

## SUBMISSION

Director  
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### From:

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Our Ref

Your Ref

Date:

22 October 2020

Dear Sirs

### **Emerging Aviation Technologies NATIONAL AVIATION POLICY ISSUES PAPER September 2020**

#### **1 Introduction**

1.1 Clyde & Co are pleased to provide this written submission on the proposed policy outcomes articulated in this Australian Government policy issues paper ("Paper") to inform the direction of the National Emerging Aviation Technologies policy.

1.2 Addressed or touched upon in our submission include:

- Do you agree with the proposed core principles for the National Emerging Aviation Technologies policy?
- What are your expectations of the Government's role and responsibilities in the management of drones and eVTOL vehicles?
- To what extent should Australia's approach be harmonised with approaches taken in other countries?

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- Are there other issues that the Australian Government should consider?
- 1.3 The Paper is described as being the "*first step towards development of a national policy for the management of drones and other emerging aviation technologies*". The Paper identifies opportunities and risks associated with these technologies, outlines some of the current approaches for managing these issues and proposes an approach to policy development. The proposed approach to policy development covers airspace integration, safety, security, noise, environment, privacy, safe and efficient electric take-off and landing vehicles, infrastructure, technology trials and central coordination<sup>1</sup>. These are all important issues and are integral to the development of a comprehensive national policy that will allow Australia to benefit from the considerable opportunities provided by emerging aviation technologies.
  - 1.4 However, in our submission, a national policy that omits a considered assessment and effective implementation of compulsory liability insurance is ignoring a vital dimension in managing the risks and impacts associated with the use and deployment of drones and other emerging aviation technologies.
  - 1.5 It is particularly their foreshadowed usage in urban transport and delivery within high density population areas by corporations such as Amazon, Google and Uber that gives re-birth to the debate and underlying issues considered by legislators and regulators in relation to the motor vehicle one-hundred years ago. For example, in 1920 the Attorney General and Commissioner of Insurance in Massachusetts, in describing legislation intended to require motor vehicle owners to have liability insurance or evidence of a bond covering the owner's financial responsibility, stated that these requirements were "*drawn upon the theory that the State can and ought to require every person who operates an automobile to furnish protection for the public against the injuries which they may cause*"<sup>2</sup>. This, it is suggested, is precisely the juncture that has been reached with drones.
  - 1.6 The Paper devotes less than half a page of its sixty-two pages to insurance. This commentary is as follows:

“Most commercial drone operators make the business decision to hold insurance to cover for any damage or injury caused as part of managing the risk of their operations. Recreational users that are members of some drone organizations carry insurance as part of their membership. The requirement to hold insurance is often a condition of engagement by organizations procuring drone-based services. There are a range of models in other sectors where third-party insurance has been mandated, such as for vehicles. However, it remains to be seen whether this would be an appropriate mechanism for drones, especially considering the disparate risk profiles of operations across the drone sector. Aviation traditionally has operated free from mandated compulsory third-party insurance for damage to property or injury, although many industry operators hold insurance policies to cover a range of scenarios as a part of their risk management processes. Any decision to implement an insurance scheme for drone operators will need to be informed by relevant drone accident data, be proportionate to the risk profile of operations, be consistent with a holistic approach to regulation and complement the suite of various approaches available to manage risks

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<sup>1</sup> **Emerging Aviation Technologies NATIONAL AVIATION POLICY ISSUES PAPER September 2020**, at page 7. See also, Julie-Anne Tarr, Maurice Thompson and Anthony Tarr, “Regulation, Risk and Insurance of Drones: An Urgent Global Accountability Imperative” [2019] *Journal of Business Law* 559; Julie-Anne Tarr, Anthony Tarr, Ron Bartsch and Maurice Thompson “Drones in Australia – Rapidly evolving regulatory and insurance challenges” (2019) 30 *Insurance Law Journal* 135.

<sup>2</sup> Quote from article by Ralph H. Blanchard, “Compulsory Motor Vehicle Liability Insurance in Massachusetts” (1936) 3 *Law & Contemporary Problems* 537

and impacts from the use of drones. International approaches have included an insurance service as an optional industry developed UTM service”<sup>3</sup>.

