Airport Innovations, New Technology and Growth

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New Approaches to Resolving Noise Complaints

Reducing aircraft noise is important in resolving complaints from members of the public but is not the solution in itself — the key is to address the annoyance caused to people by the noise.

Australian Noise Ombudsman Ron Brent shared his insights into dealing with noise complaints gained from six years in the position, at the recent NZ Airports conference in Nelson.

Ron said that noise itself is only about 30% of the reason why people get annoyed. In fact, other noises in the house or nearby environment can be very annoying even though they are much quieter, e.g. a mosquito buzzing at night. The faint cry from a baby in a distant room can wake a parent who sleeps through much louder noises.

“What brings people into the equation is expectations unfulfilled — for example if you buy a house in an area and then find that aircraft fly overhead, the prime driver of annoyance is not the noise level but the expectation that there would be no noise.

“Also there is a general lack of understanding — ‘why do planes come over my roof?’ Often, while this may be obvious to us in aviation, it is not obvious to the public. It is important to engage with people to explain why aviation works the way it does.”

Ron said the major concept is fairness. “It is like when someone gets a $20 penalty because a bank account they have has unexpectedly run into arrears. It is not the $20 that annoys them, it is being seen as the victim of an unfair and mean action.

“Also people will get annoyed due to the failure to account for changed individual circumstances. For example a person who has complained that aircraft noise has increased may be recently retired, therefore their perceptions have changed. It will annoy the individual to tell them nothing has changed just because air routes have not changed.”

Ron recounted the case of a man who complained for 15 years his house was being targeted by aircraft flying overhead. The ombudsman investigated and found it happened to be the point where aircraft moved from an instrument approach to visual.

When this was explained the person finally understood better. That was the first win. Two months later he said “thanks for moving the planes”. In fact, the number of planes overhead was the same — what had happened is that his perception had changed because his annoyance had been taken away. This was the real win.

In terms of key strategies for dealing with complaints, the approach of the ANO is to take the complaints seriously, acknowledge and accept the person is concerned, obtain the facts clearly, and then “do what you can to fix the noise and explain what you can’t”.

Ron said that usually there is no right or wrong in aircraft noise complaints, but advised on using the complaint data intelligently, to understand the drivers of annoyance.

“One person was recorded as logging 21,000 ‘complaints’ in a crusade against one airport. In fact it was 21,000 contacts about one complaint: the failure to deal with noise insulation”

To stop this behaviour, don’t reward repeat contacts and stop reporting them as separate complaints. Indeed don’t report the repeat contacts at all.

Ron’s parting advice was that a contact with the public is not a complaint. If it is necessary to say “no” then say so and end the discussion. Information needs to be accessible, responsive and comprehensible to the layperson.

“Engagement is about listening — most ideas from the public to reduce aircraft noise don’t make sense, but occasionally they do,” he warned.
The Growth of Super Diverse Customers and Challenges for Airports

Airports can benefit from understanding — and leveraging off to beat the competition — the super diversity of cultures in New Zealand by knowing their customers better, Mai Chen, managing partner of Chen Palmer and Chair of the Superdiversity Centre, told delegates.

Mai challenged the delegates — “What is your average New Zealander?” She said a big proportion of Kiwis were not born in New Zealand. In Auckland for example, almost half of the population is of Maori, Asian or Pacific Islands descent. Wellington is next in super diversity and Christchurch third.

In 2021 one in three Aucklanders will be Asian and by 2025 Asians will overtake Maori as the largest individual group. By 2038, 51% of New Zealanders will identify with Asian, Maori and Pacifica ethnicities.

To this had to be added the large influx of overseas students. Half of these become skilled migrants and of these, some go on to become permanent residents and then to repatriate their families.

“In the rural sector, for every six people who retire, there are only four kiwis who want to get up at 4am and take over the farm. That gap is being filled from overseas.”

