



Domino's Pizza Enterprises Ltd ABN 16010489326

Submission to the Senate Rural and Regional Affairs and Transport References Committee

Inquiry into Remotely Piloted Aircraft Systems and Associated Systems

15 December, 2016



Thursday, 15 December, 2016

Committee Secretary
Senate Rural and Regional Affairs and Transport References Committee
Department of the Senate
PO Box 6100
Parliament House
CANBERRA ACT 2600
AUSTRALIA

Via online submission.

Dear Senators,

Submission to the Senate Rural and Regional Affairs and Transport References Committee - Inquiry into Remotely Piloted Aircraft Systems and Associated Systems

Domino's Pizza Enterprises Limited (Domino's) is an Australian-owned and headquartered company operating Domino's franchises in seven countries, including Australia and New Zealand.

Domino's has a proud track record of enhancing our customers' experience through pioneering technology, here and overseas, which also benefits local employees and investors.

We believe deliveries by Remotely Piloted Aircraft Systems (RPAS), or drones, will be an essential development for businesses within Australia. The adoption of a forward-thinking regulatory framework for commercial and non-commercial drones will have long-lasting benefits to local consumers and their communities.

In August, Domino's launched a partnership with Flirtey, an Australian-founded company and the global leader in drone deliveries. Flirtey has worked with NASA, and top universities to create the technology and logistics systems for a mass-market drone delivery network. Flirtey was also the first company to conduct an FAA-approved delivery in the U.S.

This partnership with Flirtey to commence the world's first commercial drone delivery service with approval from the country's aviation regulator, New Zealand's Civil Aviation Authority (CAA), is progressing through a series of trials to confirm deliveries by drone are a viable, and safe, addition to our delivery fleet. In November, this partnership successfully completed the world's first commercial, autonomous delivery of pizza to a customer's house, in New Zealand. This successful delivery by our autonomous platform, DRU Drone by Flirtey, was subsequently replicated in ongoing trials to additional customers' homes in Whangaparaoa, north of Auckland.

This partnership, and our trial program, has provided us with an understanding of the regulatory requirements in Australia and overseas, and provided detailed customer feedback on the demand for, and concerns regarding, drone delivery. Domino's has unique insights into the likely future social and economic impact of drones, options for improving regulatory compliance, and the potential commercial uses of these vehicles.



We welcome the opportunity to provide a submission to the Rural and Regional Affairs and Transport References Committee.

Commercial environment

Domino's investment in drone delivery technology arises from our core mission, to provide a fresh, high-quality meal to our customers.

Advancements in delivery technology, such as Domino's introduction of scooters and E-bikes, has reduced the cost of meal delivery, while simultaneously increasing the quality of the food delivered. This technology has been supported by innovations such as online ordering and GPS Driver Tracker, which provides safety and efficiency benefits for drivers, and more information to customers. Combined, this has promoted a social shift, with consumers increasingly expecting to be able to conduct at least part of their order online (even when collecting from a store) and to have their delivery arrive within minutes.

This social shift has affected not only food delivery, but also retail delivery. It is not a metropolitan phenomenon, with regional customers rightly expecting companies overcome the challenges of distance, to ensure they receive services and products on-par with capital cities. Consumer expectations are being challenged by the limitations of current delivery methods, and the social cost of infrastructure development and increased road trauma as commercial, industrial and personal transport conflict.

Domino's aims to be at the forefront of this change, meeting the demand from our customers for safe, fast, low-cost deliveries of high-quality food. International, mainly US-based, retail companies are investing to meet this social shift, and overcome these challenges as quickly as possible. We believe drone technology, and our investment in this technology, will meet this demand, and overcome the barriers inhibiting the efficient fulfilment of customer orders.

Safety

Domino's highest priority in the planning and testing phases of the implementation of drone deliveries has been safety, for our employees, our customers and the community.

We understand there is community concern regarding the safety of drone deliveries. Our testing program, with partner Flirtey, has included multiple levels of redundancy, including using a six-rotor platform, in-built procedures for return-to-base and emergency landing and, in future iterations, a built-in parachute. Furthermore, flights are only anticipated at a height, and in areas, where there is no risk of collision with other aircraft, with flight paths in compliance with regulations.

In addressing community concerns, through media and social media, our experience has found the public is satisfied with the robust safety measures being implemented from the beginning of our commercial drone delivery trials. However, community concerns remain about the impact of unregulated drones on aviation and ground activities. These concerns typically relate to drones under the control of untrained personnel, who may be unaware of existing regulations, or unwilling to abide by them. Further, the proliferation (especially of non-commercial drones) has heightened fears of collisions with aircraft.

Domino's shares these concerns. These include the use of drones in unauthorised areas, the use of drones for inappropriate activities, and the ability to identify those operators who do not abide by established regulations.



Just as our delivery experts in cars and on E-bikes may be put at risk by the activities of unlicensed, unregistered or untrained car drivers, we anticipate the possibility unregulated users of non-commercial drones may endanger our commercial drone delivery platforms or people on the ground. As the number of commercial and non-commercial drones increase, these risks increase, necessitating the need to improve regulations, as soon as possible.

For commercial users, we have every expectation a regulatory system will allow for the unique nature of drone deliveries, specifically their low cost and low risk nature, owing to the short distances and low altitudes of standard flights. The existing regulations, particularly the requirement to conduct flights within line of sight, and associated requirements regarding the lodgement of flight plans, were understandable given the technology and safety environment in which they were established. However, Domino's submits these rules will require careful examination, and relaxation, should commercial drone deliveries be viable in this country.