- 1.7 At the outset, it should be noted that the regulatory and community concerns we raise here are not directed at responsible commercial or recreational drone users who obtain appropriate insurance to manage the risks of their drone operations. That said, there are only limited insurance options available for commercial operators at present, with options ranging from inadequate to well considered and acceptable, with a great deal of room for improvement in general on matters concerning risk differentials with different usage in different environments. Clyde & Co has written separately on some of those challenges.<sup>4</sup> In short, it would be a mistake to consider that all commercial drone users in Australia have adequate liability insurance for drones related risks. If the number of enquiries to Clyde & Co from large commercial drones operators and from insurers alike in the development of policies is a gauge, then there will need to be serious developments in this space before comfort levels can be achieved like those the Paper has assumed already exist. In any event, the concerns we raise herein, as in the case of uninsured and/or unlicensed motor vehicles, are directed at those individuals and operators who do not adhere to appropriate standards and behavior.
- 1.8 Furthermore, the laissez faire approach evident in the commentary from the Paper above is in direct contrast to the approach adopted in other jurisdictions such as the European Union where a commercial drone operator must have public liability insurance to protect against legal liability for third party property damage or injury whilst using a drone<sup>5</sup>. In addition, the International Civil Aviation Organization ICAO UAS Toolkit<sup>6</sup>, described by ICAO, as a helpful tool to assist States in realizing effective UAS operational guidance and safe domestic operations, chapter 2.8 states:

“The operator shall have adequate insurance in the event of an incident or accident. Some States require a minimum third-party liability insurance to be in effect for all UAS operations”.

- 1.9 In our submission, any pro-active approach to drone management and regulation must consider compulsory third-party liability insurance and other liability issues, for the reasons discussed in the following paragraphs.

## 2 Risks

- 2.1 There is mounting evidence that injury to persons and property damage are very real concerns arising out of the use of RPAS, and that incidents of actual harm are increasing rapidly<sup>7</sup>. The Paper takes a very “*wait and see*” approach to ground risks by stating:

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<sup>3</sup> Ibid., n 1, at page 25.

<sup>4</sup> Julie-Anne Tarr, Maurice Thompson and Anthony Tarr, “Regulation, Risk and Insurance of Drones: An Urgent Global Accountability Imperative” [2019] Journal of Business Law 559; Julie-Anne Tarr, Anthony Tarr, Ron Bartsch and Maurice Thompson “Drones in Australia – Rapidly evolving regulatory and insurance challenges” (2019) 30 Insurance Law Journal 135; J. Tarr, A. Tarr and K. Paynter, “Transport, Drones and Regulatory Challenges: Risk Accountability Meets COVID Fast Tracking of a Critical Industry” (2020) 48 ABLR 202.

<sup>5</sup> Regulation (EC) No 785/2004 of the European Parliament and of the Council of 21 April 2004 on insurance requirements for air carriers and aircraft operators. The adequacy of insurance requirements has been considered in the UK: Lloyds, *Drones Take Flight: Key Issues for Insurance, Emerging Risk Report, Innovation Series*, 2015, London

<sup>6</sup> <https://www.icao.int/safety/UA/UASToolkit/Pages/Narrative-Regulation.aspx>

<sup>7</sup> See Julie-Anne Tarr, Maurice Thompson and Anthony Tarr, “Regulation, Risk and Insurance of Drones: An Urgent Global Accountability Imperative” [2019] Journal of Business Law 559.

"There is no single data set for determining the number of incidents occurring domestically or internationally from drones involving ground risks. In Australia, there were 47 reported terrain collisions from drones between January 2016 and June 2017. It is expected that most recreational drone collisions with terrain would go unreported as there is no requirement to report such an incident in many circumstances, particularly as these collisions do not significantly impact safety in most cases. There is limited documentation of injuries in Australia with most documented cases minor in nature. There have been no fatalities in Australia as a result of a drone colliding with a person. With the exception of military uses, there is limited documentation of any international fatalities from drone collisions. Risks to people on the ground can be from a drone flying into a person, or the drone or debris from a drone falling onto a person. These may have different consequences and require different mitigations which could vary considerably based on the size and design of the drone"<sup>8</sup>.

