

Start of Transcript

Delphine Cassidy: Good morning, ladies and gentlemen, welcome to Orica's Investor Day. We do appreciate the time that you've taken to join us here today in Sydney, and those who have joined us on the webcast globally.

Before we start today, I'd like to just cover an important housekeeping matter. In case of an evacuation, the normal sirens would go off, and please follow the green exit signs. There's an exit to the right, and an exit to the left. The Park Royal staff will then take control, and we will then meet at the meeting place which is at the police station on Daly Street. So please take note of that.

Please remember that Investor Day is actually your day. In planning for this investor day, we asked a fair few of you as to what you'd like to hear from us on the day. It came down to three points. The first one was to meet and hear directly from our management team, those who are running our key regions and businesses. Secondly, it was to get a deeper insight into each of the Orica businesses, and more so the opportunities, the risks and the priorities for each of the businesses over the next three to five years.

Finally, you wanted to understand the key metrics that we're measured by, and how these create value for you, our shareholders.

We hope by the end of today's briefing we have met these objectives for you, and you come out understanding more of Orica's business, and the growth opportunities going forward.

We've broken the program into three sessions, each of them will have two to three presentations, and after that, we'll have time for Q&As after each session. We'll take questions from the floor firstly, and we've got a facility for those on the webcast to ask questions, which I will then address to the respective presenter at the time. So feel free to send through your questions on the webcast, and we'll address them.

We do appreciate that your time is valuable, so we've structured the program to give you as much information as possible. It's a 90-page presentation, I think it will give you all that you need to know for Orica at the moment. I do encourage those here in Sydney to meet and greet, and talk to the executive here during the morning break, and at lunch, after the presentation.

With that, I'd like to hand over to Alberto Calderon, Managing Director and Chief Executive Officer, to open today's briefing.

Alberto Calderon: Good morning, everyone, thank you for joining us today here in Sydney, on the webcast, for Orica's Investor Day. We haven't done an investor day in quite some time, and we're quite excited to share with you how we are going on the journey of Orica.

I would probably highlight that it's the first time probably in many, many years, that I have seen the whole management team with ties, including myself, I don't expect that will happen again in many years, but Delphine instructed us, so here we are all with ties.

So today is not about providing a trading update, I want to reaffirm that the fiscal year '19 and '20 outlook assumptions that we disclosed at the half-year results in May this year, remain unchanged.

Nothing is more important to Orica than keeping our people safe. Making sure that every single Orica site globally remains fatality-free, is our primary goal. We have adopted a management mindset of maintaining a relentless focus on fatality prevention, and always looking for ways to continually improve how we manage fatality risks of our business.

To this end, we have recently launched a global pilot for a major hazards management process that seeks to take the day-to-day management of our major hazards to the next level. At Orica, we recognise that the things that injure our people are very different at the things that cause fatalities in our industry. With this in mind, around 12 months ago, we revised our SHES performance targets to increase our focus on serious incidents.

We complemented our traditional total recordable injury frequency rate, TRIFR, measured with a new metric called, Serious Injury Case Rate. This measure includes personal injury, illness, incidents that result in an actual serious impact. This allows us to better understand the severity of the injury, illness in our business, and drive a focus on investigations, improvement opportunities, and learnings in these areas.

Year to date, our SICR performance has been stable on previous years, the small increase in our TRIFR performance is due to an increasing low severity injures, with the vast majority of these events being at the lower end of the severity spectrum.

From a sustainability perspective, our environmental programs are well embedded in our business. We continue to report no breaches of our environmental permits and licences, and our greenhouse emissions intensity continues to improve against 2018 levels.

It is a good time to be in mining services, and in particular, in the blast management services industry. As you are all aware, mining has recovered from the downturn that occurred around five years ago, with miners now returning to the growth agendas, albeit

with a tighter focus on productivity. Mining of all major commodities is forecast to increase globally in the coming years.

For Orica, the material move metric is of most importance because our explosive products and blasting services are a critical input into this activity. With strip ratios continuing to climb, miners are having to remove increasing volumes of overburden, to access the underlying valuable ore.

The world is expected to extract around 3.6 billion tonnes more material in 2023, compared to what was achieved last year. But mining is also becoming increasingly more difficult. The bar continues to be reset higher for licence to operate obligations, driven both by government regulations, and community expectations, and rightfully so.

Further ore deposits are becoming increasingly difficult to access, often found in remote, difficult to reach parts of our world, and sometimes in the harshest of settings. Orica has technical expertise, logistics, and proven experience to allow blasting to continue, for example, in Indonesia, and near volcanic earth, where the ground is hot and reactive.

We can deliver blasted rock to a defined size specification in polar conditions, within the environmentally sensitive Arctic Circle, and we can ensure miners' licence to operate is maintained by ensuring that blasting can go ahead as scheduled, without negatively impacting nearby sensitive receptors, like communities.

For many years, Orica has been making the investments that are needed to rise to the industry challenges. Organisation is fitter, and better armed to help our customers become safer and more productive.

Let's begin by looking at our core business, what we will call now our first engine of growth. We have revitalised the core through our actions across three programs. First, it's our business improvement transformation Breakaway, which has rightsized the business, and generated material commercial upside.

Since fiscal year '15, we have delivered over \$340 million in net business improvements that have compensated for some of the \$500 million of negative headwinds over the same time period. This was absolutely critical to help offset the difficult market conditions at the time. Importantly, this program continues to run as business as usual, with a dedicated internal team.

Second, we have organised ourselves better to have a more localised approach. We have put the customer at the centre, and structured ourselves internally to have a single line of

accountability for both commercial and operational outcomes.

We have four main regions, and you will hear all of them today, each one subdivided into subregions, we call them area business managers, and in turn, the subdivide into territory managers. We have 103 of these managers around the world. They are each empowered and accountable for EBIT. They are the closest to the customers, and understand how best Orica can add value to them.

Third and lastly, it is well known in companies' organisational design that the centralised companies are closest to the customers, but run the risk of losing control from the centre. This is where our multi-year SAP system introduction - which we call 4S through all these presentations - takes its place at the last essential building block of our new operating model. This investment cannot be underestimated in its future impact of our business.

Common business processes will become standardised across our global operations, lifting internal productivity, and more importantly, allowing us to optimise decision-making on important decision matters. All our dozen of manufacturing, all of our hundreds of operating sites, will have the same structures, and will measure with the same metrics.

With standard measurements of SKU standard reporting, Orica will be able for the first time in its history, to compare, to benchmark its best sites. It will be able to learn from internal best practices, will be able to measure profitability per product, will be able to deepen its reduction of SKUs, reduce inventory, and increase productivity.

We have also invested for many years to assemble a second high-growth engine, where we expect high double-digit growths and margins well beyond what the core can achieve.

Let me now talk about the three main points about this - of this core. Sorry, the three main points of this second high-growth engine, not the core.

First, we have begun commercialising WebGen, the industry's first and safest truly wireless initiating system. This is a gamechanger for the industry, providing material improvements for both safety and productivity when it comes to the blast cycle. As we continue to deploy this technology in the field, we are developing new additional value propositions.

Second, we have built a drilling and blasting digital platform, an absolutely necessary enabled to maximise the potential of digitalisation. This platform, BlastIQ, provides mine management with a fully integrated learning system, that captures real-time and post-blast data to optimise blast design, and improve execution on the field.

It is supported by our blast design software, SHOTPlus, and the digital platform seamlessly

connects to our fleet of highly specialised onsite trucks, allowing for blasting execution data to be transferred between the site office and the trucks in real time. This interconnectivity drives reliability and predictability, and has seen the cost, time and frequency of blasting all decrease.

The third, high-growth area relates to our monitoring and measurement endeavours, where we are building a business that will have multiple capabilities that miners will derive great value from. The cornerstone of this area of monitoring and measurements is GroundProbe, and its high-precision radar and laser technology critical for managing geotechnical risk. I will discuss more about GroundProbe later on.

In addition to this, this group of monitoring, we have recently released our new automated rock sizing measurement technology, called FRAGTrack, used to verify blast outcomes and feedback, the data into BlastIQ, to improve on future blasts.

We also recently released OreTrack, enabling miners to track the ore from the pit to the plant, so that better operational decisions can be made around how the ore is handled and processed.

So as you can see, through many years of investments, we're emerging as a vastly different looking mining services company today. Our core is stronger than ever, and we continue to drive this core to its full potential, we will leverage our global footprint to sell more products, intelligent products, to our customers, to make them safer, more productive, and more profitable.

Let me talk more about GroundProbe, because it is a wonderful current example of how this second growth engine, this high-growth engine is working for Orica.

First, it is worth calling out that GroundProbe, as with other growth investments, satisfies some fundamental criteria that we believe are important to maximise the likelihood of success under Orica's leadership. GroundProbe has a strong alignment to our overarching vision of driving safety and productivity to our mining and civil customers globally.

GroundProbe high-precision radar technology protects miners in the pit every day all over the world, and more recently, the technology is also being increasingly adopted to protect against tailings dam failures. Blasting is a highly disruptive activity on a mine site and if executed poorly can have severe geotechnical implications.

GroundProbe technology further strengthens Orica's ability to safely execute blasts while maintaining the integrity of surrounding pit walls and given GroundProbe's link to blasting

activities the channel to market is similar. GroundProbe can therefore benefit from Orica's global footprint scaling its business quicker through Orica introductions than if it were a standalone company. That was the bulk of the synergy story around this acquisition.

Finally, differentiation through technology is Orica's intention and in order to do this sustainably we seek to invest in only those technologies that are truly innovative and extremely difficult to replicate. The software intelligence associated with GroundProbe solutions is what sets this great Company apart. GroundProbe has already achieved a fantastic result under Orica's ownership in only 18 months.

GroundProbe has been able to sell an additional 23 contracts through the Orica sales channels and we are very pleased that these have been realised all over the world. The Orica machine is working in our favour. Subsequently, under Orica's ownership as an integrated business fiscal year 19 EBIT is on track to be 70% higher than if GroundProbe were left alone as a standalone business.

Further, we expect to reach a return on that asset of 15% on this acquisition within our second full year of ownership and we expect this role now to keep growing as we maintain double digit EBIT roles into the future.

I would like to close this starting section by reflecting once more on what we have been facing in recent years and what we can expect in the near future. Over the past four years the external market forces and the headwinds are creating a challenging environment for us but we mobilised quickly to help combat these through numerous business improvement initiatives and, while we are seeing reprieve from these headwinds, we continue to deliver value through our internal programs.

With the market working with us and not against us our continued focus on improving the performance of the business and our unrivalled technology the executive team who you will hear from shortly, and I are very excited about the future.

Angus Melbourne, Chief Commercial Officer, will talk about Orica's game changing technology products that are already boosting mine productivity for customers around the world and, more importantly, the value that will be generated for Orica. Carlos Duarte, Group Executive Manufacturing and Supply, will talk about what are Orica's competitive advantages, our global manufacturing network and a disciplined approach to making it simpler, safer and more efficient.

The Group Executives and Presidents of each of the regions, Darryl Cuzzubbo, Tom

Schutte, James Bonnor and German Morales, will give you a deeper look into each of the regions and talk about the exciting growth opportunities over the next four years. Chris Davis, Chief Financial Officer, will reconfirm our approach to capital management and cash, critical enablers to our future growth.

Today you will hear all of them talk about the future of Orica and what they will say can be categorised or summarised into four main points that summarise why we are so confident about the future. First, after years of headwinds the market for explosives is tightening, the demands for our products growing. Second, although Orica has become more efficient and effective over the last few years we will continue on this journey.

Both our customer-centric operating model and our SAP 4S system will enable manufacturing to keep improving reliability, increasing plant maintenance and reducing unit costs. We will be able to serve our customers better, we will be able to add more value to our customers than any other company in the world.

Third, over the past few years we have been consistently investing close to 1% of our revenue in technology. This wasn't fashionable just a few years ago, but we persevered and are now beginning to reap the benefits. For example, we will enable our customers to increase oil recovery as high as 30%, making a quantum leap in the world of drilling and blasting.

Finally and fourth, we are creating a second engine of high growth spearheaded by our GroundProbe decision. Together with digital platforms and wireless and the core and subsequently automated drilling and blasting this will take - in just a few years will take Orica to a level of performance that it has never delivered before. I will now hand over to Angus.

Angus Melbourne: Thank you, Alberto, and good morning everybody and thank you for the opportunity to speak with you this morning. I joined Orica in January of 2016. Prior to that I spent 25 years with Schlumberger in a variety of international postings in operations, business and technology. I'm an engineer by trade. I have a passion for technology and I've spent a good portion of my career in the development and successful commercialisation of technology.

Today I'm going to talk about Orica's technology program and specifically our commercialisation progress, a technology program that is today starting to deliver significant value and returns for our customers and also for Orica. But let me first talk about the industry drivers and the innovative solutions that we're bringing to our

customers.

During the mining boom high capital spending and high operating expenses led to significant declines in productivity. A period of rapid cost focus followed the peak and, while cost is still a major driver in our industry economics, productivity is now a key focus in the sector and rapid improvement is being enabled through a combination of technology, innovation and collaborative expertise, which promises a smarter way to mine.

Like many sectors, our industry is being re-imagined like never before and it's an exciting time to be part of the change. Robotics, automation, artificial intelligence, big data and the internet of things are transforming every element of the mining value chain. Innovation is delivering significant advances in safety, productivity and environmental outcomes and critically the convergence of new technologies and solutions is enabling us to think differently, mine differently and operate more precisely and, most importantly, remove people from harm's way.

Now, we have come a long way from the historic miner on the left with his early version of automation in the form of a donkey to the modern miner on the right operating out of Newmont Goldcorp's integrated remote operating centre, which is in Thunder Bay, Canada where they operate wireless blasting, hauling and processing and all of this is coordinated remotely 500 kilometres away from the Musselwhite site.

The entire industry is rapidly moving towards an automated and digitally integrated future. At Orica we're proud to be playing a role in that future by leading change in digital and automated blasting.

Our ambition to drive change through technology is underpinned by our strong track record of innovation and our longstanding commitment to R&D investment. This investment continued through the down cycle and that investment positions us today to deliver against industry blasting needs, it creates value for our customers and drives financial performance for Orica.

My key message today is that new technology is not just aspirational for Orica. We have moved from the lab to the operational site. You will hear from each of the regional presidents today how the technology programs I'm about to outline are being implemented and commercialised in the regions.

The value chain of today's mining operations can be considered in discreet segments; resource, exploration and analysis, drill and blast, downstream hauling and processing. For

Orica the drill and blast segment remains at the core of our strategy to apply advanced technology and the opportunities are significant.

We know that the downstream impact on poorly controlled blast outcomes today can impact as much as 80% of the total mine processing costs. Additionally, despite rapid advances made in other parts of the value chain, blasting remains largely a manual process today. As mines go deeper and oil bodies become more remote automated and digitally enabled blasting presents a significant productivity opportunity for the industry.

Orica's new technology strategy focuses on two pillars of development. The first is autonomous blasting processes, significantly increasing safety and productivity by removing manual processes and risk. Our wireless initiation systems form a key component of this pillar as the enabler to simplify the wide complexity that characterises today's blasting.

The second pillar is digitally enabled better blasting, digitising the bench for quality control, optimisation and integration with a broader miner ecosystem. Underpinning these two areas is our foundation of market leading products and services which is built on more than 140 years of innovation and expertise in commercial blasting.

The products and solutions we are developing and launching today are aiming to transform how drill and blast is used to unlock mining value utilising digital and automated technologies to create safer and more productive blast outcomes. But that's not all.