“All of these people have transnational mobility and linkages. They visit people and people visit them. With the speed of travel, New Zealand is now closer to everywhere.”

Other factors which also influence our super diversity are trade ties, the intake of refugees (including climate change ones) and international events such as Brexit, the outcome of the US elections and terrorism, which made New Zealand a more attractive alternative destination.

“Globalisation creates cultural borders and those who can cross them will win,” she said.

From these trends, airports had to understand their customer and had to grasp the concept of “cultural intelligence” (CQ) and become a welcoming experience for travellers.

“CQ is as important as IQ and EQ [emotional intelligence]. You have to learn how to work with people who are not like ‘us’. Our knowledge of Asia is low. You have to know what your customers like and expect as customers. We must understand other people’s cultures to successfully provide services to them.

“We must deal with barriers that stop the people that New Zealand wants to come and live, study and visit. We must deal with discrimination and threats to physical safety. We must understand the benefits these people bring, and invest accordingly.”

Mai’s parting advice was for airports to achieve a critical mass of super diverse staff and a diverse mindset in leadership. By understanding the mega trends at work and by understanding their diverse customer base, airports would be able to target an increased market share.

Airports need to undertake a systematic analysis of the business opportunities and risks from super diversity and make sure they act and invest accordingly.


Be Your Own Storyteller in the Marketplace

Airports can be the “eyes and ears” of airlines and develop their own competitive advantage in the marketplace as a result, LimeIntel’s Carly Wieland told delegates.

“Don’t rely on the airline to look for opportunities for growth. We are the experts of our own business,” she said.

Addressing the issue of harnessing the power of airline intelligence for growth, Carly focused on six key messages — know your end game, what’s in it for stakeholders, know the power of data, know how to present the data, establish accuracy and trust, and determine how accessible the data should be.

“The most important concept when it comes to data and how to use it is to first understand your ‘end game’ What do we actually want? And then work backwards on how to achieve our goals.

“Having a purpose established is paramount. It is to create strong partnerships with airlines and become their extended market research unit. Knowledge gives us the clarity to be able to create strategies for passenger growth. We need to understand what happened, why did it happen and what should I do now. We also need to know what economically drives a region.

“Airlines may have the high-level numbers, but what they don’t have and relish is the local perspective on what this all means and insights only you can truly delve deep enough to understand.”

Another key message is in understanding the “what’s in it for me” for stakeholders. This may involve structuring the presentation of data for different groups within a stakeholder organisation. For example the data required by operational people is different to that required by marketing people.

An example of data presentation would be to record monthly passenger numbers and dissect these by different airlines, different routes, different aircraft types, passenger types (domestic, international or transfers), time of day, seasonality and so on. All this could be used for analysis and would be augmented by more data derived from the tourism industry and local businesses, leading to the proposal of a joint solution — a marketing campaign for example.

“The data must be relevant to the end user — it comes back to the ‘what’s in it for me’ factor for stakeholders.

“Be the eyes and the ears and lead the distribution team. Make yourself invaluable,” said Carly.

“At the end of the day, be a storyteller and make sure the information can be digested easily. Differentiate your airport and be able to establish a competitive advantage by having an intimate knowledge of your business.”
But Matt also indicated that opportunities would arise from the changes, one of which would be the opportunity of overnight mass charging of electric vehicles.

Giving an overview of the major movements taking place in ground transportation, Matt said Apps like Uber and Lyft have changed the scene already. Electric cars are going to have a big effect on ground transport to from airports. Autonomous vehicles will also have a major impact. How customers go to and from airports will change and old-style car parking will reduce dramatically.

Airports are working hard to understand passenger decisions and movements. Now, the larger airports have a deep understanding of the market share of pick-ups, drop-offs, shuttles and taxis to enable them to plan their terminal frontages and optimise revenue.

"However, the first significant change has hit in the form of Uber," said Matt. "Uber now has three million trips a day, with many people driving private cars and accepting customer trips.