2.2 This statement, with respect, misses the point on two main counts. First, it underestimates the potential risk to people from drones by focusing on people "on the ground" and then only in respect of direct hits or debris falling from them. It does not take into account a large array of heightened risks associated with a drone's usage. One discussed below in further detail is the risk drones' usage pose to aircraft. It is a matter of when, not if, the use of drones will cause a major aviation catastrophe. That is accepted as a reality globally. It also fails to appreciate that the drone could be the catalyst for major losses. For example, sparking fires and explosions and worse.<sup>9</sup> Further, that drones have also negatively impacted emergency responses to casualties etc. Second, from an insurance perspective – the key role of insurance is to protect against future uncertainties and uncertain loss. While the precise delineation and evaluation of risk may be a work in progress, there is already a well-developed insurance market, described in the section below, providing cover for liability arising from the use of a drone. Insurers providing products for new and evolving risks do face challenges in accessing sufficient relevant data around the emerging risks to enable accurate pricing. However, these products do exist and if a person who sustains injury or property damage is to have a real opportunity to pursue a damages claim against a drone pilot or operator, it is essential that the person at fault is able to be identified, or alternative recourse be available. Furthermore, that the person at fault have the capacity to satisfy any damages award or settlement. A requirement to hold appropriate third-party liability insurance should not, in these authors' submission, have to wait upon an indeterminate number of future fatalities. That is not the position being adopted in other countries that are discussed at paragraphs 3.9 – 3.13 below.

2.3 Given the almost exponential usage of these aircraft, the ever increasing payloads they can carry and their ability to travel vast distances, the potential for injury or damage resulting from drone operations is increasing. Notwithstanding the assertions in the Paper, numerous examples of personal injury and damage to property are already emerging through drone accidents. For example, there are recorded instances of drones having crashed into individuals in parks and public spaces, into runners during athletic events<sup>10</sup> and of drones crashing into trains, buildings and even onto the lawns of the White House<sup>11</sup>. One submission

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<sup>8</sup> Ibid., n.1, at pp.24-25.

<sup>9</sup> Such matters will be explored in detail in a Book **DRONE LAW: Assessment, Regulation and Insurance** (General Editors – Dr Anthony Tarr, Professor Julie-Anne Tarr, Maurice Thompson, Jeffrey Ellis) to be published by Informa UK Limited trading as Routledge, an imprint of the Taylor & Francis Group (London & New York) in the first half of 2021.

<sup>10</sup> Triathlete injured by drone April 2014, Australia; Recreational runner, Quebec, June 2016; Toddler lost an eye as a result of a drone accident; UK, November 2015; a woman watching the Seattle Pride parade was hit by a falling UAV and knocked unconscious June 2015

<sup>11</sup> Shear, Michael D; Schmidt, Michael S., The New York Times, 27 January 2015, "White House Drone Crash Described as a US Worker's Drunken Lark" [https://www.nytimes.com/2015/01/28/us/white-house-drone.html?\\_r=0](https://www.nytimes.com/2015/01/28/us/white-house-drone.html?_r=0)

to the Australian Senate Inquiry Committee<sup>12</sup> demonstrated how the lack of registration and insurance has previously resulted in a bystander footing the bill for a drone operator's mistake when in August 2016 a drone collided into the front of a new Mercedes GLS as it was being driven across the Sydney Harbour Bridge. The impact left part of the RPAS embedded in the car bodywork and other debris scattered across the road. Because of heavy traffic the vehicle was travelling at a slow speed; had the traffic been moving faster the incident could have affected several vehicles and resulted in greater damage in general. Because the operator of the RPAS remains unknown, and despite police investigations, the owner of the motor vehicle has been left with the repair bill.