Our blast management offer provides the ideal platform for us to expand our role in both the upstream and downstream areas of the mining value chain. This will not only deliver greater outcomes for customers but also increase our involvement and influence over mining operations. Starting with the resource model on the left hand side, Orica is actively taking steps today to better understand the oil body. A better understanding of the resource creates an opportunity to improve blast designs and execution.

To this end we are collaborating with customers and other industry players to develop technologies to integrate vast amounts of complex geotechnical data into our blast design processes. This influences the overall blast design and ensures the right explosives are delivered in the right holes at the right timing to achieve the desired outcomes.

If we turn to the right of the screen we see the downstream processes of the value chain. Orica has made significant investments in post-blast monitoring and measurement technologies. Using a series of smart IOT sensors and Edge computing to replace

inefficient manual processes measurement data can be used in real time to improve future drill and blast outcomes based on machine learning algorithms that drive continuous improvement.

Now let's take a more detailed look at blast automation. As I said earlier, blasting remains one of the few processes in the mining value chain that remains largely untouched by automation. As mines go deeper and oil bodies become more remote the case for blasting automation becomes clearer. The size of the prize is significant for the industry in the form of getting people out of harm's way, granting access to difficult oil reserves and reducing operational delays. Due to the complexities associated with a typical blast this is no trivial endeavour.

In a first step last year we released the WebGen 100, the world's first truly wireless initiation system and something that we're very proud of. This is a once-in-a-generation step forward in terms of technology advancement. WebGen improves safety by removing people from harm's way, enhances productivity by removing the constraints imposed by wide connections and is fundamentally changing the way blasting in mining is approached by enabling new mining methods.

In the last 12 months we have co-developed more than seven new blasting techniques enabled by WebGen that are revolutionising the way our customers are planning and executing their mining operations. We believe that wireless initiation systems is the game changer of modern blasting and is a critical enabler for full automation to the drill and blast process.

We are also working closely with customers and industry partners to make underground and surface blast automation a reality enabled by the unique wireless blasting capability. By uniting the market leading explosives offer the wireless capability and digital optimisation platforms, advanced delivery systems with automated solutions that are being developed with our industry partners we can revolutionise drill and blast operations for the future.

To illustrate the positive impact wireless technology is having on our customer operation I wanted to share a video with you. This is from CMOC-Northparkes in New South Wales who have recently converted their entire sub-level cave mine to the WebGen wireless initiation systems. This is an Australian and a world first. As a result, Northparkes is seeing significant improvements in productivity and increased oil recovery at their operation and they're leading the industry by mining in new ways.

[Video playing]

Angus Melbourne: You can see just how much of an impact WebGen is having on their entire operations and this is just one of many applications that is occurring around the globe. This is no longer in the lab.

We're starting to see significant growth in WebGen awareness and adoption around the world and, importantly, customers are realising and validating the value of the technology. Since its release more than 220 WebGen wireless blasts have been executed across four industry segments in both the surface and underground sectors. We have also secured several commercial contracts with up to 28 demonstration sites currently active or planned for the year around the world.

Additionally, WebGen is being recognised with three industry technology and innovation awards. We're also making good progress on producing the next generation of WebGen 200, specifically designed for broad market application in surface mining and a critical enabler towards the full automation of the drill and blast process.

We see 2020 as a critical tipping point for this technology as the industry moves from early adoption to early majority in the adoption life cycle. Importantly, miners are identifying and validating the value of this game changing technology to their operations with customers seeing significant improvement in the key drivers, including safety, oil recovery, productivity and cost optimisation.

By helping our customers achieve success and delivering the financial performance for their operations we have been able to adopt a service based business model for WebGen. Typically we expect to see between 15% and 30% of total value delivered to customers through the application of WebGen technology and this is evident in our commercial contracts in place today.

Now, turning to our second key technology pillar; digitally enabled better blasting. We're investing heavily in digital technologies that integrate and deliver insight, they empower better decision making and increase control over blasting outcomes. Importantly, digital technologies enable us to quantify value delivered from the drill and blast at every stage of the mining value chain.

On Orica's open blasting platforms our customers will be able to capture and analyse data to fully understand and optimise the impact downstream. When miners can measure and value their decisions they can start to close the continuous improvement loop. We have

prepared a short animation to explain just how digital technologies map to the broader value chain.

[Video playing]

Now our digital solutions set is also out of the lab and on to the desktops, laptops, tablets and trucks in operating sites around the globe. Since its release last year, the next generation BlastIQ platform has been implemented at 35 sites, across 25 customers globally. We've also piloted 3 BlastIQ enabled optimisation service projects underway with select customers. These pilots applied both our digital technologies and our advanced technical services knowhow, to deliver a significant impact on operations.

We expect steady growth in our digital offer to the market over the coming years, and across all regions, and you'll hear about the penetration of each of these in all of the four regions from the presidents. Orica digital solutions can be segmented in to 3 tiers, related to the complexity of the operation and sophistication of the solution. Our first-tier solution blast control which allows customers to digitise and optimise their drill and blast operations. We see an incremental margin of around 2% to 4% over a typical advance blasting service margin.

This is not insignificant given this is a broad-based market offer. In our tier 2 solution, blast control and measurement technologies, we can start to impact the downstream processes of our customers, by monitoring and measuring blast outcomes, to feedback in to the drill and blast cycle, to optimise specific customer and site level needs. Customers see a larger value impact from this solution, enabling improved pricing.

With this solution, we typically see around 8% to 10% incremental margin growth, on non-digital contracts. Finally, our top tier customer solution, digital optimisation services, combines Orica advanced blasting services, with our full suite of digital solutions, to deliver ore extraction optimisation services. Now while this is a more targeted offer, which requires a deeper customer partnership, the solution has the potential to yield up to 20% to 30% incremental margin on a typical blasting services contract.

The Bulkmaster7. The Bulkmaster7 is the latest evolution of Orica's market leading delivery system technology, delivering a leap in productivity, efficiency and safety on bench, while enabling digital on bench operations and workflows. To date we've placed 23 units of our smart connected Bulkmaster7's on customer sites. The rapid adoption rate in iron ore and the coal sectors, reflect the broad appeal of the Bulkmaster7 and the benefits of its flexibility of configuration.

Now while the Australia Pacific Asia region has led the development and introduction of the Bulkmaster7's, and Darryl will outline that progress in his discussion. Latin America is also an attractive early market, with 7 units planned for customer trials. The Bulkmaster7 will see steady growth over the coming years, as the technology matures and we expand in to new applications and geographies. Importantly, customers are seeing value delivered with fewer assets and people required to deliver the explosives, and this translates in to productivity benefits, and cost savings for our customers.

As a result of the customer value, we're seeing up to 40% incremental margin growth, when compared to our old generation Bulkmaster6 delivery systems. As well as the benefits that come from a deeper integration and bundled offers with our digital BlastIQ technologies.

So, in conclusion, the scope for data driven optimisation in drilling and blasting is significant. Connected and digital enabled drill and blast systems. Artificial intelligence driven designs. Real time measurements, and analysis of both rock properties and blast outcomes, will advance blasting for mine productivity improvement. Our industry is being reimaged and Orica is proud to be leading the change in digital and automated blasting. Thank you. I want to hand off to Carlos Duarte now.

Carlos Duarte: Thank you Angus and good morning to all. After joining Orica almost 2 years ago, to lead the manufacturing business and supply chain, I am pleased with the progress that we have made so far. With our ongoing commitment to keep our people safe, to simplify and standardise our operations, and to continuously improve and better serve our customers. Today I will cover some of the achievements in manufacturing and supply chain, as well the plans in place to address some of our challenges.

Reflecting on the progress, I continue to be excited about the number of opportunities to improve the efficiencies in our manufacturing business, and in our extended supply chain. Orica's global manufacturing footprint, is a competitive advantage for our business. Critically it supports our value proposition of secure and reliable supply and enables us to have a more agile supply chain. This strategic advantage enhances our operating performance is optimised, and we consistently deliver sustainable improvements in our ore manufacturing and our external supply chain.

Improving the performance of our continuous plants has been a critical strategic priority, especially giving the benefits this will deliver as the AN market moves towards supply, demand balance and pricing improves. There has been a particular focus on improving the

operating discipline, and plant reliability to reduce downtime and plant maintenance and associated costs.

After implementing a standard manufacturing organisation structure across the Company, we now have the foundation in place to develop our long-term asset management plan and implement a comprehensive set of maintenance strategies. This has already started to deliver benefits.

KI, Yarwun and Bontang have all benefitted from our significantly improved plant turnaround process. With this project complete on time and on budget. We have now also completed a turnaround at Carseland, and no further major plant work is planned for this year. Where turnarounds have been completed, we see an uplift in production, with improve efficiency from those plants.

While good progress is being made, there is a lot of work still required to imbed these processes and deliver them on a consistent basis. Operation improvement at Bontang are already delivering an additional 15000 tonnes of production, at essentially no additional CapEx. By improving efficiency on the plant, and working with our suppliers to increase the reliability of supply of ammonia and the utilities to the site.

We are continuing to develop the business case for further expansion based on a conservative future price modelling, to increase the capacity to 365000 tonnes. OEE performers has gradually improved on all continuous plants over the past 12 months. Those less apparent in the graph are KI, the decreasing May and June represents the back to back turnarounds on 2 of the nitric acid plants, and 1 ammonia nitrate plant. Which will not reoccur for a 3-year period.

The KI turnarounds were completed fully within budget and schedule. Additionally, the 2 nitric acid plants and the ammonia plant, have achieved an increase in production reference rate. Specifically, the nitric acid plant rates, have both increased by 4% and the average ammonia daily production capacity has increased by 2%. All sites are showing progress in the right direction, and we managed to increase available capacity by close to 100000 tonnes.

We are working to achieve consistent improvement on OEE and remain above the target performance for the long term. I would like to call out to the performance of Yarwun, which shows the results of a dedicated engineering and management effort, to improve the performance of the plant in a sustainable way.

Burrup rectification works are continuing in line with the schedule, which we previously advised to the market. Our optimism about the role the plant will play remains unchanged, notwithstanding the disappointing start to its operations. The plant remains a strategic 30 plus year asset located in the Pilbara region, to take advantage of the local market.

After the initial critical repairs to the plant equipment and infrastructure over the past 12 months, the plant was restarted in May and produced 40000 tonnes of good quality AN, before being shut down in July for preparations to begin the rectification works in August. This was in line with our production forecasts and there were no other major operational issues identified, during this testing period.

To date, 5 of the 9 heat exchanges have been delivered to the site. 3 are currently being shipped and the last one is due to be dispatched in the coming weeks. The plant will remain offline until mid-January to complete the rectification works, with cold commissioning of completed plant sections commencing in December, and continuing through January throughout 2020.

Hot conditioning is planned to commence in February and the plant is expected to be fully online in March 2020. The key objective is to ensure that the plant is capable of reliable and continuous operation from the second half of Fiscal Year 2020. Our utilisation for Fiscal Year 2019 is 12%, OEE for Fiscal Year 2020 is currently forecast at 50%. Fiscal Year 2021 production is forecast at 290000 tonnes, based on our current contracts.

I believe that the comprehensive rectification work is in the hands of capable project team, who will return [their set] to its original design intent. Further, the site operations team have demonstrated their ability to operate the plant stably during May and June, providing a solid base to the forecast of the plant, will be operating in the second half of Fiscal Year 2020.

We have been deeply engaged in optimising our initiating systems and packaged emulsion plants, focusing on 3 areas. The first one SKU rationalisation to improve the plant utilisations and reduce inventory. The second one, on increasing the capacity for EBS and WebGen100 to continue to support their growth. And the third, the development of new production methods for the WebGen200.

The SKU rationalisation program is progressing well. It simplifies our traditional product per portfolio and enable increased plant utilisation rates at ISP manufacturing plants, and the reduced levels of inventory. It further provides the pathway to exit low value commodity products, to redesign the production network with enhanced lead times and

lower product costs, and also to focus on the production growth or higher margin products like EBS, and new product introduction like WebGen.

The first phase of the SKU rationalisation is in progress and includes the harmonisation of non-electric detonated delays and is standardising the associated connectors. And also, the rationalisation of the detonating cords offering. This project will provide moderate savings in Fiscal Year 2020.

The second phase, which has commenced, targets reductions in raw materials and in conversion costs and lower levels of inventory. The initial plan outlines a reduction to just over 5000 SKUs by 2022, from 17000 in 2019, with significant benefits associated to network cost reduction.

It's worth noting, that many of the 20000 SKUs that we have already removed from our product catalogue, were either obsolete or had no recent sales. With anticipated customer demand, we are investing in further EBS capacity for hybrid units in Canada, and EBS caps in China, in addition to the 2 new product lines in Australia and Colombia. We will continue rationalising product lines in our plants, as we have done in 2019 in Chili, Brazil and in the US. Thereby benefitting from higher utilisation and reduced associated manufacturing costs.

Supply chain efficiency and integration, are key contributors to decreased product and operational costs. We have just implemented a standard supply chain organisation. One of the key elements of this structure is to appropriately segregate category management, sourcing, supplier management and procurement. To ensure that there is independence throughout the supply chain processes and to deliver improved transparency and accountability. These changes are aligned with the new SAP design 4S and our support of its successful implementation.

This is standard operating structure connects the central and the regional supply chain groups, and use common processes and metrics to decrease operational complexity and drive continuous improvement.

Our new sales and operational planning process has been implemented, driving improvements in inventory visibility, accountability, and internal conflict resolution.

Decision-making has improved significantly, aided by timely information on product cost and inventory impacts.

In order to leverage our spend and reduce complexity and inefficiency we need to develop

stronger relationships with a smaller set of suppliers. We have drastically reduced the number of suppliers during 2019 and that will continue for the next few years.

In parallel we have been developing new suppliers for critical components in order to increase the security of supply and improve lead times and costs.

We have completed critical glass contract negotiations with Australian providers. Gas supply for KI and Yarwun is now secure through to the end of 2021. Contracts for gas supply beyond 2021 are now under discussion.

Our key priorities continue to be to operate our plants safely and to continuously improve their reliability and the equipment integrity.

Second, to simplification of the initiating systems product portfolio to deliver benefits for higher utilisation and lower costs.

Thirdly, to better plan, better planning and procurement discipline to deliver a more competitive and resilient supplier base and lower levels of inventory.

In summary, we have made process in improving our continuous plant reliability, decreasing the complexity of our IS product portfolio, and integrating our supply chain.

All impact positively our EBIT and will deliver substantial benefits for Orica as we continue focusing on operation discipline, systemic approaches and continuous improvement.

Thank you, and I will now open for questions.

Operator: I now open the Q&A session for the - any questions addressed to Alberto, Angus and Carlos. We'll take questions from the floor. There are two microphones. For those asking questions here in the room can you please use your microphone so the people on the webcast can hear you.

Following questions from the floor I'll address some of the questions that are coming through the webcast and I'll ask that of the three presenters.

Sophie Spartalis: (Bank of America Merrill Lynch, Analyst) Good morning, Sophie Spartalis from Bank of America Merrill Lynch. Just firstly on technology. I'm intrigued by how you marry up your longer-term vision for explosives and their presence in the mining world given you've got some pretty big miners, such as Anglo American, who are pushing for their Smart Mine thesis, whereby they're looking to eradicate explosives over the next 10 years, particularly in underground mining.

How do you work with those clients, work with the industry when that is their push?