"In the USA, cars sit idle for 96% of the time and the Uber App aims to improve that kind of low productivity. There is virtually zero cost in adding new drivers to the system. Now it has one million drivers in 70 countries. In 2015 Uber had 46% of pick-ups and in 2016 it is expected to be the majority of commercial vehicle pick-ups in the US."

While Uber is facing legal and other disputes, Matt said that whatever happens to them, the concept of ride sharing is here to stay — "Fewer trips will occur by private transport to the airport as a result of people using their App.

"There will be more efficient use of vehicles and a reduction in car ownership and an increase in low-cost public transport. Electric vehicles are increasing in battery capacity at 5% a year and battery cost is reducing at 9% a year. They will overtake the petrol engine in a short space of time as they are already 10 times more efficient.

"The net affect will be to reduce the cost of travel. The cost of getting picked up and dropped off will be much cheaper. Autonomous vehicles are starting to hit the roads. Partnerships are forming between Ford and Google, Audi and Nokia for example, to work in this space. When you cut out drivers you get a whole new world of low-cost travel. It may challenge some short-haul domestic air routes where it could be cheaper and sometimes even faster to travel by road."

All of this would result in a lower number of people parking and a reduction in yield for the airport.

"A drastic downside scenario might suggest the end of airport parking and a collapse of a traditional revenue stream. However, looking at the fundamentals, we don’t think it’s all that bad just yet."

Matt said that the redevelopment of airport car parks could lead to something new. Wellington Airport is part way through the development of a nine-level ground transport hub to cater for the new robotic customers.

"Airports, by their nature of generating the last trips taken at night and the first in the morning will make ideal depot locations for electric vehicles. Assuming we can keep the car park full, current thinking from the electricity markets suggests that airports may become the power stations of the future.

"If every car is equipped with an 85 kWh battery, and all of these batteries are connected to the grid, Wellington’s 3000 space car park would be able to power 8500 houses."

"With the opportunity to supply power in the peak and draw down in the off peak, airport car parks may be able to make a meaningful contribution to the grid and generate revenue."

"By 2030, when three life cycles of electric vehicles have been in the market and nobody drives themselves, the airport transport business may have completely evolved from a business in which we charge for parking to one where our customers park for charging!"
Airports Conference
2016 the Biggest Yet

The NZ Airports conference was our biggest and busiest to date, reports NZ Airports chief executive Kevin Ward.

“All the speakers on the main programme were of the highest standard and we covered a huge amount of ground,” says Kevin.

“We chose a lot of topics this year with a flavour of innovation and new technology, and also the challenges of growth.

“I think people would be surprised at the high-tech nature of modern airports — travel trends in 2020, real-time reporting from sensors in runways, mobile technology for dealing with emergencies, and high-tech car parking to name just a few. Disruptive developments such as Uber and driverless cars came up more than once.

“As usual we deliberately strayed outside traditional aviation topics a couple of times and the presentation on diversity by Mai Chen was a highlight. Airports are dealing with a rapidly-changing domestic population as well as tourists from non-traditional countries, and Mai captured the challenges brilliantly.”

The Australian Noise Ombudsman Ron Brent was another highlight because the future of airports is closely tied to them being good neighbours in their communities, and noise is probably the biggest potential friction point.

“Ron’s key points about new thinking in managing noise issues will form a great springboard for good performance in that field.”

Kevin says that Nelson was a great venue and host airport.

“Thanks to our sponsors who make a huge difference to what we can achieve at the conference — and a special mention has to go to the Fulton Hogan networking dinner and the Beca Awards Dinner. Terrific and memorable occasions.”

NZ Airports Chair Opens Conference

The chair of the NZ Airports Association Malcolm Johns (Christchurch Airport) opened the 2016 annual conference after Mayor Richard Kempthorne welcomed delegates.

A total of 134 delegates attended at the Rutherford Hotel conference centre in Nelson and were greeted with a packed programme including a half-day workshop on technical topics on the first day and special sessions for regional airports at breakfast on the second and third days.