- 2.4 Their increased deployment through transport and delivery services in high density population areas will further enhance personal injury and property damage risks.
- 2.5 There are burgeoning numbers of drones, many of which are unregistered or unlicensed, and, more dauntingly, a substantial numbers of drones that are operated with limited or no training. Regulators and the community at large therefore face what is hardly a minor safety challenge with the Civil Aviation Safety Authority (CASA) submission to the 2018 Senate Inquiry highlighting *“an increase in the operation of RPA without regard to safety, particularly within restricted airspace, including ‘the risk of a catastrophic collision with a passenger aircraft.’”*<sup>13</sup>
- 2.6 The Australian Senate Committee of Inquiry stated in their 2018 Report<sup>14</sup> that a primary and growing concern of aviation authorities and experts is that of the number of incidents whereby RPAS have come into contact with or within close range of aircraft. According to the Australian Airline Pilots' Association there were over 160 "air proximity events" involving RPAS reported from 2015 to 2016. The Australian Transport and Safety Bureau (ATSB) provided a figure of 180 near encounters with RPAS reported to air traffic control between 2012 and 2016. In 2017, there were 151 reported near encounters with manned aircraft, representing a 119 per cent increase from the previous year. There are several high-profile examples of such hazards. Gatwick Airport, the United Kingdom's second largest airport, was brought to a standstill in December 2018 through the illegal operation of drones within the airport's airspace<sup>15</sup>. This disrupted the travel plans of 125,000 people and cost the airlines an estimated US \$63 million. A civilian UAV collided with a Black Hawk helicopter over the Eastern Shore of Staten Island, New York City, on 21 September 2017, and on 17 April 2016, a British Airways Airbus collided with a UAV on approach to Heathrow Airport<sup>16</sup>.
- 2.7 The Federal Aviation Administration (**FAA**) in the United States of America reports that unmanned aircraft (**UAS**) sightings from pilots, citizens and law enforcement have increased dramatically over the past two years. The FAA now receives more than 100 such reports each month. The agency has sent out a clear message that operating drones around

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<sup>12</sup> Australian Certified UAV Operators, *Submission 73*, p. 31.; Australian Senate Inquiry Committee, *Regulatory requirements that impact on the safe use of Remotely Piloted Aircraft Systems, Unmanned Aerial Systems and associated systems*, 31 July 2018; at para. 1.15.

[https://www.aph.gov.au/Parliamentary\\_Business/Committees/Senate/Rural\\_and\\_Regional\\_Affairs\\_and\\_Transport/Drones/Report](https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Rural_and_Regional_Affairs_and_Transport/Drones/Report)

<sup>13</sup> See Explanatory Statement, *Civil Aviation Safety Amendment (Remotely Piloted Aircraft and Model Aircraft – Registration and Accreditation) Regulations 2019 (Cth)*; dated 25 July 2019; p.6.

<sup>14</sup> See above, footnote 13, at. Para1.31.

<sup>15</sup> Maurice Thompson, Patrick Slomski & James M Cooper, "Gatwick Meltdown: drones in a no-go-zone" <https://www.clydeco.com/insight/article/gatwick-meltdown-drones-in-a-no-go-zone> Published December 21, 2018, accessed 20 May 2019.

<sup>16</sup> See [https://en.wikipedia.org/wiki/List\\_of\\_UAV-related\\_incidents](https://en.wikipedia.org/wiki/List_of_UAV-related_incidents)

airplanes, helicopters and airports is dangerous and illegal. Unauthorized operators may be subject to stiff fines and criminal charges, including possible jail time<sup>17</sup>.

2.8 According to safety experts, [UK drone incidents](#) rose more than a third in 2018. The UK Airprox board recorded 125 dangerously close encounters or drone incidents in 2018. This number is more than a third higher than in 2017 when only 93 drone incidents were recorded. 71 incidents were recorded in 2016. Even more concerning, 39 of the 125 drone incidents occurred at the UK's busiest airport Heathrow<sup>18</sup>.

2.9 The increasing use of drones also gives rise to very real privacy concerns. As Matthew Koerner<sup>19</sup> observes:

“Drones have gained notoriety as a weapon against foreign terrorist targets; yet, they have also recently made headlines as an instrument for domestic surveillance. With their sophisticated capabilities and continuously decreasing costs, it is not surprising that drones have attracted numerous consumers – most notably, law enforcement.”

2.10 These privacy concerns extend beyond law enforcement considerations and encompass issues such as the unauthorized collection of data and industrial espionage. Other real drone risks of a non-safety nature include potential damages arising from private law claims (for example, such as trespass, nuisance, invasion of privacy) and possible damage to a company's goodwill or reputation.

2.11 These are further liability risks that need to be addressed by insurance.

### **3 Liability Insurance – current status**

3.1 Several standard commercial public liability policies now include express cover for liability arising from the use of a drone during business operations, for example, during farm operations. However, these standard policies will generally exclude cover where the primary function of the business is the operation of a drone. This gap in coverage for specialist drone businesses has been filled, as a number of insurers now offer public liability insurance products aimed specifically at operators of drones.