Angus Melbourne: I think first of all just some context. I mean we monitor technology across the full spectrum of explosives, including technologies that could supplant explosives. We're confident that there is some - that's a far-off proposition. They're still the most efficient way to blast is with chemicals. So we see that not being the next phases of technology advancement.

As far as working with customers on Smart Mines, we feel that we have an integral role to play in being part of those Smart Mine developments. As I outlined in the presentation around drilling and blasting and integrating that in to the Smart Mine proposition.

Alberto Calderon: We did look at that Anglo, because you have mentioned that before. In that presentation I think it's one line that says, oh, and by the way we're looking at this. So I mean there are 100 probably PhDs encourage us, don't see in the next 50 years anything that will replace chemical energy and the cheap, competitively.

Sophie Spertalis: (Bank of America Merrill Lynch, Analyst) That's fantastic. Just a quick follow-up. Just in terms of the incremental margin uplift that you presented in terms of the technology. Where does that value share sit with the client? How much are you having to share that value uplift with the client versus what you can retain within Orica?

Alberto Calderon: It would be the client who will keep most of the value. We will have between, some contract we have 50%, others 20%, 25%.

Our priority right now with wireless is proving the value. We're quite excited how quick we are being able to do this. If you compare this to the introduction of the EBS technology, it took about 15 years to just introduce it.

So we're really trying to fast-track this introduction. The way we are doing it is saying, it will initially cost you the same. Let's prove the value and then we discuss. With a few clients we're in that second stage already.

We are very confident that it will change how mining is done, and the value in some cases that we have seen is more than the total cost of the explosives. We are growing the pie to such an extent that we're comfortable that it will be value sharing and win-win for both sides.

Grant Saligari: (Credit Suisse, Analyst) Good morning, thanks, Grant Saligari, Credit Suisse. I guess just first of all just trying to quantify some of the opportunity around the technology. If you look across broadly your revenue splits you talk about services somewhere in the vicinity across the region of sort of 15%-ish of total revenue.

Initiating systems can be another sort of 10% to 20%. We can quickly do some maths on revenue on that. But what sort of proportion of revenue do you think is sort of amenable to these type of technology solutions?

Angus Melbourne: So I think the technology is embedded across all of those segments. So if you look at automation, for example, and how that will advance. That will advance around the services offering.

Now WebGen sits in the initiation system category, a lot of the bulk delivery, and also some of the automation services will sit across there. The technology is being applied across all of those segments of revenue.

Alberto Calderon: We will track this second engine of growth internally, the profitability of each one. So they will be vertically tracked. Wireless will have a P&L, and then the digital will have a P&L, GroundProbe has a P&L. We will not share all of those publicly.

GroundProbe we will, others we won't.

What we can tell our shareholders is, we will ensure that they are surpass our minimum threshold of RONA of 20%. So that we will make sure that it will happen, we track it internally.

You will see it in the EBIT margin in the end. We talked about, for example, what's happening in APA, the EBIT margin went down lately, but it was more around Burrup and the cost of sourcing. In a normalised world we expect that EBIT margin to go to 20. We expect that the margin to start going up as we penetrate our high value technology.

So you should expect to see it there. But because of commercial reasons we won't disclose it individually.

Grant Saligari: (Credit Suisse, Analyst) How are you seeing competitors respond when you're going into these opportunities with a, what you're claiming to be a better technology offer? In what way are your competitors responding?

I guess given the technology advantage that you're describing, do you expect that to lead to greater consolidation in those sort of services being provided?

Alberto Calderon: What Angus showed and that very clear graph showed of about 1000 things, little things all over the place. What that was trying to show is that you don't build that in weeks or months.

We've been investing for many years. Maybe two years' ago our competitors were not talking about technology. They are starting to talk about that, and that's good because in the end we all need to find ways of adding value to the business.

But we're quite confident that the lead that we have of so many years will stand well for Orica as we keep increasing market share across the whole world. You will see in the APA presentation the market share we've won already in the past 18 months. It's quite significant. That is I would say highly correlated with the better technologies. In the end facts speak louder than words, and that's what's happening as we speak.

John Purtell: (Macquarie, Analyst) Good morning, John Purtell from Macquarie. I just had a question for Carlos. Thanks for the update in terms of manufacturing and Burrup as well.

Just as far as Burrup, obviously you've talked over the last few months about the rectification work required. I mean just in terms of how you would assess the degree of difficulty involved. Is it effectively like building a new plant?

Sometimes it can be actually harder when you're trying to modify an existing plant. Just how you would assess the risks from what you're seeing there.

Carlos Duarte: I think the most important thing has been these two months that the plant operated stably and produced this 40,000. Because we were still worried about if there were other issues.

The team that we have in place and all the work that was put in to take in consideration all the risks. You are correct that a lot of times to repair something like this plant is even more difficult than to build from the beginning.

We have had this team in place for quite a while and we have been preparing this also for quite a while. There were a lot of issues that we had in the region of the project. We have put in place processes to make sure that we avoid the same issues that there were a few years ago.

So again, a challenge, but we are very confident with the team. I will be there this coming week to be on the site with the team because they will be starting the rectification work.

So like I said on my earlier comments, we are very confident. A lot of work to do and it will not be easy, but we are confident with the plan and with the people that we have in place.

Alberto Calderon: Just complementing Carlos, and you can chip in, but the decision was taken and was instrumental in that, we paid for a new plant, we want a new plant. We

could have compromised in part of the equipment trying to repair it in some way. The decision was, no.

They say, almost all the critical components have been changed. The most important thing was ensuring we didn't repair the problems of the past. So they were actually not only fabricated in France, Germany and Italy, but the quality assurance program was there.

So that takes a big part of the risk as the heat exchanges and the absorption column and the dry drum are put in place. We know that they will work. When I talk to them about it, they believe that in a P95 world we have understood what was wrong. We were quite comforted as Carlos says by the fact that it produced high quality AN in these two months without any flaw. There was some issues and they could fix them on the run.

There can always be probably a 5%, but in a P95 world we are quite confident that the team is the right one in place, and that they have identified everything that would be, let's say, complicated.

We're starting this in, this month, in a few days. The plant is being cleaned, emptied and within a few days we'll start the permanent fix.

Carlos Duarte: In my notes I only mentioned the heat exchanges, but you know it's a new absorption column. It is new drying drums. All the fundamental issues are being fixed and it is really like, in my comments, as to the original intent of that plant.

Scott Ryall: (Rimor Equity Research, Analyst) Okay, hi, sorry Scott Ryall from Rimor Equity Research. I was wondering if you could just give us a little bit more, Angus perhaps, on the characteristics of the mining customers that are more willing to adopt or trial some of your technologies please?

I would imagine you add more value to hard rock mining than you do potentially for bulk. I'm just going to throw some statements out here for you to rebut. I'd love to understand why you think Latin America miners have adopted faster than, for instance, North American.

Yes, some things like that kind of give us an idea of who the early adopters are, that'd be great, thanks.

Angus Melbourne: Yes, I think actually that the technology first of all is applied across a really broad range of applications. So you mentioned a couple of things there, first of all segments and applications, but also customer types.

If I look at our current trial candidates and portfolio, actually it consists of a reasonable mix of Tier 1 and Tier 2 miners. It's a pretty consistent mix across the regions. I mentioned Latin America this morning because it's come fast this year in particular, which you'll see from German's presentation. But in fact the spread across all the regions is pretty consistent.

Auspac has probably been on the front foot and the most advanced. But North America has also been very advanced with WebGen adoption. So North America and Australia have really led, been the vanguards in adoption across a range of customers and applications. Latin America have come hard this year.

Alberto Calderon: I think, yes, we can come back to that question later. But the regions, in particular in APA, he can discuss in more detail what we have. But for example, in BMA just to - it's not only underground. We are also working in open pit, the possibilities there are significant too.

It is, as I understand as we speak, we are preparing the largest blast ever in BMA. That should happen some time through the next weeks. So it's across open pit and underground.

We started earlier in underground because the understanding of the value on block caving was very clear. But as we talk to customers, example with Roy Hill, who is one of the most advanced - the potential in open pit may be even larger.

So it's just a new technology, but we are testing it across the whole spectrum of different kinds of mines.

Brenton Saunders: (Pandal, Analyst) Good morning, Brenton Saunders. Maybe just two things. Angus, one just for you, if you could just give us a better practical sense of what some of the benefits of wireless underground are. My understanding of it is it's quite safety focused.

So especially for big bulk caving methodologies you were talking about reducing undercuts and getting people out of the way and that kind of thing. So maybe away from the safety, what are the other areas that are appealing from an underground mining perspective?

Then I was just wondering if there was an update on the performance bond arbitration and CapEx for the Burrup remediation?

Angus Melbourne: I'll take the technology one first. It's a good question and it's actually related. The getting people out of harm's way is related to the other value propositions. So

we're currently working on around about 30 different value propositions around different mining methods. Almost every one of them is predicated on pre-loading.

The big advantage of wireless is that we can go in and pre-load areas. From that basic premise you can drive a lot of different applications and value propositions. One of them of course is that you don't have to send people back.

A classic example, and this is the example that was developed in Musselwhite in Canada, is called a temporary rib pillar method. Without getting too technical, it allows us to actually pre-load several blasts in advance where you couldn't previously go back in.

So that enhances ore recovery. Previously a pillar of ore would have had to be left behind or there would have been trade-offs with dilution as you blast.

So that ability to pre-load and then go back and blast without having to send people in the load is the key advantage. So it's related to the getting people out of harm's way.

The other example we often talk about is multi-layer blasting through the bench. So if you're able again to pre-load blast layers and then sequential blasting, as opposed to having to keep coming back on bench. There's some pretty significant productivity gains.

But again that's premised on this idea of being able to pre-load.

Alberto Calderon: Just what we've seen has increased ore recovery of 30% in some cases. So it's beyond safety, the money is quite significant.

Alberto Calderon: As to your question on Burrup. We now finetune and probably reaffirm the guidance that we gave in some months ago. So basically total cost will be around \$200 million for Burrup, the performance on this \$120 million. So that would be about \$40 million for Orica.

It is going to go like all of these into litigation and it will take a long time to find out where we are. We think we have a good case, but at this stage I probably won't want to go into any comments on what is a current legal process.

Sharon Johnson: (Milton, Analyst) Hi, Sharon Johnson from Milton. Just two questions for me. First on the tailing dams, is there any other technology that could do what you outline, given what's going on at the moment in Brazil? What opportunities do you have for Orica? I'll just give you my second question as well. You mentioned geoscience just on mineral assay, is there any opportunity there that you can expand into that, given that where - you're already on the blasting side? Can you actually go backwards and look at mineral

assay as well?

Alberto Calderon: I'll handle the second one but not the first one.

Angus Melbourne: Yes.

Alberto Calderon: Just on the first one, for control of tailing dams, this would be one of the technologies so there are other technologies but since the tragedy happened in Brazil actually, we haven't called and we're working with Vale on many many sites. Probably the largest team right now, in the world, is in Brazil.

We just opened an office today in Belo Horizonte Brazil The expansion into tailings dams across the world will be significant. On the second one, as you say - on all of the geoscience, geochemistry and assets and we are looking at things that we are doing ourselves and are looking also at the market and opportunities with that. That is part of the scope.

Angus Melbourne: Yes, I'd probably just add a couple of comments around that. It's actually a really rich environment for opportunities. The premise is a better understanding of the resource means we can blast more precisely and the reality today is that the block models are - the ability - we can blast in a much more precise way than actually we have information around. We see a real opportunity to improve the knowledge and understanding of the block models and also the technology now is allowing us to do something about it in real time. Back to your question, it's a rich area and there's a number of technologies and approaches and they all have different advantages.

You've got very fine scale precise measurements that pin point locations like assaying. You've got logging of drill holes and then you've got broader based, say, acoustic or seismic measurements. All of them, whether they're geochemical or geomechanical, we believe have a role to play in improving the knowledge of the rock. We're pretty focused in looking at a range of those different options that we can bring. Ultimately, it's about delivering a better blast and this is why we're doing things like the industry project with index, which is about taking geoscience data from the blast dog tool and then feeding that into loading rules for blasting. But we're also working with companies like DataCloud which take acoustic measurements while drilling around geomechanical properties.

It's an area that we're looking pretty broadly at and fairly open minded about who we work with around delivering that goal of better knowledge of the rock.

Belinda Moore: (Morgans, Analyst) Good morning. Belinda Moore from Morgans. There's

clearly plenty of EBIT upside from what you've talked about this morning. I was wondering, are you able to put maybe some buckets around - you know, EBIT upside, even in a wide range? Or aggregate, sort of, the upside over the next few years from each of these initiatives?

Alberto Calderon: We're able but we won't.

[Laughter]

Alberto Calderon: What I thought I'd tell you we do think there's a significant potential and that's what I said. I think we could take this to a place we've never been there before, in some years. I think that is true. But in the short term, we reaffirm the guidance for '19 and '20 and just to remind the '20 guidance is a jump on '19 and we've also said that in '21 we expect another jump.

We're still quite confident of that trend and the we think that those jumps in '20, '21 will be more from the core. Then beyond that, they will start becoming from the second engine of growth. So I don't want to give orders of magnitude but they are not business as usual.

Delphine Cassidy: I'll just take a question from the webcast, given that we are nearly to the end of the session. Angus, this question is directed to you. A recent report on the Chinese detonator market said that there could be a potential impact on Orica going forward of around \$50 million? They want to understand what's the response from Orica?

Angus Melbourne: Well, first of all, we don't agree with that assertion. Our assessment is that that report is incomplete. Actually, we view China not as a threat, but an opportunity. The regulatory and technology changes happening in that market are not just about detonators. Electronic detonators are a part of that, but it's also about a transition and a push from a largely packaged emulsion business to a broader services and bulk-based delivery industry. That represents a big opportunity for Orica. We're well placed and this is why we've entered into a joint venture with the largest explosive products provider in China, in Poly, and we're all be working to make the most of that opportunity in China.

As far as the specific EBS threat is concerned, this is not new. People have been talking about China electronic detonators for a long time. The China market is quite different. It's very very price sensitive and the electronic detonator products currently in that market are well below the performance and reliability level needed in international markets.

The development of that technology in China will happen, but it will happen, first and foremost, for the China market which is a big opportunity. It also has some unique safety

requirements in it for that market. I think, over some time, it's inevitable that a large scale EBS industry there will spill into international markets but we see that some way down the track. In the meantime, we're changing the game with WebGen.

Delphine Cassidy: If there are no more questions from the floor, we'll take a break. We'll take a break until 10:45 and come back for the next session to hear from the four regional managers. They'll be outside having coffee with you, so please feel free to interact with them. Thank you.

[Break]

Delphine Cassidy: Just start.

Darryl Cuzzubbo: Alright we might kick-off again. Just looking at our CFO to take a seat [laughs]. Good morning everyone. A special welcome to everyone that's here, but also on the webcast. I trust that you enjoyed your quick break and it was quick because we've still got lots to share with you. My name is Darryl Cuzzubbo and the Regional President for our AusPac and Asia business.

Prior to joining Orica, I spent most of my career running both open pit and underground mines and at times, was a customer of Orica's. Coming into Orica nearly four years ago, I bring a customer perspective and it quickly became evident that we could unlock significantly more value for our customers. This has never been truer than at this point in time because we're introducing transformational technologies that change the game for our customers.