The annual general meeting of the association was also held during the conference and Malcolm handed the chair role on to Steve Sanderson (Wellington Airport) for the next 12 months.
The Minister said that as a frequent domestic traveller, he could see the upside with all the work occurring in airports across the country.

“Our airports are looking good — better than ever. I celebrate with you. We can be proud to have one of the best domestic airport networks in the world.

“The increases in air services, both international and into regional airports, and with the general economic growth, are creating a purple patch.

“It means we have to ensure the regulatory settings are up to scratch. I will be looking at that soon with the Aviation Amendment Bill being introduced next year.

“I will also be looking at our air services agreements. We can say in an unbiased way that our open-sky approach is the most liberal and progressive in the world. That is a winning strategy to bring more people here.”

The Minister added that the Government will be looking at other initiatives to assist the general tourism market, such as road safety for tourist drivers and a $600 million programme to eradicate black spots on rural highways.

Another — and very significant — challenge would be reducing emissions in the domestic aviation market, with a plan to do so being submitted to ICAO (the International Civil Aviation Organisation).

“The basic issue is that we have the ability to do the right thing. You — the airports — can do your bit by being early adopters of new technology to help make a difference, such as making your ground transport fleet more sustainable.

“I would encourage you to think about that because in time it will become more important,” he said.

Wellington, Invercargill and Queenstown Scoop Honours

New Zealand’s three top airport awards, sponsored by Beca, have been won by the airports of Wellington, Invercargill and Queenstown.

The three were honoured at the New Zealand Airports Conference in Nelson as Major Airport of the Year, Regional Airport of the Year and for the Project of the Year (Queenstown’s runway widening and overlay).

Beca principal/technical director airports, Tristan Hughes, who presented the awards, said that Wellington Airport had made impressive progress with its redevelopment of the terminal campus.

“The Terminal South Extension creates a much-enhanced passenger experience, celebrating the views out to the Cook Strait and vastly improving the passenger flow through the terminal.

“The airport is also expanding its infrastructure to keep pace with demand, investing in additional parking structures and aircraft stands. The airport company is proud to be innovative and creative in its development solutions, in its use of materials and use of spaces.

“In construction, the Safety Wingman campaign has provided a very positive safety culture amongst the project teams.”

Invercargill won the regional award for the transformation of its terminal building after five years of planning, design and construction.

“It is clear that Invercargill Airport has succeeded in its aim to create a terminal building which Southland can be proud of. Since opening, it has lifted the spirits of those working at and passing through the airport and presented a great first impression of the region,” said Tristan.

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The Project of the Year prize went to Queenstown Airport for a truly collaborative effort between client, airline stakeholders, consultant and contractors to enable the introduction of after-dark flights.

“The various packages of work which were successfully completed will provide not only an easing of capacity constraints for the airport but will also provide a huge boost for tourism for the region.

“The project was made significantly more complex by the need to return the runway to an operational state each morning, without fail, for the construction period of over four months. This required an extreme commitment and attention to detail from the entire project team as there was no room for error,” said Tristan.

The runway works were designed and managed by Beca and constructed by Downer, with the all-important lighting installation being undertaken by Airways. The project was completed on time and budget thanks to the positive approach taken by all parties.

NZ Airports chief executive Kevin Ward said the awards were hotly contested, and showed the health of the airport sector and its commitment to meeting the demands of growth.

“The judging panel highly commended New Plymouth Airport for its innovative new Jetstar terminal, which re-used a building from another site,” said Kevin.
Wanganui Airport Manager Honoured

Wanganui Airport Manager Allan MacGibbon has been honoured by the airport sector at the New Zealand Airports annual conference.

Allan was presented with the Beca Airport Personality of the Year award at the conference awards dinner held at the Rutherford Hotel in Nelson on the conference Friday.