Equally, when considering the safety of drone deliveries, the safety of alternative delivery methods should form an essential part of this consideration. Domino's is progressing its investment in drone delivery technology precisely because we believe they are a safer alternative than road-based deliveries, which are subject to increased traffic volumes and the failings of other, human, drivers.

Ultimately, clear guidelines that allow for the co-operative use of airspace, between traditional and emerging users (both commercial and non-commercial), will improve the usability and safety of our airspace for all concerned.

Privacy

Domino's understands the community have reasonable expectations of privacy when on their private property. We share those expectations.

The integration of high-definition cameras, even in entry-level drones, and their ability to overfly private property where an expectation of privacy exists, raises public interest issues, especially for those users of non-commercial devices.

Domino's focus is on our chosen delivery platform, DRU Drone by Flirtey, which has cameras on-board to monitor and record the drone's safe operation. This footage is only to ensure a safe delivery is completed, and only stored in the event of an incident occurring that requires the review of in-flight data and footage.

We believe this approach, as well as existing requirements under the Privacy Act, is the best way to address public concerns regarding the capture and usage of images recorded by commercial delivery drones.

Employment

Domino's is a proud employer of more than 13,000 people in Australia. We are often the first employer for young people, instilling values such as teamwork, respect, attention to detail, customer service and workplace safety, that provide a foundation for a successful career across all industries.

Domino's recognises the community has concerns about the impact of increasing automation on employment, particularly youth employment and would like to address those concerns.



Our company forecasts a doubling of stores, from 2022 in our seven markets currently, to 4650 stores in these same markets by 2025.

Our team members, from our talented pizza makers and store leaders, through to our delivery experts, will always be a vital component of our business that sets us apart from our competitors. Our view is technology will play an increasing role in meeting customer demand and our expansion plans, helping our team members find efficiencies and improve their already high standard of customer service.

The most recent example of this phenomenon is the move to online ordering. Online ordering, through websites and mobile applications, is an ever larger component of serving our customers. Each year, a smaller percentage of our customer orders are placed in store or by telephone calls. Far from reducing the number of employees, or replacing team members with online ordering, this technology has driven the creation of jobs, creating and delivering pizzas, and supporting a larger network of stores across our business.

Domino's is proud of our investment in developing technology, with full-time employees, contractors and partner companies developing innovative software and hardware solutions from our Australian head-office. These roles simply did not exist, nor could have been envisaged, when Domino's opened its first store in Australia.

We expect a similar path with the introduction of drones. Faster and more efficient deliveries will increase demand, met through more team members making and serving fresh, hot meals from our stores. Furthermore, an ecosystem of employment will develop around drone deliveries, from software developers and hardware designers, through to maintenance team members, service personnel through to those loading the drones with deliveries. The proviso being that many of these jobs will be created by the companies, and countries, that lead the way with drone technology.

Technology

The ability to use drones to complete autonomous deliveries is a significant technological challenge, which Domino's is proud to have been able to successfully complete with partner Flirtey.

Domino's believes the impacts of regulations are greater than those relating to drone usage. Instead, the regulations have a broader impact on technological investment, and innovation.

Simply put, this is an important moment for Australian companies eager to use drone technology. They will either be innovators and developers of a technology that promises safety, environmental and economic benefits for our community, or they may rent this technology from innovators overseas.

Domino's hope is for Australian companies to lead the way in progressing drone technology, from the platforms used through to the numerous tasks to which they may be applied.

A regulatory environment that encourages real-world testing of advanced technology such as autonomous commercial drones, will not only benefit the use-case under testing, but also have a halo effect for other industries and uses.

Ultimately, we cannot foresee each potential application of drones, as much as we could not anticipate the disruptive impact of mobile technology on commerce. What is certain is the full



benefits of these uses will flow to other countries and their local companies if Australia is not a welcoming environment for this innovation.

We believe there is community support for this approach. Through media, social media and customer surveys, there has been a high level of interest and demand for drone deliveries within Australia. Chief among the feedback received is the question "When will this technology be available in Australia?".

Domino's looks forward to the opportunity to use DRU Drone by Flirtey in our Australian operations.

Next Steps/Future

The successful trial of customer deliveries in New Zealand has provided us with important information about the operational challenges, and customer interest, for drone deliveries.

In the next phase of this program of testing, scheduled for 2017, we will work with our partner Flirtey with a goal to expand the delivery distances, weather conditions, and package dimensions with which we can operate.

Our goal is to commence commercial operations with at least one store, following these additional tests in 2017.

Domino's Pizza Enterprises Ltd operates in seven countries, including Australia, New Zealand, Japan, Netherlands, Germany, Belgium and France. There is a high level of public interest and customer demand for drone deliveries in each of these markets.

Ultimately, the market in which we next expand our footprint of drone testing and customer deliveries will depend on a combination of customer demand, operational factors and the local regulatory environment. Domino's recognises the development of innovative technology poses unique issues and concerns for governments and regulators, and looks forward to addressing those issues with any bodies considering the controlled, staged roll-out of this technology.

We would hope an Australian store, potentially in regional Australia, may next meet these requirements, but believe our customers and our business are best served by continuing to progress this technology program in the most timely manner.

Yours sincerely,

Domino's Pizza Enterprises Ltd

Don Meij

Group CEO and Managing Director