Just a bit about APA. APA has been a strong and increasing contributor to Orica's financial performance. APA covers some 26 countries, representing diverse commodity markets that offer continued growth opportunities. Whilst a strong EBIT contributor, a key part of APA's strategy is to continue to lift RONA by leveraging its strong manufacturing asset base through improving plant utilisation and leveraging our advanced products and services against every tone of Ammonium Nitrate sold. You can see here that - by the revenue split, it highlights just how leveraged we already are, with straight Ammonium Nitrate accounting for only 22% of our total revenue. However, there is more that we can do, particularly in the services and initiating service - initiating systems part.

With the 26 countries that we operate across, we have 14 key markets spread across both our AusPac and Asia business. Our AusPac business supports some of the largest, highest quality, low cost, scalable mines in the world, servicing Asia's regional growth. With

commodity prices coming off their low over three years ago, we've seen our customers take more of a long-term perspective, hence adopting more of a value rather than purely price centric approach in contract negotiations. This plays to Orica's strong products fleet and technologies, supporting Orica's strong and growing market share that currently sits at 45%.

Our Asia business is a very different business. It is geographically fragmented and has a complex and dynamic regulatory environment. Whilst this is challenging, more often than not it actually plays to Orica's strength because we can leverage our supply chain footprint and out operating standards, better than others. You'll see later that Asia has been growing rapidly and is now a very dominant part of our global portfolio. Our Asia business is particularly focused on customers who are happy to take a leap up the technology maturity curve and go straight to our most advanced products and services. We've been focused on growth in six key target areas, spread all the way from the Pilbara to Mongolia. These are areas where we have been under-represented from a market share perspective and where we can unlock value that isn't being unlocked today. Such growth is and has been delivered through disciplined go to market strategies where we don't win market share purely on price.

Lastly, we've been building our operating model for a number of years. Our final 4S SAP go-live is less than 12 months away and represents the last significant piece of our operating model jigsaw puzzle falling into place. It is this operating model that will enable us to scale and control a decentralised, geographically dispersed business. We will also use our 4S system to provide global performance transparency against global standard roles.

This performance transparency will assist greatly in our efforts to drive a performance culture, that is hooked on continuously finding, copying and surpassing the best performance across our Company. Talk about - a bit about our underlying growth. We've realised significant market share growth, with the foundation set for this to continue. In the last 18 months, as we put contract resets behind us, we have seen underlying revenue growth outpace volume growth. With the foundations already set, EBIT performance will also significantly increase further as we realise the compounding benefit of Burrup, starting with much lower sourcing costs in the growing Pilbara region, combined with freeing up Yarwun capacity to displace rising imports.

This will be further rated post FY21 as contract renewals occur with anti-dumping measure now in place for Australia, lifting import parity pricing by over 10%. Some other proof

points that demonstrate Orica's success of value differentiation. Our EBS sales have increased by 38% and our services EBIT is increasing, typically, 10% year on year and last year pushed through the \$100 million per annum EBIT contribution mark. Also to note is Asia's performance, an important growth engine for our organisation, is now fast moving up the technology curve, becoming a very sizable business where EBIT has nearly doubled since only FY16.

Little bit about AN demand. The underlying demand for Ammonium Nitrate is strong and increasing. We see continued growth in most of our key commodities with increasing strip ratios, part from Indonesia thermal coal. Some specific call outs. A high-grade thermal coal from the Hunter Valley region has continued to grow for 14 consecutive years, with the exception of a blip in 2015. We expect this to continue for some time, with new thermal coal power plants coming on stream throughout Asia, plus climate change pressures increasing demand for the high-grade low-emission coal found in the Hunter Valley.

We see thermal coal demand from Indonesia as being more fragile, given its lower quality and higher cost nature. However, even this risk reduces over time as Indonesia's domestic demand for thermal coal displaces export demand. We also see increased Pilbara demand due to recent supply shortfalls in Latin America and increases in strip ratio as miners revise their mine plans towards the higher-grade iron ore due to premium price it continues to attract.

So it's clear that the AN market has tightened substantially in the last three years with both the east coast of Australia and Indonesia now being in balance. We expect the west coast of Australia to be in balance over the next two to three years as strip ratios increase. It should be noted that just a 0.2 increase in strip ratio increases the AN demand in the Pilbara by over 100,000 tonnes. So if you think about that, it actually won't take much to push the west coast into balance earlier.

With Burrup becoming operational in the second half of financial year 2020, we will see the dual benefit of significantly reduced current sourcing costs as well as freeing up Yarwun capacity to ultimately displace imports coming into Queensland. With our Bontang plant in Indonesia now being loaded, expansion plans for an additional 30,000 tonnes are well progressed. This expansion is a low capex, de-bottlenecking project on our lowest cost ammonium nitrate plant, which has significant export options should the Indonesian thermal coal exports contract.

Let me talk a little bit about our AusPac business. AusPac is a strong business along every

dimension, including safety operational performance, strong manufacturing footprint covering ammonia nitrate, cyanide and EBS, our technical services where we outrank our next best competitor three to one, which has been critical in growing our services contribution and where we are rapidly introducing transformational technologies.

In the last 18 months we have been increasingly introducing commercial value-sharing arrangements. These initially started as value guarantees, justifying differences with our more advanced product pricing, but have moved to value sharing where our success is integrally intertwined with that of our customers. This is creating focus and momentum towards fast value liberation. Increasingly, we will pair our best technical services people with these types of value sharing agreements as this is where we can unlock the most value for our customers and ourselves the fastest.

Our largest risk is the east coast gas price outlook. 84% of our contracts are locked in until the end of FY21 with gas pricing also locked in for that period. This situation becomes uncertain when we need to renew gas contracts and customer contracts around the same time. Consequently, we will continue to publicly argue the case for government intervention in a broken gas market so as to bring about competitive domestic gas pricing, both for ourselves and for other manufacturers.

If I turn to Asia, our growth in Asia has been remarkable and has been based on leveraging a number of our differentiating strengths, mainly strong safety performance and brand, strong local joint venture partnerships, our ammonium nitrate initiating systems manufacturing footprint, our ability to respond to a dynamic regulatory environment, better than our competitors, through the supply chain options that we have given our regional footprint and high operation standards that are recognised by the regulators.

Our Asia team is particularly proud of recently winning the giant Oyu Tolgoi mine in Mongolia, which gives Orica and our local manufacturing partner a critical mass of which we can service other mines in Mongolia.

In EMEA, we're introducing our most advanced technology products and services with two large customers, which will set the scene for others to follow. Under Angus' leadership, our focus in China has been on the development of the joint venture that we have with Poly who are the largest provider of explosives in the largest civil explosives market in the world.

Talk a bit about technology; I've mentioned the term transformational a few times in

reference to our technologies. Coming from an ex-customer perspective, these are the technologies that change the way that mining is done, rather than just incrementally improve the current mining process. They unlock what was previously trapped value, whether that being able to blast part of an underground ore body that previously wasn't possible due to detonator wires being damaged in a preceding blast, or being able to conduct mining steps in parallel that previously has to be done sequentially, such as multi-layer blasting, where you can drill and load multiple layers at the same time, but still blast sequentially.

One of the questions was around the use of our technology and it is absolutely broad based. So if you look at our WebGen, we're introducing WebGen in underground block cave, underground sublevel, open stope, we're introducing it in open cut metals, open cut coal, it's across the board. Whilst the technologies of WebGen, BlastIQ and automated loaded MMUs are transformational in their own right, when combined, they also form the building blocks of full drill and blast automation, which in time will revolutionise the front end of the mining process.

As an ex-miner, I can say we're the only explosives company that has the foundational technology building blocks to full drill and blast automation. With the technology advantage that we have, our focus is on successfully introducing such technologies as rapidly as possible. This hasn't been difficult with the BM7s, where we haven't been able to manufacturing these units fast enough. We're also ahead of plan in terms of the number of sites where we are introducing WebGen. Alberto referred to this earlier, but BMC is a mine that's operated by BHP in Queensland and it has been an absolute standout where nearly every two months they break the global record for the number of WebGen units blasted with increasingly sophisticated blasts and are set to do that again this coming month.

BlastIQ is also an important technology in that it provides the necessary data capture to help us quantify the value that we offer to our customers, which is of increasing importance as we increase the number of value share arrangements. BlastIQ also enables the automation of the loading of explosives and is improving the precision of the process, leading to lower costs and better outcomes for our customers.

We're increasing the adoption rate of new technologies through technology partnerships, where we don't just collaboratively develop the application techniques to fully exploit the opportunities offered by these new technologies, but also co-define the design of the next generation of these technologies. A great example of this is at Roy Hill where we're

integrating our technology road map with their road map as we move quickly to drill and blast automation in a way that unlocks the most value for them the quickest.

You can see that in the last 12 months we have had a substantial uptake of these game-changing technologies. Furthermore, we're starting to see a shift in recent activity to these new technologies, where there was initially some understandable nervousness about not wanting to go first. We're currently reaching an inflection point where no-one wants to be left behind.

So in summary, APA has been successfully delivering against its growth strategy for the past three years and will continue to do so. This growth has and will continue to be premised upon delivering unrivalled value for our customers through our remarkable people and technologies. It's pleasing to report that we are well progressed in our six key targeted growth areas, enabling us to realise a market share growth from 29% in FY16 to 37% over the course of next financial year and this is with contracts that are already locked in.

You just don't achieve this market growth without having something that the others don't have. Just as revenue growth has outstripped volume growth the last 18 months as we put contract resets behind us, EBIT growth will increase significantly, outstripping revenue growth as Burrup comes online and our contract books opens up in two to three years in a tightening market with anti-dumping measures in place.

We're at an exciting time in Orica's history and the mining sector more broadly. The momentum is with us as we partner with our customers to introduce new transformational technologies. This will unlock significant value for them and is further fuelling our continued market share growth.

I'd now like to hand over to Tom Schutte who will give you an overview of the EMEA region. Thank you.

Thomas Schutte: Thanks Darryl and good morning to everyone, everyone that's here as well as on the call. I think I'm fortunate to have met many of you before. I've been with Orica now four years and I think I joined in 2015 originally as the CFO and took over this role as President of EMEA about one-and-a-half years ago.

Right, I'll start with an overview of EMEA. So the EMEA business in Orica includes Europe, Middle East, Africa and CIS. I've had one or two of you ask me the question about that earlier during the break. We are yet to come up with a proper acronym that actually

elegantly includes the CIS in the acronym of EMEA, but it covers all those regions. It's a pretty large piece of the Earth.

As you've seen from our half year results, we had a very strong performance in the first half of this financial year. Now what differentiates EMEA from any other region though is its complexity and diversity that combines with its geography, where our employees are currently disbursed over 21 countries and three continents. 100% of our ammonium nitrates is supplied by third parties and we also have currently a cost to serve a much more scattered customer base.

With half of our business in Europe being uncontracted, this also requires a different market response that I will cover a bit later in the Europe section. Operating in such a complex and diverse environment, our current results reflect progress across our business following our recent reset of the subdivision of EMEA into basically three logical subregions as I mentioned, with Europe and Middle East together as one region, Africa the second and the Commonwealth of Independent States the third, which basically covers Russia and Kazakhstan but of course all the other countries that are in the CIS.

Looking at the top three charts, you'll notice that we have a revenue of about 16% but we're generating 10% of the Orica group's EBIT and this ratio is different to say, API, that Darryl actually highlighted earlier with North America, largely because of our scattered customer base that has a higher cost to serve, but also importantly we have no ammonium nitrate manufacturing. Importantly, I think we should note that the RONA in this region is still very attractive because of efficient capital deployment.

Over the last year we have seen strong AN volumes in key growth regions, including Kazakhstan and Russia and Africa, which has sort of partially been offset by volumes in Turkey and we all know about the economic problems there. Strong EBS growth and growth was pretty much we saw across all regions, as well as an increase in cyanide sales in Turkey in Africa that was basically due to the continued strength in the gold sector. We expect this momentum from the first half to continue with high volumes expected across EMEA with a focus in EBS and new technology offerings.

Now looking at the bottom three charts there, you'll see we have about 48% of our revenue in the form of bulk and packaged explosives and given the nature of our markets though, a larger portion of the profitability is ascribed to the higher value package explosives and also to IS and services. 41% of our revenue, you'll see in the middle graph, is attributable to quarries and construction, followed by gold and other mined commodities,

such as phosphate, oil shale, nickel, zinc, silver, they're all combined in that category other which is about 24% of our revenue. I guess once again this is different to many of the other regions that have been described and will be described today.

Importantly, with a market share of around 10%, I think this is important, a market share of about 10%, there is significant upside potential in this region purely from market share growth and I will highlight the opportunities in each of these three subregions in detail in some of the later slides.

So how are we positioned in this sector? On this slide I wanted to just show you how rich and diverse our market really is in this region. Across EMEA, I've mentioned earlier, we have the three subregions, but in actual fact there are seven key P&Ls that we manage: Russia and Kazakhstan, including the CIS, then Africa north and Africa south and we basically roughly split that around the DOC, the Democratic Republic of Congo. Then Europe is basically Norway, which is a specific market, the rest of Europe and the Middle East.

So given Russia's long history of industrialisation, many of the mines are large and ore bodies are relatively mature in some of these larger mines. These types of mines are disbursed across many of the commodities that I mentioned earlier and Kazakhstan also has a pretty established mining base that operates across these various minerals. Many of these mines are actually quite impressive to view and Orica has a huge amount to offer in terms of safety and productivity improvements with our core products. Some of the mines which have a more international footprint and there are many of them, also then stand to benefit from things like the latest technologies of the new products that Angus described earlier.

For Africa, approximately 50% of the mining activity is concentrated in southern Africa, but the growth prospects are high in the north-western gold sector, copper projects in various other areas and eastern Africa is also proving quite interesting. As stated earlier for Europe and the Middle East, a very large proportion of this market is quarries and construction specifically things like tunnels in Norway. Mines in this subregion actually tend to be smaller but relatively advanced in mining practises are they, as you can imagine in Europe, need to compete with much higher cost environments. This will eventually play out very positively with regards to our new technology adoption as they drive towards mining autonomy.

For the Middle East, well there are a lot of new developments in that area, specifically in

the area of seismic blasting, an area where Orica provides advanced products. Important to note that although thermal coal is quite prevalent in the region, I mean you can think of high volumes of thermal coal in South Africa as well as middle Russia, Orica is actually not present in those markets; in both instances they tend to be more logistically challenged regions to serve at this point.

Right, if we start looking at demand, so overall I think the summary is we've got quite a positive demand outlook for ammonium nitrate across EMEA, with greenfield mining and growth restart, iron ore and copper price improvements and consolidation in the gold sector, pretty exciting. Left chart there, you'll see on the screen, reflect Wood Mackenzie's robust outlook for copper, iron ore, gold over the medium term to 2024 and I'm not going to expand too much on that.

The positive outlook for copper is supported by greenfields projects and expansion in African copper belt, in CIS, Nordics, iron ore increase in Kazakhstan and Russia is pretty much on the back of the iron ore positive price environment. The outlook for gold of course is also positive with further industry consolidation expected, increased exploration activity and developments of new projects in CIS and in Africa.

Quarries and construction is an interesting market; it's forecast to grow at around 2% CAGR, supported by a new construction for projects in the Middle East. The Norwegian market growth is driven through government investment in the development of roads. Now given the topography of that country, this necessitates the building of tunnels, including sub-sea tunnels. Growth is forecast in this area, we expect, in line with GDP of around 2% as well.