He has been on the board of the NZ Airports Association since its formation in 2008 and been involved with the Wanganui Airport since 2006.

Beca principal/technical director airports, Tristan Hughes, who presented the awards, said: “We understand Allan is retiring from his position as the full time Airport Manager of Wanganui Airport after previously overseeing the airport function part time while being engaged as the Wanganui District’s Economic Development Manager.

“Allan has a strong organisational, policy and general management background. In his days at NZDF he was awarded the NZ Long Service and Good Conduct medal.

“He has ably and vocally represented the interests of the Regional Airports in New Zealand and has been instrumental in agreeing service levels with Airways New Zealand.

“During his time with the airport he worked hard to get the issues facing small regional airports, recognising the vital economic and social role airports play, onto the board table. He has successfully done this and he has kept them there.”

NZ Airports chief executive Kevin Ward said Allan sees the major issues into the future being the sustainability of smaller airports and the recognition and development of a true national airport network, including smaller airports, where standards are consistent and the capability for full aviation services to operate are maintained.

Another growing issue is the increasing regulatory demand on smaller airports and the impact this has on viability.

Kevin described Allan as a true personality: “He is a high-energy individual, a mentor for newcomers to the sector, and is well known for his good humour and costumes at the Annual Conference dinners, often picking up the prize for best-dressed!”

Allan said the award had “caught me on the hop” and added that the aviation/airport industry was a true community.

“I used the word ‘network’ to describe it to Cabinet Minister Steven Joyce and it caught on and has become a catchword.”

He said he would continue fighting for the ‘small guy’ — “This country’s wealth comes from the regions. We can never lose sight of that.”

Allan has offered to continue to provide support to NZ Airports as required.
Use Knowledge and Understanding to Influence Demand

The importance of marketing research was emphasised by a case study from Nelson Airport’s Sally Russ.

Sally outlined Nelson’s target of generating one million passengers by financial year 2017, and the roadmap to achieve that goal has five central pillars.

The first is situation analysis — who are we?

“We needed to understand what is our unique selling point. We needed to understand who are our partners and what are our infrastructural needs. "Think about this from a regional and airport perspective. What does your region have to offer that makes it unique? How does your airport currently enable your passengers, is this a good experience? Airports are passengers’ first and last impression of a region.

“Then we needed to understand our passenger profiles. We engaged local Tourism and Travel students to conduct the survey — this can assist smaller airports from a cost perspective. It is very important to know who your audience is in order to structure your questions correctly.

“We looked at the airline schedules and we worked the survey around key times for all airlines, including the new addition of Jetstar. We captured answers from 1600 departing passengers in a week.

“Then we used a local analyst to study the data to give us a better perspective on our existing and potential customers,” said Sally.

The third pillar is establishing target markets. "You have to establish your geographical catchment. Our survey results showed we were getting people driving from Blenheim to use the services out of Nelson.

“Key messages by market have to be established and priority targets selected. What’s your inbound message? You need to focus on your unique selling point. We were able to share the survey results with our RTO [regional tourism organisation] to help them focus on selling points for the inbound market.”

Marketing initiatives can involve a mix of initiative and tools, such as events, social media, advertising, brand marketing and sponsorships in the community, as well as working with your airline partners, RTOs and other airports — in Nelson’s case, a joint marketing initiative with Wellington.

“Relationships are key to strengthening your collaborative approach and story to airlines. Make sure you build these foundations across multiple platforms. Become the squeaky wheel.

“Airports traditionally were not active in managing passenger numbers. In today’s competitive marketplace we need to be in charge of our business’s destiny and take an active role in partnership with airlines, tourism/economic bodies and aligned airports to build capacity and encouraging ‘bums on seats’,” said Sally.

In summary, Sally said her message to other airports is to consider: what’s your role?; be the expert on your local market as well as the inbound and outbound passenger growth potential; identify your key partners and build strong relationships across layers in their business; do your research and use it effectively; and have a plan.