3.2 The insurance industry initially adopted an approach to drone insurance using standard aviation wordings on an annual basis, adapting those policies by removing coverages such as passenger liability, but effectively giving users a standard aviation policy at disproportionate cost of issuance. As Tom Chamberlain<sup>20</sup> explained in an interview with the International Underwriting Association of London<sup>21</sup>, this approach was not optimal for the insurer or the customer.

“Firstly, from an efficiency point of view, we have experienced general aviation underwriters whose focus should be to underwrite the medium to large accounts business rather than spend an hour or so on a relatively low value drone policy.

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<sup>17</sup> [Reported UAS Sightings \(October 2018-December 2018\)](#)  
[https://www.faa.gov/uas/resources/public\\_records/uas\\_sightings\\_report/](https://www.faa.gov/uas/resources/public_records/uas_sightings_report/)

<sup>18</sup> <https://dronedj.com/2019/04/05/uk-drone-incidents-2018-safety-experts/>

<sup>19</sup> Matthew R Koerner, “Drones and the Fourth Amendment: redefining expectations of privacy” (2015) 64 Duke Law Journal 1129.

<sup>20</sup> Underwriting Manager General Aviation and Aerospace, London, Allianz Global Corporate and Specialty.

<sup>21</sup> “On-demand and Conquer: Is the future of insurance a pay-as-you-go one?”, IUA Developing Technology Monitoring Group, 9 October 2019. [https://www.iaa.co.uk/IUA\\_Member/Press/Press\\_Releases\\_2019/IUA\\_publishes\\_on-demand\\_insurance\\_report.aspx?WebsiteKey=84dca912-b4fb-4a0f-a6e5-47ad899350aa](https://www.iaa.co.uk/IUA_Member/Press/Press_Releases_2019/IUA_publishes_on-demand_insurance_report.aspx?WebsiteKey=84dca912-b4fb-4a0f-a6e5-47ad899350aa)

Secondly, for the customer, there must be a better product out there. One that is cost effective and offers you the cover you actually need.”

- 3.3 However, with these undoubted challenges come new opportunities.
- 3.4 Some very innovative products have been developed for the drone market. For example, in January 2018, Flock launched Europe’s first app-based “*pay-as-you-fly*” drone insurance in conjunction with Allianz. Through a mobile app, commercial and recreational pilots are able to purchase customized equipment and liability insurance on demand (lasting from one to eight hours). The cost of cover is “*exposure-based*” as the risk is assessed on a per-flight basis and determined by combining real-time data with algorithmic risk assessments.<sup>22</sup> That product has been followed in July 2019 by Flock’s introduction of its “*Enterprise*” product to provide scalable exposure-based insurance for connected drone fleets.
- 3.5 These types of on-demand insurance will undoubtedly play a fundamental role in the future of the insurance industry generally. New research published by the International Underwriting Association (IUA) observes that pay-as-you go models of cover will allow customers to automatically activate policies when and where they need them<sup>23</sup>. This obviously transcends drone’s insurance and there is potential for on-demand insurance models to access new markets and customers
- 3.6 In relation to recreational operators of drones, the Australian Senate Inquiry Committee<sup>24</sup> noted that vast majority of recreational RPAS operators are unlikely to be insured to cover damage or injury caused by devices under their control. Some operators will purchase a specialized public liability product for the use of their drone and some others may have recourse to third party liability cover under their home and contents insurance where damage caused by a drone occurs on the insured property. Whether a home and contents policy will provide third party cover for such damage will, of course, depend on the wording of the policy. For example, some commonly available home and contents policies contain express exclusions for a legal liability arising out of an accident involving a drone and most home and contents policies exclude cover where the liability relates to commercial endeavor. The Insurance Council of Australia has observed that this absence of cover leaves many amateur RPAS operators financially vulnerable in the case of RPAS system failure or operator error resulting in personal or property damage.<sup>25</sup>
- 3.7 Of course, equally or more concerning, is the potential injury to the person or property of a third party in circumstances where the drone operator does not have any or adequate insurance cover or cannot be identified.
- 3.8 The ICAO UAS Toolkit<sup>26</sup>, described by ICAO, as a helpful tool to assist States in realizing effective UAS operational guidance and safe domestic operations, chapter 2.8 states:
- “The operator shall have adequate insurance in the event of an incident or accident. Some States require a minimum third-party liability insurance to be in effect for all UAS operations”.
- 3.9 In many jurisdictions overseas, compulsory insurance requirements are already in place. For example, in the European Union, a commercial drone operator must have public liability

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<sup>22</sup> Flock, “The future of insurance for connected drone fleets” [www.flockcover.com/enterprise](http://www.flockcover.com/enterprise)

<sup>23</sup> *Ibid.*, n 22.