On the supply side, as I mentioned earlier, we do not have any ammonium nitrate manufacturing. We do, however, have ample choice of AN supply from other third party sources and these are mostly well located in the growth markets we are targeting and are very competitive given the competitive gas-back position in many cases. Of course this is beneficial to EMEA, to Orica, from a return on capital perspective as we do not have to invest in these capital-intensive facilities at this point.

As you can see in the map on the right hand side, this just shows there on quite a number of AN manufacturing plants close to our markets Africa, Europe and CIS. So overall, I think on balance we are extremely well positioned to deliver a competitive source of ammonium nitrate supply to our customer and in this growing demanding environment.

I'll turn now to each one of the regions on there. So Europe, basically Europe, Nordics and

the Middle East. This is a mature, fragmented explosives market, which is highly regulated from a permitting, security, transport and storage perspective. Quarries and construction is dominant in this sector, representing 60% of the business with some emerging mining opportunities in the Nordics and southern Europe.

The market characteristics reflect a very highly competitive environment, including other major global and regional explosives players. There are no significant large scale global customers in this region and the contact profile tends to be dominated by short-term, annual contact cycles in the quarries and construction centre, including the large and diverse regional customers.

The Q&C market is largely stable in growth as I mentioned earlier. Opportunities for Orica's digital and electronic technologies are growing in this Q&C sector where we've delivered double-digit growth year on year with our EBS products, with specific success in the Nordic construction market. Additionally, new opportunities in the mining sector are developing with WebGen, BlastIQ automation, where the European miners are seeking to grow efficiencies and implement automation underground. We will leverage our global service base and knowledge to support these technologies, especially in the underground sector, where it's widely acknowledged that Orica has a leading position and offering.

The Middle East remains a strong focus for growth. We have seen recent developments in all sectors, including oil and gas, where we have just completed our first successful load and shoot contract partnering in the UAE. Contract retention for this area is our key priority because it is in such an established market and we have got very high brand recognition, which is good.

Looking at Africa, our Africa strategy focuses on increasing output from installed capacity with quite a couple of little plants around and expanding in gold and copper in the surface and underground mining segments. New investment decisions are evaluated against customer opportunities, allowing us to support the growth in the surrounding markets. This will improve the market competitiveness and spreads the investment risk over a broader customer base and improves the customer security of supply as well. In Africa we've seen growing interest in Orica's technologies that can deliver safety, reliability and productivity improvements in the mines as you can imagine for many of the new projects that are there.

Mid-cap miners are investing heavily in technology to automate their mines, while others are looking to harness big data capability to optimise across the mining process. I think it's

always interesting as you develop a brand new mine you can adopt some of these technologies quite quickly. Orica's technology, such as WebGen and underground automation and BlastIQ are key enablers and will be targeted to deliver this differentiated customer value. Of course a key part of our growth clearly lies in our traditional product offering in this area.

Russia, if we look at CIS which is essentially the largest with Russia and Kazakhstan, they're both large mature mining markets that are both becoming more open to outsourcing services and reliable suppliers such as Orica. This was as seen in the market share increase from 7% to 12% over the past three years, with strong growth in the far east Russia where we've established ourselves and central western Kazakhstan. Orica continues to deliver strong growth in Rock-on-Ground services, which now accounts for about 40% of our total explosives consumption in this region and provides a strong platform to leverage efficiencies through the application of our technology.

Opportunities for our digital, electronic and wireless technology is also growing in this region. Orica has a service base to support these technologies, we've based it from Moscow and more importantly, provide an avenue to the market to showcase the downstream benefits on this new customer base. All Rock-on-Ground accounts will be utilising Orica's BlastIQ by the end of this calendar year 2019 and there are a number of inquiries now in from existing customer portfolios across Russia and Kazakhstan.

The underground market continues to represent a significant opportunity for us and the CIS is in the top three market by volume for Orica's underground bulk products and expansion in this sector. We continue to be an engine for growth, specifically for CIS as well. The CIS is one of the largest sublevel caving markets in the world, which plays into our technology pipeline and quite key to bringing WebGen to the market there.

CIS team has a strong focus on building relationships across the region with local universities, firstly to develop the safety and the knowledge in the blasting industry for future leaders, you can imagine we've been in quite remote areas and secondly, to provide access to local talent in these regions that we can operate properly. Human capital and maintaining a high level of capability remain at the forefront of our long sustainable plans, as does the continued assessment and validation of opportunities to increase to some extent our domestic content and reduce our reliance on some of the imports, depending on the products.

So technology, as can be seen from this slide, depicting the focus areas in this region, the

opportunities are widely spread across the geography. In terms of product rollout, compared with the other regions and I think Angus touched on it, EMEA was the last to go, hence the lower numbers. We also need to get these products CE certified to fully commercialise them. This process is actually not expected to be an issue, but simply takes time to get through all the different qualification phases. Early efforts though, that you see on the slide, were all on testing and trials, which we could have done in the meantime.

So I'll first talk a bit about WebGen. We recently completed successful trials at a large underground mine in Europe. The main value benefits cited by the customer was safety and then ore recovery, specifically ore recovery in the pillars which they normally left in situ. A first stage WebGen blast was fired at an underground mine in Europe in early July 2019 and this is going to be followed up with a secondary blast in early FY20. Then two large open pit mining trials are in planning phase for northern Europe for Q1 2020. Key stakeholder discussions are in advanced stage with several mining organisations in Africa that are keen to trial WebGen. Part one of technology engagements will continue to add customer sites over these next six months.

BlastIQ. Although Europe and Middle East is predominately a quarries and construction market, there are significant opportunities in this industry segment once Orica's quarry design BlastIQ platform is completed and available in 2020. We have already achieved success with the implementation of the next-generation BlastIQ at two Rock-on-Ground customer sites in the CIS and one customer site in Africa. An additional site in Africa will implement BlastIQ before the end of this year. So the key value drivers for this blast control suite are reduced drilling and blasting costs, as Angus highlighted; improved safety and performance; and improved blast design.

There's also been a growing interest in BlastIQ and FRAGTrack, specifically across EMEA, through the BlastIQ website platform for customers. So we need different approaches in these markets, but we're having quite a good success.

So what does the future hold? So what are we focusing on now? From Orica's perspective, we certainly see EMEA as a high-growth, developing market, but it's in a diverse and complex environment. So our objective is to position our Company for the long-term growth by offering safe and efficient products, new technology and services to our customers in a very targeted fashion. Firstly, while dispersed, EMEA has significant upside potential and we continue to deliver on this growth strategy. In the CIS, not completely [new to us], we have a proven track record of successful deployment of

projects in remote regions and have more to deliver in these new territories. In both the last two years, we have built and delivered cost-efficient plants in very remote locations of North East Russia, on schedule and below budget.

In Africa, we are expanding our footprint via beachhead investments and our ideal targets at this stage are growing the gold and hard rock mines in West Africa and technology offerings in Southern Africa. Europe and the Middle East remains a mature, large fragmented quarries market and delivers strong returns in our region, so we're quite comfortable with that. With our established channels to market, we are pursuing further growth in new construction projects along with new technology adoption.

So to deliver our EBIT, specifically EMEA EBIT uplift, our cost optimisation is supported by the SAP system, 4S, as you mentioned earlier. Our cost to serve is high, as I also mentioned and, given our dispersed market, remote locations and large size, a specific focus on net cost optimisation is necessary and we'll leverage 4S to achieve this increased level of control and transparency implemented.

Proven capital light strategy is delivering a RONA of greater than 20% in all these sub-regions.

Finally, we are focusing on the high uptake of new technology. As mentioned, although EBIT has grown substantially, we have been slower than the other regions in the deployment of this new technology, due to regulatory requirements in the things that I mentioned earlier. We have an exciting future ahead, knowing that our customers will benefit from safety productivity improvements of all the suite of products and, as mentioned, we've really proven EBS grew already this year over 20%.

With new technologies in our portfolio, we will continue to invest in our people as well. It's going to be critical in terms of the deployment throughout this region and their specific and targeted training in the digital world.

So what does this all mean? I'd say, given this opportunity to grow this market share from a relatively low base of 10%, we are quite confident, I say, that we will continue to deliver double-digit EBIT growth in this region for some years to come still. So with that update, I think we'll break for the Q&A session. Then, if you have any questions, then just direct them through Delphine or - let me go and sit down and we can do this.

Delphine Cassidy: Thanks, Tom. We'll start questions from the floor for either Darryl or Tom. There's a question to the right there.

Daniel Kang: (Citigroup, Analyst) Morning. It's Daniel Kang from Citigroup. A couple of questions for Darryl first and then one for Tom. Recently, Darryl, there were a few tenders on the East Coast and a major IS and services contract that went away from Orica. I'm just wondering if you can shed some light on why you think the reason for those tenders going away from you. Just secondly, I'm interested in the China region, the history and JV with Poly, where you see the opportunities there in China are. How - the magnitude of what China could be for the Asian market.

Darryl Cuzzubbo: Sure. Just on the second question, I'll actually defer to Angus to answer that. On the first question, firstly, these were contracts we didn't hold. So we didn't lose them, but we were going for them. That was obviously disappointing. As you will appreciate, I can't and won't talk about specific contracts. But let me share with you more broadly how we see this. We do have the most advanced technology. We do have the best people. That appreciated in some areas more than other areas. We're very disciplined on pricing too. So we have a view of the value of our products and services and, if that's not recognised, then we will walk away from bids.

This is a general response, but I do share that, because we don't expect to win every bid. We go for the customers where we think we can unlock value and where there's a mutual appreciation of that value. I might hand over to you, Angus.

Angus Melbourne: Yes. So, China, is - I alluded to some of what's going on in China in the last question last session. China is a really big opportunity for Orica. It's the largest civil market component by a considerable amount, but it's a challenging market. It's highly fragmented and it's very competitive and there are many players. But it's undergoing some significant changes, which are largely regulatory driven towards the use of electronic detonators for security and safety rationale. There's also a push for consolidation of the industry and there's also a push from the use of packaged emulsion to bulk explosives. So we see the opportunity for Orica, who have had existing operations in China for some time. We have a manufacturing footprint that includes the manufacturer of detonators and also of bulk and emulsion.

We also manufacture delivery systems there, including pumps and surface trucks. So we're well positioned, as the industry migrates towards a bulk and mining services, which is a more of an international market approach and we're also very well placed to take advantage of the shift to electronic detonators. Orica invented electronic detonators. We know a lot about the players in China and our key positioning with our joint venture

partner is really designed to take opportunity of our expertise, our technology and Poly's position as the largest player in China to take advantage of all of those market dynamics.

Daniel Kang: (Citigroup, Analyst) How do you ensure that your technology is protected in that region?

Angus Melbourne: So we're very careful with our technology and I mentioned earlier that a part of the transition in China to EBS will be around a specific China product. Today, that market is very price-sensitive and the current product performance and reliability is considerably lower than the EBS - in fact, even non-electric detonators in the international market. So the first versions of EBS in China will have to be very specific to that markets needs. There's also some criteria around - it's too much detail, but there's a hierarchy of encryption that's unique to China, which needs to be embedded in that China product. So we will protect our IP by working on a China-specific product, which will meet the needs of that market.

Daniel Kang: (Citigroup, Analysis) Thanks, Angus. Just a quick one for Tom. Can you just describe, I guess, your key competitors in the EMEA region? Are you really facing more regional players in that region? What's the aspirational market share that you would look to target over the coming years? You've got 10% at the moment. Just lastly, in terms of AN supply and demand, I mean, I'm assuming that is an oversupply in the region at the moment and you're currently benefiting from that. How long do you see that lasting?

Tom Schutte: Okay. Quite a couple of good questions. So, firstly, yes, I think the market is quite competitive and I think I mentioned it actually in my script. Europe has been around for a while. There have been a lot of domestic players in Europe and in Africa as well you have quite a lot of players in the southern part of Africa. So that's true. The reality though is that on a technology front, I think, we're very well positioned, very well placed on that perspective. Not many - I don't - nobody else has got the advantages that we have with regards to the technology. The reason why we were last to go actually in this region was actually, I think, the correct methodology in order to get scale in the large regions, like, APA, where we have got - just the largest mines in the world are actually there. So just the reality.

So - yes, so I think we're well positioned. As regards to the market share target, I'm not going to give it to you. So I think we can't put another market share growth environment I think this is not a market share über type strategy. I think the issue is we also want to grow our profitability as well. So certainly, I think, the way to grow this business, Europe

is really stable and to look at Russia, CIS and Africa is to be extremely targeted. Add customers there, you're going to get an immediately benefit with regards to the technology, rather than a scattergun approach, just to push market share. What I tried to actually illustrate with the market share comment was that if you come off that type of base and you know about the amount of activity that is really on the go in Africa and in Russia, it's immense.

There's a lot of stuff happening on projects due to mining, improvements in mining and so on. Just due to that activity, with the technologies which we haven't applied in the past, we would have a good opportunity to grow in that region. Then to answer your question on ammonium nitrate, it is a little bit regional that market, in that - in Russia we've got quite a lot of supplies and suppliers that are local. We buy from multiple different sources for the other areas. So my sense is that that region will stay in oversupply and I'm sure you've got much more research than - or as much as research that we have that that market within that region or within those regions specifically will be oversupplied for some time to come still, which means it's comfortable for us to source the product.

It also gives us quite a lot of variety in terms of sources to source product and deliver to customers. But to predict the future, of course, we don't know.

Unidentified Participant: Good morning, again. I just have a couple of questions, just firstly in terms of contract timing of renewals, Darryl, and also just in relation to gas costs in Eastern Australia. Just to clarify, the timing of renewals, so that you - you obviously said in the presentation post-FY21, is there prospect of that happening during FY21? I just want to clarify the expectation there.

Darryl Cuzzubbo: Yes. So, no, it's 84% for our AUSPAC business. The contracts are locked in until the end of FY21, so it's FY22 that we see our contract book open up.

Unidentified Participant: Thank you. Just in relation to gas, you seem to be flagging step up in gas costs beyond FY21. I mean, our understanding was that your gas costs had already moved to a higher level, so maybe just some perspectives on that. You're expecting to pass some of that on to customers?

Darryl Cuzzubbo: Yes, so it's a good question. So 96% of our book has a rise and fall, where ammonia and gas price movements do move back to our customers. Come the end of FY21, as our book opens up, we're back in an open bid process, so pricings will be reset through that process. Therefore, the price of gas actually does have a direct impact on us. There's a lot of things going in our favour. But if I had to call out one risk that we've really

got to manage over the next two years, it's fixing this gas issue. Now, from an Orica perspective, we're a little fortunate, because we can always import ammonia. Not every manufacturer has that as that option, so, yes, it's the risk. We do have a plan B, but this is the number 1 risk that we need to manage in the medium term. All right.

Alberto Calderon: Just let me add something on that and it's around - I think the antidumping was an important one. If you look, let's say, without the gas, we're far away from the IPP. So that still protects us. Probably with the gas price increases, we are at IPP. That is a protection that is probably important to mention.

Grant Saligari: (Credit Suisse, Analyst) Grant Saligari, Credit Suisse, again. So on EMEA, I guess, it's somewhat unique in not having the manufacturing capacities you've said, so I'm just sort of wondering whether it would make sense at all, should the right assets, at the right price, become available, whether it would ever be in scope to have manufacturing capacity in certain parts of Europe or whether the structure is so completely fundamentally different which you couldn't generate a return from that type of backward integration. I guess, related to that, whether the lack of manufacturing capacity is at all a barrier to, say, the market share objectives that you have.

Tom Schutte: Sorry. I missed that last question. The lack of - as a barrier?