“Through knowledge, understanding and how to influence demand and market intelligence, you can influence and inform airline decision making.”
Addressing the conference on the subject of "the new airport environment", Floor said travel had changed dramatically over the last 20 years and is constantly evolving with new technologies.

Technology is now in the hands of the consumer such as mobile check-in and social media, which has created high passenger expectations and a low-tolerance of airline and airport delays, with passengers quick to post comments.

"Technology is now customer-centric. We know how you like to sleep, that you like free movies and what you like to eat."

"The expectations of people who go to airports has also changed. For example you have Michelin Star restaurants in airports now. The amount of waiting time has a big effect. An extra ten minutes spent standing in line cuts spending in the airport by 30%. Happy passengers spent 45% more than the average passenger."

The longest queues are due to security and the trends there were difficult to predict.

"It is hard to know what will be the future in security. Everything changed after 9/11 and continues to evolve in the current environment. You never know what might create future change and airports need to provide flexible facilities that permit change."

"In some cases online passenger screening programs have developed which means that only those passengers who are deemed of interest to the authorities are dealt with personally."

"Another development is having more security conveyor belt length to place bags and laptops for screening. Once through the checks, there are areas to put laptops back in their bags, and for passengers to put their shoes and belts back on, creating an improved passenger experience with less stress."

"Technology is now making it possible to leave the laptop and liquids, aerosols and gels (LAGS) inside the bag while it is screened."

Another development is in the USA where expedited lanes have been set up for passengers who sign up for pre-screening.

Floor recounted recent problems faced in Europe where terrorism attacks led to passengers being screened outside terminals, exacerbating passenger delays and anxiety as terminal facilities were under repair, all while still trying to maintain airport operations for these key pieces of national and regional infrastructure.

Floor said there are greater demands now for flexibility in airport design, with sustainability a big factor and architecture a big factor.

She showed slides of two different security areas, each with rounded profiles for the desks, but differing architectural finishes i.e. wood panelling, creating a warmer, friendlier feel for passengers.

Floor also briefed delegates on the launch of Aruba Happy Flow, which uses facial recognition technology and removes the need for passengers to present their passport and boarding pass at multiple stages of the airport journey.

Based in the Caribbean island of Aruba, it is an industry-first trial which could have a major impact on the airport experience on a global scale as airports look to reduce the number of customer touch points to create a seamless, enjoyable journey for passengers.

When a passenger checks in at a self-service kiosk, a photo is taken of their face, which is then verified against, and linked with, their electronic passport, while at the same time all of the usual border control background checks are performed.

Then, at each of the subsequent checkpoints — namely bag drop, immigration and boarding — instead of having to present their documents, the passenger simply has to stand in front of a camera, which automatically recognises their face.

The photograph is matched against their passport and boarding pass, and approval is granted to continue the journey. Each process is completed in a matter of seconds.

Facial Recognition the Way of the Future

Biometrics are creating new opportunities for fast airport screening, Floor Verhoeven of Airbiz told the conference.
Use New Technology to Improve the Passenger Experience

Making best use of new technology, sharing data and applying that to customers’ needs will be a big focus for improving the airport experience for passengers, conference heard from John Whittaker, group general manager of Air New Zealand.

“Success comes from understanding what the customer needs and wants and then adapting how the technology might be applied. We think what the customer wants from the airport experience is control and information, as opposed to being purely ‘in the airline system’.

“They want good service, ease of travel and a cost trade-off regarding service offerings against the amount of time taken to sample those offerings.

“Control is being addressed by self service. Many of us now will go to self service even if there is no queue. We can choose our seat and see which seats around us are occupied, for example. It increasingly seems to be the airport environment of the future,” he said.

John pointed to technological innovations such as the coffee App being used in the Koru Lounges, allowing people a greater measure of control over their experience.

While there are core needs to be met, principally in safety and security which can’t be overlooked, there are four basic functions which occur in customer check-in — confirmation of travel, allocation of the seat, tagging and check-in of the bags and identity verification.