Grant Saligari: (Credit Suisse, Analyst) Of manufacturing capacity, whether that's a barrier at all to the market share objectives that you have.

Tom Schutte: Okay. Yes. Sure. Okay. So we talked about not having manufacturing. We do have manufacturing in the form of IS, right? So we've got Gyttorp there and we've got a couple of others they're all on that map. We've got quite a couple of manufacturing facilities for IS. At this stage, we make the bulk of our money actually in that space and ammonium nitrate, although we do make on that as well is an entry to that customer from our full package perspective. So we certainly have a footprint, but from an ammonium nitrate footprint perspective, in terms of if there's opportunities, I mean, of course, Orica always has a look at that and the market does tend to be regional to some extent, so certainly you'll have to take that into consideration with regards to, say, supply into Russia, et cetera, et cetera.

At this point in time, our footprint is actually quite well established. We spent the last couple of years trying to get that in place, so it's not an impediment at all in terms of getting our market share growth expectations in place. As I mentioned earlier, the growth would be quite targeted to some specific accounts and so it's not just - it's not a matter of

that we need a heap of ammonium nitrate to go and conquer the world. It's actually very focused. So certainly within our planning horizon, it's unlikely that that will become an impediment, per se. I mean, the biggest challenges in this region tend to be practical issues, like geographies, North Siberia, loading the blast at minus 52 degrees Celsius. Those are the sort of things that we - I think would challenge us more than the supply from that side.

But certainly I'm sure that we would continuously look at opportunities like that.

Delphine Cassidy: If there are no questions from the floor, a couple have just come through the webcast. Both for you, Darryl, I'll ask it to you separately. First one was - and I think this is following on from Alberto. He's already commented on this - is that please provide some more detail on the benefit of the recent antidumping decision and what's the outlook for import volumes into Australia.

Darryl Cuzzubbo: Yes. Sure. So a bit over a year ago, a number of industry participants, not just ourselves, put in a submission for antidumping and the outcome of that was favourable. We were seeing ammonium nitrate volumes being dumped into Australia, so basically sold into Australia at prices much lower than what would cover their typical costs and fully absorbed cost and what they were selling into their domestic market. So that has imposed restrictions and we've seen the import parity pricing as a result lift by over 10%. So we've seen that play in the market today. In terms of - and that was suppressing the market. In terms of import volumes, so if you look at before last year, it was typically around 100,000 to 120,000 tonnes of ammonium nitrate being imported into Australia. That actually went to 220,000 tonnes last year.

Some of that was us importing into the Pilbara, but the vast majority of that was servicing the rising demand in Queensland. As Burrup comes up on stream, that then frees up our Yarwun capacity to then, if you like, displace those rising imports into Queensland. So Yarwun is actually in the right location at the right time, as soon as Burrup starts, Yarwun will be able to service that rising need. Does that answer the question?

Delphine Cassidy: I think it does. The second question is also for you. Your region's got about a 36% reliance on Thermal Coal. What's the risk of an erosion of Thermal Coal on the business?

Darryl Cuzzubbo: Actually I'm glad that question is asked. When we look at Thermal Coal we actually have to look at it in two segments. Thermal Coal, we hear about Thermal Coal coming off through Europe et cetera and that is true. But the opposite is true in Asia. So

if you look at Asia the energy requirements per capita is increasing. In responding to that through China, India, Indonesia and other parts of Asia they are building Thermal Coal power plants.

So if you look at it from an APA perspective the demand for Thermal Coal is actually increasing. If you put an overlay over that the Thermal Coal in the Hunter Valley is the highest quality, lowest emission Thermal Coal in the world. So the demand for Thermal Coal as climate pressures increase from the Hunter Valley is going to increase as well. We've seen that right through consecutive years of growth.

In Indonesia it's a different dynamic. The Indonesian Thermal Coal is heavily dependent on their rising domestic need and Indonesia is building Thermal Coal power plants. But also we've seen on the east coast of India building Thermal Coal power plants that are suitable for both Indonesian and South African coal. So that again helps to put a floor if you like on the demand from Thermal Coal.

Now with all of that said if we were presenting this a couple of years ago you would have seen that our exposure to Thermal Coal is around 45%. It's now at 36%. So as our market share grows we are actually diversifying our exposure to different commodities and as a result our Thermal Coal exposure is reducing. But it's still an important part of our business and we think it'll be an important part of our business for at least the next 10 years.

Delphine Cassidy: Thanks Darryl. I think we'll move to the next two speakers. That's James Bonnor and German who will cover North America and Latin America.

James Bonnor: Thanks Delphine and welcome everybody. It's great to see you all here. My name is James Bonnor and I'm the Regional President for North America. I've been with Orica for almost 25 years. Worked initially in the fertilizers division when we had fertilizers and then subsequently in the chemicals division when we had chemicals. But was smart enough to keep moving and about 14 years, ended up in the Mining Services division and I've had the privilege of working across New Zealand, Australia, Asia, North America and Latin America through that period.

I'm going to give you an overview of the North American market, the current business position and the outlook in the future for North America. North America is the second largest region in Orica. We account for around 30% of the explosives volume, 28% of the revenue and 31% of the EBIT. We have the highest penetration of electronic detonators across all regions representing 42%. I'll talk about our joint ventures shortly. Our joint

ventures have been one of the key enablers of that penetration of electronic detonators. The commodity mix in North America is relatively balanced, with a trend in recent years from declining in our exposure to Thermal Coal and an increased reliance on hard rock metals and Quarries and Construction. Thermal Coal now represents only 10% of our total volumes in North America. This trend and mix is likely to continue over the coming years and Orica through recent years has secured a market share position - market leading position of 49% of the market by volume.

As mentioned in the previous slide the market is characterised by a diverse range of commodities across a very challenging geographic market. Being able to operate supporting customers through the Arctic Circle through to Central Mexico is absolutely essential in this market.

The Ammonium Nitrate supplied into this explosives market is characterised by three key industry players along with some other fertilizer companies who supply Ammonium Nitrate but don't participate in the downstream explosives business. The total market of North America is 2.7 million metric tonnes and on top of this we have a number of downstream service providers supplying around 600 mines and 4000 Quarry and Construction customers.

North America has an abundance of mineral reserves and with its relatively low sovereign risk we're experiencing a positive environment for investment particularly into Canada. So just looking at our spread. So this slide represents our footprint across North America and as you can see it's very comprehensive. A significant investment is needed if you want to be a serious player in the North American explosives market. Investment and manufacturing, investment and supply chain, field operational assets to service the needs of the market.

Orica has an unmatched position across the region with access to over 1.5 million tonnes of Ammonium Nitrate capacity either inhouse or through third parties. Or IS and EBS plants, manufacturing plants including Brownsburg in Canada which the largest electronic blasting plant anywhere in the world with a 15 million unit capacity. We have 12 packaged explosive plants; packaged emulsions and ANFO. Nineteen emulsion plants many of them on customer sites and we have 105 downstream sites including rail transloads and distribution centres.

Again essential to be able to service the needs of a very geographically challenged market. The competitive advantage generated from this is unmatched in the industry. So I'd like

to talk a little bit about Ammonium Nitrate, the demand side and then I'll talk about the supply side.

The demand outlook for the region is mixed with a declining coal being offset by growth in Copper, Gold and Quarry and Construction. Consequently we see CAGR around 1% to 2% over the coming five years for explosives and slightly higher for detonators given the growth in underground mining and quarries and construction. On the supply side Orica has an enviable supplier footprint with inhouse manufacturing at Carseland just near Calgary and Alberta for 500,000 metric tonnes back to AECO gas which is some of the lowest cost gas anywhere around the world currently.

Along with a long-term supply contract with CF Industries linked back to Henry Hub Gas at Yazoo City, Mississippi. Yazoo City is the largest and lowest cost AN Manufacturing facility in North America and we started a 10 plus five-year supply deal in 2017. This gives us ex gate Tier 1 cost positions linked back to natural gas combined with our significant footprint in infrastructure to deliver to our customers at a competitive cost across the remotest locations in the region. That's a really key point; competitive cost on a delivered basis.

Many of these mines are in very challenging geographic locations. So I'd now like to talk a little bit more about the USA. The US is the largest business in the region and is a combination of our direct channel in the Q&C markets along with long standing joint ventures in the mining markets plus a number of independent distributors. I'd just like to touch on our joint ventures.

We have a joint venture with Nelson Brothers, a family-based company out of Birmingham, Alabama which services all our coal markets. Powder River Basin, Appalachia and into the Midwest of the US. We have another joint venture based in Tucson, Arizona with Southwest Energy, another family business which we formed a joint venture with back in 2008. They distribute through the four corners, so Arizona, Nevada, Utah, et cetera.

The supply partnership with CF Industries and the significant rail coverage is key to the long-term positioning of the US business. The outlook in the US for Gold, Copper and Q&C is solid but is tempered somewhat by the continuing decline in coal from the distribution of coal - from the substitution of coal to natural gas in the US energy mix. That said, coal production peaked in 2012 at about 1 billion short tonnes in the United States.

It's now running at about 700 million short tonnes and it has stabilised at those levels for about the last 18 months. Now that decline will continue but it's not as dramatic as we saw from that sort of 2012 to 2017 period. The outlook for US Gold, Copper and Q&C is

solid. We have been getting excellent traction with BlastIQ particularly in the Q&C markets where a lot of our customers are actually adopting it for managing blast data and being able to compare results from previous blasts.

We also see a solid outlook into the Q&C sector based on pent up infrastructure investment required to support the US business. So I'd like to finish up with the US by saying that this market is a growth market for us despite the decline in coal. We're very well positioned in the market with the CF contract and we see great potential into the future both directly and through our joint ventures.

The Canadian business is a gem in the Orica portfolio. It has an excellent manufacturing footprint combined with deep long-term relationships with customers and first nations customers which is again key to being successful in the Canadian business across very remote locations represents mining in Canada. We're seeing investment in Greenfield gold projects in British Columbia along with restarts of iron ore mines up in eastern Canada and also restarts in Metallurgical mines in Alberta. This is creating some great opportunities for us to grow the business.

The customers are some of the most innovative customers you'll see anywhere in the world particularly in the underground centre where the adoption of wireless technology is leading anywhere. When you combine this with a pro mining environment and some of the better reserves in the world Canada has a lot of potential for Orica into the future. It's hard to see a lot of downside for mining in Canada but like Australia it is very much dependent on export markets across the commodities that it produces.

So let me talk a little bit about Mexico. Mexico is the smallest country in the region but still represents an important contribution representing around 20% of the earnings for Orica North America. We have strong supply positions with AN sourced from a local fertilizer company Fertinal along with bringing product down from our Yazoo City contract with CF Industries. Combine this local supply of IS, packaged and bulk explosives from our Cuatrociénegas plant in the north of Mexico gives us a full range of products and services for our customers.

None of our competitors can match this range. The penetration of electronic detonators and advanced bulk emulsion is the lowest across the region and therefore provides opportunities to improve blast outcomes through advanced technology. In addition we have run a number of successful wireless blasts at a large underground mine and customers have been delighted with the results and looking to integrate WebGen into their

long-term mine plan.

There are some challenges in the Mexican market with community unrest and broader political and economic challenges causing an unsettled mining environment. However we do see a solid outlook for our business in Mexico particularly in relation to the penetration of our new technology. Let me talk a little bit more about technology. We have mentioned - Angus mentioned a bit some of our customers in Canada in the underground sector.

But WebGen really is providing significant interest across the region with a strong pull particularly from the underground sector. The productivity and safety benefits are proving a game changer for many mine operations and we have already converted five underground mines to WebGen in Canada along with others in Mexico. One mine in Canada has generated 12,000 incremental ounces of gold in the past six months through utilising this technology. If you do the math on that it's pretty healthy for a relatively small underground mine.

BlastIQ is also proving to be very successful across North America where we have over 100 sites installed with different variations of our BlastIQ technology. Different customers value different elements in different ways. The Quarry and Construction customers really are interested in the data management of their blast. A fairly simple need but very important. In the past a lot of their blast sheets ended up in drawers of various engineers on the various quarries. Now they can get all that data in cloud based and benchmark performance across many, many quarries that they operate.

While some of our large mining customers are really interested in looking at key elements of the value chain and in particular looking at blast design simulation. So simulating blast outcomes and then looking at the fragmentation benefits that come through their subsequent mill optimisation. GroundProbe is also continuing to penetrate the market and the Orica sales channel has generated a number of leads and has been a key enabler in growing sales for the GroundProbe technology.

So looking beyond. The outlook for North America is solid and core to our strategy will be focusing on growth segments including Gold, Copper, Quarry and Construction with a number of Greenfield projects which Orica is well placed to capitalise. In addition we see EBIT uplift through our relentless focus on operation costs leverage and greater operating discipline particularly utilising the introduction of the 4SAP system.

This will culminate in strong growth outlook for the North American region and combined

with our transformational technologies we see a positive outlook for the North American region over the coming years. So I'd like to close and share a couple of perspectives and also share a story. Having spent a large number of years in this Company I can have this perspective.

The operating model we implemented about four years ago has really created the right balance of empowering the regions to run the business overlaid with functional excellence from the centre. The rollout of the new SAP system will be a key next step in standardising our systems and processes across the Company globally. Secondly I've never seen a portfolio of new technology in all my time in the Company, like we're talking about with you today.

These technologies are truly game changing for the mining industry particularly the wireless technology. The energy and enthusiasm this is creating both internally and also with our customers is very exciting. So I'd now like to share a story. Fourteen years ago when I joined the Mining Services division I was talking with a senior research scientist. He said to me just imagine if we could have wireless blasting and I thought okay that sounds pretty interesting but it was a just imagine.

Now through a lot of hard work of some very clever people that just imagine is now a reality and we are now enabling customers to deliver significant value through this technology. I just want to acknowledge a lot of our senior research people, all the teams that have been involved and not only at WebGen but all these new technologies. We're having a lot of just imagine moments in Orica and it's that kind of foresight and thinking that we need and I just want to acknowledge those people.

They are a bunch of gems and we tend to get focused on numbers and everything else but sometimes that capital that we have in our people we should really emphasise. So let's just keep imaging and you never know where we can take it. So I'll hand over to German Morales who's going to talk to us about Latin America. German.

German Morales: Thank you. Thank you very much James and good morning to everybody here in the room and also on the webcast. I'm going to jump a little bit over the script and I want to share another story. With me you know when WebGen was launched into the market I was on the other side of the fence. Right I've been 20 years in the industry basically in the competition and I have the privilege of working all around the world, in Africa, United States, Australia.

But back in those days I was in Spain and I remember seeing the release of Orica coming

to the market with a wireless technology. Let me tell you that was a shocking discovery for the industry to find out that somebody can pull the rabbit out of the hat and come up with something that is fundamentally disruptive to the market. It has been said this is a technology that happens once in a lifetime and I feel a privilege to live that once in a lifetime opportunity here. So for me it has been a privilege to be part of this well-grounded organisation. A well-grounded organisation.

Let's talk a little bit about Latin America. Latin America is mainly exposed to three commodities, Copper, Gold and Thermal Coal. Overall we see a strong growth outlook in the region very much supported by Peru and Chile both countries with a stable and profitable political involvement. There is mining and infrastructure investment in those two countries alone exceeding \$100 billion for the coming years. Regional sales are positively influenced by a healthy Cyanide pipeline, organic market growth and underpinned as a technological solution.

While the competitive landscape has been changing over the past years, I'm very pleased to report that Orica remains the market leader in the region, especially boosted after the recently awarded contract of Antamina in Peru. Similarly to EMEA, our business is mostly limited to downstream contribution, resulting in a modest EBIT, but nevertheless, a very attractive RONA.

Orica LATAM is getting back to setting the basics right by placing our customers and their need at the core of the business, strengthening commercial relationships and discipline, pushing operational excellence to further increase the reliability of our products and services.

Over the past year, we have right-sized the operational and supporting structures, resulting in contained overheads and improved service margin. Last year contract losses have been completely offset and in fact, volume is trending up thanks to both organic growth and competitor conversion.

Overall, annual growth is estimated to be at 3%, very much aligned with copper growth for the region. Our local competitors in Chile and Peru are fully or almost fully vertically integrated, benefiting of some cost benefits - or some cost advantages. The market is still showing a product commoditisation trend, influenced by our competitors' strategy, mostly based on lower prices.

Despite of this, we have retained a leading position on the market; very visible on premium products such as electronic systems or [premium emulsions]. As part of this - sorry - our renewed customer focus, with transformation towards innovation, efficiency and sustainability represents our main competitive advantage.

Over the past 15 years, we have seen how mine production and Ammonium Nitrate consumption has been steadily decoupling. Mineral extraction requires increasingly higher amounts of material to be moved. As an example, in Chile back in the year 2000, for each tonne of mineral moved, 10 kilos of copper were produced.

Today, that ratio has dropped to 6 kilograms. On the other hand, and to a lesser degree, all mines are migrating from open pit to underground. A good example of that is Chuquicamata, reducing explosives consumption, at the same time, opening opportunities for more advanced mining methods such as block caving, where our products are best suited for. Both trends underpin a growing commodity production, results in a very positive outlook for the region.

Orica is by far the largest Ammonium Nitrate buyer in Latin America. This gives us the flexibility of choosing sources, both local and imported and optimising our supply chain. Despite of not enjoying the upstream benefit of Ammonium Nitrate, we are able to offer a reliable and cost-effective solution to all clients.

Let's talk about the Northeast, Brazil, Colombia and the Caribbean. This area is mainly characterised by large surface operation - thermal coal in Columbia, iron ore and copper in Brazil, some underground mining and a developed quarry and construction business in Brazil. Not to forget also, there is an interest in gold business in the Caribbean especially attractive because of the consumption of cyanide. Orica value towards digital, automation and premium product is aligned to market technification.

A good example is the way we have presented our proposals to some key clients in Brazil, combining Orica and GroundProbe propositions. The newly commissioned electronic system plant in Colombia will also allow us to further consolidate our position in the market by supplying our customers competitively and with the best available technology.

Southwest - the southwest is mostly a mature market where we believe we still have some room to grow, particularly in Chile where our markets are - is limited to about 21% market, but also in Peru. In both countries, and as a result of the favourable political environment, we expect organic growth as well as greenfield projects.

Chile is of particular interest, not only for the size of the business and our relative position into the market, but more importantly, because of the interest that our technologies are creating in the market. Ecuador is also developing interesting projects of considerable size, such as Fruta del Norte and Mirador.

While there are risks associated to how mining impacts some of - some communities - and a good example is the recent blockages we had in Las Bambas in Peru - we have been developing integration activities within such communities. A good example can be found in Congata, one of our southern plants in Peru, where we actively collaborate with the community with the scholarships, education and training programs, soil protection and other meaningful projects. This is part of our sustainability strategy for the region.

I was mentioning before how over my 20 years of career, this is the first time that I have seen such a unique moment in the market, where the clients show strong interest in our technologies and solutions.

As a consequence, today we have a solid proposal pipeline for WebGen and BlastIQ, with commercial sales to both open pit and underground mining. Additionally, and as previously mentioned, there is a strong alignment of Orica and GroundProbe value proposition. These integrated value propositions can create a very positive impact to our customers, both in terms of value generation as well as safer and more sustainable operations.

It was questioned before why Latin America was inclined to accept these technologies faster, and there is a number of reasons for that, but let me summarise in a couple of them.

Communities is an important part of that. The fact that this is a mine - some of these mines sit close to the communities, force the mines to be extremely diligent - vigilant in terms of the impact that they create versus the need to have a monitoring tool like BlastIQ helping dramatically to respond to the requirements of the communities.

Also, the new technologies help them with [hitting] some of the impacts of the greater community. But also because of the [unclear] position [unclear] in the region are relatively low, compared to some of the regions around the world.

That make them that they have to be more efficient and they are more open to products and solution that give them that edge of competitiveness that they require to keep on

operating low-grade coppers mines in high altitude mines in the Andes. There's also some safety reasons for that. There's mines that are exposed to silica and anything that can remove people out of [unclear] is also very [unclear] and appreciated.

So, there is a number of reasons and there is a number of value propositions why Latin America is very suited for this type of technologies.

Our differentiated value propositions, focused on meeting our customer needs, will help us retaining current contracts and gaining new ones. Our new technologies will allow us to improve margins while becoming a strategic partner to those customers that consider this important.

We aim to consolidate our position as market leaders while leading the technology change that the mining industry is facing. Before I close, allow me to highlight some interesting achievements over the last month - over the past months. Orica LATAM has implemented the first commercial open pit operation for WebGen in the world. We also established the first OreTrack and FRAGTrack commercial operations in Chile and Colombia respectively.

I'm very much aware of the challenges as well as the opportunities that lie ahead of us at the moment, in which mining is quickly changing. Because of the previous examples, all supported by a pool of experience and committed professionals, I am convinced that we have all the necessary building blocks to be successful and become an active protagonist in designing the future of mining.

Current mining positive environment offers us the opportunity to benefit from market growth, helping our customers face the challenges. Making them safer, more productive and delivery cost-efficient operations. Orica's technology base value propositions, joining with our integrated strategy based on sustainability, operational excellence, discipline, supply optimisation and supported by the most capable people will enable us to grow at the fast pace of the market.

I would like to open now the question and answer section for both James and myself. Thank you.

Delphine Cassidy: We'll start with questions from the floor.

Grant Saligari (Credit Suisse): Just on Latin America. I was wondering whether you'd just comment on the supply and demand balance outlook as you've highlighted 16% demand growth, I think, over the next five years in your presentation. Does that take us anywhere close to balance in terms of supply and demand of bulk AN? I guess, if it does, does that

change at all Orica's competitive position in that market?

German Morales: It depends on the area. Latin America is a cluster of different countries and in every different country, there's a different position. But the 16% is - it will tighten up the market conditions significantly.

Grant Saligari (Credit Suisse): How would that affect Orica's position? Because you're in a market at the moment where you're sourcing in a market where there's excess supply, so if that tightens, how would that affect Orica's competitive position in that market?

German Morales: Well, you suspect it is obviously, as the market tightens, the competitive pressure on prices will be reduced and it will be driven more into value.

Grant Saligari (Credit Suisse): Maybe I'm not communicating correctly, but if you're actually buying product and the market tightens, doesn't that put you in a weaker competitive position? Are you saying, no, it doesn't?

German Morales: We basically produce most of the product except for Ammonium Nitrate. I don't know if you're referring to that. Orica has the industrial footprint in Latin America to produce most of the product we are consuming, either from Latin America or we import it from our factories in other parts of the world within the Orica footprint. So, that's not going to be a problem for us to continue supplying as the market tightens into Latin America.

Grant Saligari (Credit Suisse): I guess, just observationally over the last number of years, Latin America has been one of the more volatile segments that, that I've observed coming out of Orica and that suggests to me that there's something in the competitive position there that is leading to that uncertainty. I wonder whether you can sort of elaborate at all on what it is that generates the volatility that comes out of the Latin American results for Orica?

German Morales: For Orica, I can't comment on the past years and obviously, what created the volatility of what happened after fiscal '17 was the loss of a couple of contracts. We lost a significant volume in Latin America, counting for about 25% of the value generated in the region and that was what drove the particular volatility that you saw in fiscal '18.

Alberto Calderon: Probably for German it's more difficult - to comment, but yes there were some issues that are well known by the market. We - the management team are there - probably have gone a bit too far away from the customer. It led to a significant change,

not only at the top but also at the area business managers.

We actually sent our best business managers across the world and it's making a difference. Again, German's been modest, but really the way that he's been made up his region, the loss of Codelco, that was about \$20 million of EBIT, I think, and I'm expecting he will practically be able to make it all up during one year. We have guided the market that it will take two years. It's probably only going to take one year.

So yes, things are better. If you look at the four regions, the weapons that they have are less. Again, if you look at North America, the moats are enormous. You look at Australia and again, similarly. But here, we hadn't done it that well for technology and that is really what's driving in the past 12 months.

But we obviously have to buy the AN. So, it's a more challenging environment, but at the same, it's where we're most bullish on the commodities outlook, which is gold and copper. Personally, I've been quite happy with the reaction of that group in the past 12 months and I expect that trend to continue into the future.

Delphine Cassidy: There's a question from the floor.

Scott Ryall: (Rimor Equity Research, Analyst) Hi there, yes, Scott Ryall again. Question for James, I guess. We've spent a lot of time talking about mining markets, but you emphasise the Q and C market quite a bit in your presentation. Could you just talk to what you believe are the critical success factors for a provider such as yourself in the Q and C market? And perhaps why, compared to some of the others - weightings of revenue that we see from other companies, that you might be under represented and what you're doing about that, please?

James Bonnor: Sure. The Q and C market is characterised by a very high service component. Most quarries or construction jobs want a service provider that can load and blast the explosives. So, key to success to that is ensuring that you're - first of all, you've got a competitive position. That footprint that we have with the distribution centres - we run a hub and spoke model off those distribution centres - typically, we'll send six to seven MMUs from each distribution centre, out to those quarries, do the full service, do the blasting - so, we warrant the blast. The success in that is really having that full package and being able to be reliable, day in, day out. Relatively small blasts, but on a very regular basis. That's pretty much where you drive the competitive advantage.

Some of our competitors will have, perhaps, slightly better geographic positions,

remembering that most quarries are within a couple of hours of major built up areas. Say, Atlanta Georgia is a good example. We represent the market, maybe our competitors represent a little bit differently. We're about a third, a third, a third between the three major players in the US. We have a high representation in the mining markets. To grow that segment, we need to be investing further in infrastructure and ensuring that our service offer is superior to that of our competitors. That's what we're trying to do. The BlastIQ offer that we bring to the Q and C sector in the US is being picked up quite nicely. It's a growth opportunity and it's also a growth market. A lot of pent up demand for infrastructure in North America - sorry, in the US and we know where those areas are, particularly in the east. So, we need to be prepared to invest in those growth opportunities.

Scott Ryall: (Rimor Equity Research, Analyst) Sorry, just to follow-on, in terms of the infrastructure you need to invest in, can you just specify that a little bit more? And I guess, on the services side, which was the other one, you're very comfortable that the service offering you have is superior to competitors for the Q and C market?

James Bonnor: I visited some customers up in the Green Bay area two weeks ago and the feedback from these customers that have been trialling the different players, is very much set on Orica because of our reliability, supply, service and everything else. But there are areas in the US where we're underrepresented and I'll give an example, that's Texas. If we really want to be a serious player in the Texas Q and C market, we're currently third - we have to go and invest more in infrastructure into that particular market. Now we have to make the right decisions on where we can get the best return. But it's those kinds of opportunities where those of you who know the US market, Texas is a boom region around Dallas, around Houston. So, these areas we need to be prepared to invest in.

Scott Ryall: (Rimor Equity Research, Analyst) That infrastructure is more supply chain infrastructure, is that? As opposed to production infrastructure?

James Bonnor: It's around investing in the sites. Have the - delivered cost into those sort of market segments.

Scott Ryall: (Rimor Equity Research, Analyst) Okay, thanks.

Delphine Cassidy: Question from Sophie.

Sophie Spartalis: (Merrill Lynch, Analyst) Thank you. Sophie Spartalis from Merrill's. Just an extension onto that question prior. Just in terms of North America, given that there is

or there appears to be some work needed to be done to improve your position in Q and C, would you say that over the next sort of 12, 24 months, that growth coming out of North America will be predominantly from mining?

James Bonnor: Look, I - first of all, I'd say I'm pretty comfortable with our position in Q and C. Like I said, it's about a third, a third, a third. There are some areas we - where we could be better represented and that market is going to continue to grow, depending somewhat on what investment comes through the US government in infrastructure spend and that's pretty hard to call right now. But there is big growth in mining, particularly in Western Canada and re-starts in Eastern Canada. I'd say the biggest opportunities for us right now is British Columbia Alberta, where there is a log of Greenfield projects being developed, particularly in gold. I'd say what's going to grow - as I said in my summary slide - penetration of technology will be another key enabler of growth for us in North America.

Delphine Cassidy: Are there any further questions from the floor? There are no questions from the webcast either so both of you must have covered everything very well. I'd suggest, given that we're running a bit early, let's take a five to 10 minutes stretch break and come back for the last session with Chris and Alberto and we'll be finished by 1pm, ready for lunch.

[Break]

Delphine Cassidy: Ladies and gentlemen, let's restart the last session. There's a lot of nice discussion happening, which can continue over lunch.

Christopher Davis: Good afternoon, ladies and gentlemen. For those of you that I have not met, my name is Christopher Davis and I've been at Orica for five years now in the Finance division. More recently, I was appointed CFO in October of last year. I'd like to start this session with giving you a quick overview of Minova and the progress since we implemented a turnaround journey in 2016. To recap, Minova is a global, ground support business, supplying rock bolts, resin capsules, cement grouts and injection chemicals to the mining infrastructure and oil and gas sectors. The business has over 190 technology patents and operates in 25 countries with 15 manufacturing facilities. The overall market for ground support products is estimated to be about \$2.3 billion and is growing at approximately 3% per annum.

Minova has a leading position in the chemical segment of the ground support market and a strong position in steel components. The Minova strategy is to build on its superior

chemical products and extend its steel rock capability, especially in its high-growth hard rock segment, as well as extending its footprint into new geographies, such as India. The introduction of new products, specifically for the hard rock sector in the USA and Canada, will increase Minova's exposure to hard rock mining. The India business is expected to grow significantly. In this respect, a joint venture has been established with a locally-based partner. The joint venture is supported by a major multi-year contract, that has recently been concluded with a large customer in Rajasthan. An opportunity also exists to increase Minova's presence in USA and Africa, targeting the higher margin chemical products.

As Alberto and I mentioned to you at the half-year results, we are seeing sustainable benefits from the turnaround initiatives that the management team has embarked on. These include new contracts and pricing initiatives that has seen revenue grow by over 20%, a decrease in fixed manufacturing costs through plant rationalisation, including the relocation of manufacturing from Germany to Poland, and a significant and sustainable reduction in overhead costs. The net result is that benefits in terms of increased profitability, improved trade working capital and improved cash generation are now being delivered. Importantly to me, Minova is now self-sufficient in terms of cash generation.

With a stabilised and sustainable base, the business is now focused on growth in new and high in margin geographies and sectors, as well as increased product penetration to both new and existing customers. The business is also currently investing further in improving manufacturing productivity in Poland, Africa and the USA, which should see further benefits delivered in financial year 2020. We remain confident that with the improved performance of Minova over the past 12 months and its growth plans, the uplift in earnings experienced to date will continue into the future.