“Customers can already choose a seat and get a boarding pass online or through their App. Rimowa has produced a bag with an integrated electronic bag tag can be connected by Bluetooth as part of the check-in process. Electronic bag tags will become common. Automated bag drops have been introduced in Auckland, and are now part of the biometric check-in of the customer.

“In future, the bags may not travel with you. Imagine ‘Uber bags’, where bags are picked up from your home and are moved separately.”

John said the IATA 753 standard introduces more tracking steps, including scanning of bags to reduce mishandling errors. The Star Alliance wants several points of different bag tracking data. The location of the bag can be followed more closely with several such points and it also allows information to go to the customer as to when the bag may appear on the carousel.

Biometric scanning is another innovation which can accelerate the procedures at the boarding gate and allow for personalised delivery of information via message boards.

John talked of “big data”, such as that delivered by every flight of a Boeing 787 — “it delivers more data from each flight than the whole of the data contained in the US Library of Congress. The trick is in using the right material from the huge amount downloaded.

“We should be prepared for a world in which sharing big data is possible. Sharing of information can allow aircraft to, for example, avoid bad weather, or use favourable winds for better fuel consumption or a more efficient flight path.”

However he said personal or sensitive data needed to be protected — “sharing of data will become more important, but so will the privacy of private information”.

John pointed to technological innovations such as the coffee App being used in the Koru Lounges, allowing people a greater measure of control over their experience.
Lachlan said the newly-created operational App was a result of the airport company looking at its business continuity plan and wanting to move beyond a paper-based system.

It went into partnership with Kestrel to produce the crisis management Talon App which is now used for all emergency response and business continuity purposes.

Wellington has worked with Kestrel since 2013 and the App introduced the concept of mobility, allowing the company to go paperless. Then came the realisation there was also a wider use for the App than just the business continuity plan alone.

Airport emergency response procedures could also be put into Talon. The App is intuitive and summarises the key points from the plans. Separate tabs provide links to other detailed information or contact lists which are active so there is no need to go back into email or the contacts list in the phone.

This also applies to status reports which can be sent to all other mobile phones anywhere in the country. The information is cached on the phone so it always available and updates can automatically be downloaded as long as the mobile network is working.

In respect to the emergency plan, checklists have been loaded for different types of emergencies, giving the contingency procedures depending upon the circumstances. The layout in the Talon App replicates the scenarios set up in the airport’s automated emergency alerting system.

Upon activation of the emergency alerting system, an alert is sent and goes to all necessary response groups and stakeholders either by way of electronic message, printed message or SMS text, without the need for a telephone cascade system.

“The message gets out extremely quickly and there is no need for phone calls,” said Lachlan.

The emergency alerting system has recently had further capability added by the direct connection with two accelerometers which measure Peak Ground Acceleration during earthquake events.

“Two accelerators in different locations near the airport react differently to earthquakes (one is located on sand the other bedrock) and these send the PGA readings directly to the EAS (emergency alerting system).

“All the operational staff have to do is drop the information into the message box in the EAS and hit ‘send’ and the information goes out as an alert to stakeholders and other interested parties — along with the response category which has been automatically determined by the EAS as opposed to staff interpreting the data and deciding what category response is required for an earthquake.”

The next level of development is looking at linking the EAS direction with the lightning detection system developed by the Met Service. Lachlan said a key benefit of Talon is mobility. “It doesn’t matter where you are, you’ve always got your business continuity and emergency response plans at your fingertips.”

“You don’t need to worry if everyone has access to the internet or a printed document as the information is cached on your device and also stored securely in the cloud. Talon will automatically update when you open the App, so you can be sure everyone has the latest version.”

Lachlan added that the latest development at Wellington was the introduction of A-CDM. While it is the second airport in the country to introduce this collaborative decision-making system, it is the first in Australasia to introduce it fully for all scheduled flights, international, domestic jet and regional turboprop.

Further development of the system as operated by Auckland was required with regional operations requiring inclusion of origin and destination columns. Wellington installed CCTV to record on-blocks/off-block times for regional flights as the aircraft systems were not yet advanced for the turbo prop fleet to send this information automatically by ACARs.

Although early days in its implementation, Wellington stakeholders were reasonably happy with progress to date with 85% usage and around 70% accuracy in TOBT targets.

“Air traffic controllers can now use A-CDM to allow more efficient use of slots on the runway, direct traffic on the apron and, knowing which stand the aircraft is parked on, can work out the most efficient way from the runway to the stand and return without delay” said Lachlan.
Be Prepared to Designate

Airports should consider the benefits of seeking designations that specify a broad range of activities for land areas, rather than accepting the status quo of district plan zonings.

Strong advice from a presentation by John Kyle and Kirsty O’Sullivan of Mitchell Partnerships was that designations are a mechanism by which airports can spot-zone their activities, providing much better protection than a land-use zoning.

John and Kirsty explained designations and district plan provisions for delegates, with John saying there are provisions in the RMA for certain entities (usually providers of infrastructure for the public good such as airports) to use designations.

“The importance of this can’t be under-emphasised. If you are able to use designation provisions you should be using them in a careful way.

“Zoning provisions are clumsy tools and not best for the land use in airports. Designations on the other hand can be applied to land, water and air space and airports are one of the few entities that use the air space provision.”

John provided a brief of what an airport designation might include and the range of activities that it might permit an airport operator to undertake. He said councils will almost always take a narrow interpretation of an airport and the activities provided, however he noted that airports are “…not just about runways and terminals.”

In the 2008 High Court case McElroy vs Auckland International Airport Limited, land owned by the Cragie Trust was taken and designated for aerodrome purposes but over time was not used for those purposes.

The resulting case law explored (among other things) what defines an “aerodrome” and whether ancillary activities (such as retail and commercial activities) were captured by its definition.

While there is no question that airside facilities are captured by the term “aerodrome”, most notably, the High Court found that an “aerodrome is no longer a term of normal usage for modern sophisticated and integrated airports” and that it is reasonable to embrace “…a wide range of facilities, some not obviously connected directly to the arrival and departure of aircraft, their passengers, crew and freight and those involved in that activity, but with all such activity being focused on providing revenue to the airport operator to offset the losses inevitably derived from aircraft operations…”

John said that on that basis, “airport operators can be reasonably comfortable that it is appropriate for modern airports to provide for a diverse range of activities and goods to support and complement the functioning of the airport.

“The case law establishes that a broad range of activities can be covered. Therefore make sure you have a designation and that the scope of the designation covers everything on your site and is likely to be on your site, even 30 years into the future.”

However he said that for surety, if you are an airport owner you should be also be rezoning your land as a protection measure. While designations are an effective tool for airport operators to realise their future development aspirations, John advised that only the airport owner can rely on and use the designation.

Other people establishing at the airport must comply with the underlying land use zoning. More often than not, he said district plans have antiquated zonings.

Kirsty outlined the case study of Queenstown Airport which is subject to an outdated land use zoning. The airport is impacted by two different zonings — airport mixed use and rural general. A lot of the airport facilities are in the rural general zone.

“What happens in practice is that if someone wants to establish an airport ground support equipment shed in that part of the airport that is zoned rural, the council will require resource consent as it is not an activity that is ordinarily anticipated in the rural zone,” she said. This is nonsensical given that the activity is wholly consistent with the activities occurring at the airport.

Kirsty recommended that if you have airport designation, the underlying land use zone should mirror the designation, both in its extent and the activities are provided for.

Efforts are now being made under the Queenstown Lakes District Plan review process to get the whole of Queenstown Airport’s designated aerodrome area rezoned to airport mixed use. The idea is also to align what is permitted by designation with what is permitted by the airport mixed use zone.