Turning now to finance and, more specifically, our approach to capital management and cash. Two critical components that will enable us to realise not only the growth objectives and opportunities that the regional presidents have shared with you today, but also allow us to continue to invest in technology that Angus has spoken about, which drives value for both Orica and its customers. At Orica, we remain guarded by our capital management framework, which governs our actions towards the maintenance of a healthy balance sheet. This framework is predicated upon three key principles, namely maintaining an investment-grade credit rating, preserving the flexibility for future investment alternatives and to respond to changes in the external operating environment and, finally, maximising our returns to our shareholders.

This approach has been in place since 2016, following the divestment of the chemicals business and is part of our response to the downturn in the mining cycle. As a result, we have made several material changes affecting our financial profile, including transitioning in 2016 from a progressive dividend policy to a dividend payout ratio policy of 42% to 70% of underlying earnings. It is worth noting that if we had maintained our progressive dividend policy, our payout ratio today would have been over 100%, which would have both been unsustainable and inappropriate. We have also established a new approach towards capital investment, which drives a disciplined assessment of all capital approvals, taking into account, affordability and delivery of a targeted return on net assets.

We've lowered our targeted gearing range to 30% to 40% to better align with the key credit metrics that underpin our credit rating. Finally, we have delivered a reduction in net debt from \$2.2 billion in 2014 to \$1.6 billion in 2018. This was all done whilst maintaining our BBB credit rating through the cycle. As I've already mentioned, in 2016, we introduced a new disciplined approach towards the assessment of capital expenditure. All capital expenditure relating to safety, environmental or regulatory obligations is prioritised, whilst other capital expenditure is subject to financial hurdles and ranked according to a rigorous prioritisation process. This capital allocation process ensures sustenance capital is available to support and maintain the asset base. It results in the best growth initiatives being favoured over lesser returning alternatives.

It drives a focus and culture towards the delivery of increased return on net assets, whilst at the same time delivering sustainable shareholder value and return on investments. This has resulted in our capital expenditure requirements reducing materially from the earlier part of this decade when average annual capital investment spend was about \$700 million. It is our belief that this focused approach towards capital investment has driven an improved focused and sustainable capital expenditure profile that balances the enthusiasm of the business with the need to maintain a healthy balance sheet. An example of this focus has meant that we've been able to allocate capital to priority projects, as is evidenced by the improvement and overall equipment effectiveness of our major plants, including Yarwun, KI, Bontang and Carseland which are now operating at, or above, our targeted 80% benchmark. Importantly, we do not see a requirement for further material investment in additional AN capacity in our major markets. With Burrup expected to be commissioned in the first half of financial year 2020, the resultant freeing up of capacity at Yarwun, and the addition of incremental tonnes at Bontang, we are comfortable that we can meet demand, as we move forward, without further significant capital spend. As the

planned investment in our single SAP project comes to an end in 2020, this too will free additional capital. It is our intention that this capital will be applied towards both an increase in sustenance capital, toward a further improvement in plant reliability, as Carlos has already mentioned, and, importantly, further incremental investment in growth projects and technology investment.

Taking this into account, we expect our capital profile to remain around \$350 million each year, excluding any capital required to replace the defective Burrup assets. Furthermore, we continue to evaluate our asset portfolio to identify lower returning or non-operating assets. These will be monetised for cash which could be deployed towards investment in, or the acquisition of, higher-performing assets. Before I move to the next slide, it's important to reflect on the capital we are spending on our single system in Orica. As the CFO, the benefits to our finance organisation will be immense. For the first time, we'll be able to get standardised, real-time financial reporting. This will allow us to better understand instantly, at the press of a button, our profitability by both customer and product, the price risk exposure that we have, and our cash position and the management thereof to name a few benefits. This will enable improved decision making to drive shareholder value.

Turning now to cash generation. We recently communicated a reduction in our target gearing range to 30% to 40%. As you can see from our recent financial performance, gearing has historically performed within the revised target range. The move to lower the ceiling on this measure better reflects an alignment with other key credit metrics underpinning our BBB credit rating. Going forward, trade working capital is targeted at between 8% to 10% of sales. In a growing market, we expect cash conversion to be greater than 90%, which considers the build-up of trade working capital to service increased customer requirements over the next stage of our growth journey.

We are currently carrying a temporary increase in inventories as a result of the Burrup rectification works and the associated requirement to ship product from the east coast of Australia to the west coast to ensure that our customers' needs are met. This will resolve itself as the rectification works are completed and the Burrup plant is commissioned in 2020. Furthermore, with the pending implementation of a single SAP system, we are planning an appropriate increase in safety stock levels as a conservative contingency, as we migrate to a new operating environment. Importantly, both these impacts are temporary in nature, with inventory levels planned to correct in the second half of the 2020 financial year.

As I've mentioned earlier, Orica maintains a conservative and balanced approach towards debt management. We value our investment-grade credit rating, which is currently positioned by Standard & Poor's at BBB stable outlook. Our credit rating secures us access to the committed debt facilities we require and allows us the ability to do so on desired terms in exchange for appropriate pricing. As a result, we maintain strong and mutually beneficial relationships with several international and domestic banks, as well as bondholders with whom we maintain an active and open dialogue. We have an appropriate distribution of debt maturities, which is further complemented by our actions to proactively refinance maturities in advance of our requirements.

In this respect, in March this year, we renegotiated \$715 million of committed debt facilities with existing group relationship banks. This involved approximately 45% of total committed bank facilities, including a refinancing of \$340 million of 2019 maturities and a pre-financing of a further \$375 million of 2020 maturities. This refinancing has resulted in an extension of our average committed debt facility maturities to 4.4 years. It also completes a significant proportion of next year's refinancing requirements in advance, positioning us well and allowing us to take an opportunistic approach in evaluating options to refinance our next bond maturity in October 2020. Importantly, our current costs of funds has reduced to 4.3%.

To wrap up, one of my key priorities coming into the role is to continue our disciplined approach to capital management and cash. As a Company, we remain focused on ensuring that allocated capital delivers at, or above, the respective hurdle rates, cash generation remains strong, and that our overall capital management program delivers attractive returns to our shareholders over time. With that, I'll now hand you over to Alberto, thank you.

Alberto Calderon: Before we conclude today's briefing, I'd like to take a few minutes to articulate again the Orica investment proposition. Let me start by saying just how very proud we are as an organisation. This pride extends from multiple fronts. Our unwavering focus on safety, it is not only our moral obligation but it is the foundational value that has secured our success.

The pride comes from our global leadership. Today we remain the global leader in mining and civil blasting. Given the solid platform that we have today, we will benefit from the positive momentum in the cycle. Our decentralised, customer-centric operating model, with what now will be a state-of-the-art ERP system with standard processes, standard

metrics and detailed profit-focused reporting. This will also enable better planned maintenance, common metrics across all of our manufacturing that will unlock value as Carlos mentioned. Versus, for example, this year we expect 100,000 more tonnes coming out of our AN plants and we expect even further tonnes in to '21 and '22.

Our pride comes from our technology investments. We stand alone in our investments in technology and innovation and our internal investment focus on these levers that will unlock the greatest customer value. We are solving real, high-value customer problems, as Angus alluded to. We are proud of creating the second High Growth Engine. We understand our core and its strengths and will leverage it where possible. But at the same time, we realise that the world is changing and changing rapidly. We will continue to allocate the necessary resources to identify and participate in other technology-intensive segments that will contribute disproportionately high returns to the Orica Group.

So broadly speaking, this is the Orica of today and tomorrow and we are proud of our identity. At the same time, as a management team, we stand behind decisions we make that shape our entity. As a shareholder group, you too should hold us accountable. Specifically, three key metrics should measure our success as a management team. Safety; are we doing all that we can to protect our people, partners, customers and communities. Profitability; are we showing consistently strong profitable growth, riding the bumps on the commodities cycle. Finally, return on [the assets]; are we deploying scarce Group resources to the right projects to achieve an optimal rollout. Orica remains committed to delivering value to our shareholders. Thank you. With that, I open to final questions for Chris and myself.

Daniel Kang: (Citigroup, Analyst) Hi, it's Daniel Kang from Citigroup. Just a quick question maybe for you, Alberto, on Minova. You've indicated in the past that EBIT is tracking around \$1 million to \$2 million per month, and that was shown in the first half result. From Chris's presentation it sounds a little bit more upbeat. That's the way I heard it. But is that still the case? Just further from that, on a strategic standpoint, Minova, does it belong in the Orica portfolio longer term?

Alberto Calderon: So the guidance that we gave for this year was about \$12 million I think was the guidance. I will probably get out of my commitment and say we will surpass that. We're very confident of surpassing because we've surpassed it already. So finally this transformation of Minova has come. It's been longer than I would have expected, but we have the right team, really, with a very different mentality. As you say, it's a very different

business than Orica, starting with a mentality of very low margins. So that just makes the approach to contracting and everything totally different. So we're happy with the team, we're happy with the process that is happening of transformation at the moment. Having said that, I have said then to shareholders it is non-core, we have arrived also that it is not part of Orica. If, at some point in the future, we get what we considered somebody that recognises the potential, we would engage. But there is no rush. It's starting to produce EBIT and cash and we're quite happy.

Daniel Kang: (Citigroup, Analyst) Just a quick question for Chris. In terms of CapEx, you've outlined that your future CapEx outlook is around \$350 million. I note that that's quite considerably higher than the D&A, about \$300 million to \$320 million. What sort of outlook or how many years above D&A CapEX do you expect? When do we expect that to pull back?

Christopher Davis: Listen, our D&A, I think we indicated, sits at about \$260 million, \$270 million at the moment. It's going to go up to about \$280 million, \$290 million. As Burrup comes on stream, we obviously carry the D&A for Burrup, which is about another \$25 million. Then with our new single SAP system coming on, there's obviously a further increment in the D&A. So the \$350 million will probably sit marginally above our total D&A going forward.

Daniel Kang: (Citigroup, Analyst) For the next two to three years?

Christopher Davis: For a number of years, yes. As I say, we are trying to invest more in the growth side of the business, as well as invest more in the technology. Then we're also investing more in the plants from a sustenance [bent] to keep the reliability at the levels we wanted and improve it further.

Daniel Kang: (Citigroup, Analyst) Thanks, Chris.

[Brenton Saunders]: (Analyst) Brenton Saunders. Just maybe as an extension to both of those. Firstly, just on the Minova side. I mean as you point out, it's non-core. Eighteen months ago we were having a very different discussion about it. I'm interested in the things that needed to be changed and what go you to a point where the business looks much better? Then just on the CapEx side, it's risen every time for the last three years. I think it's higher again this year. We're through the major capital cycles for big growth projects. I'm just interested in why it's still going up and why it needs to settle there and not at a low level?

Alberto Calderon: Let me start with the mineral rights. We always say that, but it is true. It's all about the people in the end. It was the right team that has the right level of focus. So what happened this year, first of all, they focused at what they should have, SG&A, so SG&A was a significant part of that, but then the quality of the contracts, how they were matched. When you have a 3% margin, you cannot afford any lapse. When you have a 50% margin, you can be at plus or minus five. Hugh, who's the president of Minova, comes from that background of contractors that where the difference between three and zero is so close. So he tightened that whole structure. But the other thing we did is we started putting up prices that we haven't done before. The industry structure has improved.

There was this transaction done by our competitors who, in the US, there's slightly better industry structure. We hadn't raised prices in six years, in fact, in the US. So now we did engage with our customers in saying, look, we like you very much, but we can't work for free or for negative. There's been a lot of engagement with customers and they've accepted that. Prices have increased and have also gone to the bottom line. We expect that to still continue. There's still some EBIT margin improvements that we would expect. So CapEx.

Christopher Davis: Yes. Just on the Capex points, I think when Tom Schutte first took over the role, we were quite consistent on maintaining our position that CapEx would be in the \$300 million to \$320 million mark. In the first year, it was relatively low, but if you look at the next two years, because you're referring to the fact that it steps up over the three years. If you strip out the single step project, it's kind of stuck around the 80 to 90 mark. So it hasn't really been increasing too much and we've stuck to the guidance range that we've maintained.

Alberto Calderon: Probably, when we talk about \$350 million it would have to be a project of growth that we are seeing that meet the hurdles. If those projects of growth don't occur, we're happy to go back to \$320 million or something like that. But there's just a bit of leeway. We are seeing a lot of possibilities of growth and that I think it's going to be set around that \$330 million, \$340 million level.

Brenton Saunders: That falls out of the base though, right?

Alberto Calderon: That falls out of the base. It defaulted to the depreciation, but it falls off. Yes.

Christopher Davis: It's still part of your capital spend. You can see it on the chart.

Alberto Calderon: But it will fall off eventually.

Christopher Davis: Yes. It falls out in the middle of next year.

Alberto Calderon: So Burrup and SAP do fall off.

James Robinson: (Analyst) Thanks, James Robinson. Can you just give us an indication of how much you spend on R&D or how much your tech department spends, how that's trended over, say, the last three, four, five years and where you think it's going?

Alberto Calderon: Look, the guidance we've given is between 0.5% and 1%. I'd probably say it's more closer to the 1% level. So we have increased and there's currently the relationship between the chiefs - the chief commercial officer and the chief financial officer is a bit strained, because of that. We're talking about budgets. I'm talking inside shop so there is a lot of interesting opportunities. You look at that, it's ORETrack, FRAGTrack, all of those, BlastIQ, there's a lot of investment deployments. But we will keep discipline around that 1% level.

Sharon Johnson: Hi. I just want to - with your payout ratio being between 40% and 70%, I was just trying to get where your thinking is where you flex from 40% to 70%. Is there anything or is it just a per half decision-making?

Alberto Calderon: We're currently at around 50%, yes, now?

Christopher Davis: On the half year we were 50%, yes.

Alberto Calderon: So we were 50%. My expectations is that that number would probably go - the bias would be towards higher than lower. Let me put it this way. Eventually, it depends on cash flows again, but I would expect the cash flows - when I look at the uses of capital and the sources and Burrup will be - that - Burrup may demand an unusual amount and also the SAP after that and that's probably 2021. I would expect that the uses of funds are significant less than our generating and hence that number should go up. That's my expectation today, that percentage, towards the upper end of the range.

Sharon Johnson: Just one more question. With amortisation, what's your feeling on technology in terms of the length it's amortised? As technology changes, do you have a view?

Alberto Calderon: I'd prefer longer, but the CFO is very strict on that.

Christopher Davis: So typically what we'll do is run it but it depends on the product. It runs between three and seven years, so your shorter life products amortise quicker and

then your longer life products will go longer. But we constantly reassess it every year depending on our expected tenures.

Alberto Calderon: But probably seriously, that changed the definition. We also expense a lot...

Christopher Davis: Yes.

Alberto Calderon: ...of the technology expense.

Christopher Davis: Sorry. Can I just emphasise that point, because when Tom was CFO, way back when, he took a lot of heat, because we said we were expensing a lot of our R&D spend. We still do today.

Alberto Calderon: That's it.

Christopher Davis: Only to the extent that it's in commercial production and there's development on that do we then start capitalising it, so there's actually not a lot from an R&D perspective on our books.

Alberto Calderon: That's important.

Delphine Cassidy: Are there any more questions from the floor? There are no questions from the webcast.

Alberto Calderon: I think there's no more questions. No? Thank you very much. It's been a long day. Thank you for bearing with us. It's been a pleasure to be here. Just one last thing on behalf of the whole management team this wouldn't be possible without Delphine, and her very small team. We are very efficient, so she has to work with two persons and a half, but anyway, all of that is because of herself, thank you for that. Thank you all for coming, see you for lunch.

Delphine Cassidy: There's lunch.

Alberto Calderon: Yes, there's lunch.

End of Transcript