<sup>24</sup> Para. 4.21.

<sup>25</sup> Insurance Council of Australia, *Submission 59*, p. 4; Australian Senate Inquiry Committee, see footnote 13 above.

<sup>26</sup> <https://www.icao.int/safety/UA/UASToolkit/Pages/Narrative-Regulation.aspx>

insurance to protect against legal liability for third party property damage or injury whilst using a drone.<sup>27</sup> The Regulation requires all commercial drone operations to carry third party liability insurance with the minimum third-party insurance requirement being based on the mass of the aircraft on take-off.

- 3.10 Anyone who wants to fly a drone for commercial work in the United Kingdom needs a 'Permission for Commercial Operation' (PFCO) from the CAA. It is a condition of each PFCO that the applicant/operator has appropriate insurance coverage that meets the requirements of *Regulation (EC) No. 785/2004*. As a minimum the commercial drone operator must have public liability insurance to protect against legal liability for third party property damage or injury whilst using a drone. The Regulation requires all commercial drone operations to carry third party liability insurance with the minimum third-party insurance requirement being based on the mass of the aircraft on take-off; for example, for drones weighing less than 500kg the minimum cover required is approximately €660,000.<sup>28</sup>
- 3.11 The extent and scope of this EU Regulation in the United Kingdom and elsewhere is under active consideration. For example, the House of Lords in considering *Regulation (EC) No. 785/2004* recommended that the Commission clarify the scope and applicability of the Regulation and increase the amount of public liability insurance required by commercial RPAS operators<sup>29</sup>. Furthermore, drone owners and insurers in the UK are closely watching to see if insurance will be made mandatory for lighter drones in the wake of *Air Navigation (Amendment) Order 2018* requiring compulsory registration for drones over 250g.<sup>30</sup>
- 3.12 Another jurisdiction with compulsory insurance is Canada, where public liability insurance of at least \$100,000 is required to obtain a Special Flight Operations Certificate, a pre-requisite for commercial drone operations in Canada<sup>31</sup>. Similarly, in Brazil, the National Civil Aviation Agency requires insurance coverage for damage to third parties if the RPA has a maximum take-off weight of greater than 250g<sup>32</sup>.
- 3.13 Compulsory insurance requirements are also in place in Costa Rica, Trinidad and Tobago, Chile, Columbia, Guyana, Uruguay, Nigeria, Rwanda, Philippines, Thailand, Iceland, Liechtenstein, and Norway.<sup>33</sup>

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<sup>27</sup> Regulation (EC) No 785/2004 of the European Parliament and of the Council of 21 April 2004 on insurance requirements for air carriers and aircraft operators. The adequacy of insurance requirements has been considered in the UK: Lloyds, *Drones Take Flight: Key Issues for Insurance, Emerging Risk Report, Innovation Series*, 2015, London.

<sup>28</sup> Regulation (EC) No 785/2004 of the European Parliament and of the Council of 21 April 2004 on insurance requirements for air carriers and aircraft operators. The adequacy of insurance requirements has been considered in the UK: Lloyds, *Drones Take Flight: Key Issues for Insurance, Emerging Risk Report, Innovation Series*, 2015, London.

<sup>29</sup> See Civilian Use of Drones in the EU – European Union Committee

<https://publications.parliament.uk/pa/ld201415/ldselect/ldcom/122/12210.htm>

<sup>30</sup> See, for example, UK Department of Transport, Impact Assessment: Insurance for Drones 15 July 2016 [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/579509/drones-insurance\\_ia.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/579509/drones-insurance_ia.pdf); Kennedys, "Taking Flight: The Rising Importance of Drone Insurance" [https://www.kennedyslaw.com/media/2102/kennedys\\_droneswhitepaper.pdf](https://www.kennedyslaw.com/media/2102/kennedys_droneswhitepaper.pdf)

<sup>31</sup> Transport Canada, *Proposed rules for drones in Canada*, <https://www.tc.gc.ca/eng/civilaviation/opssvs/proposed-rules-drones-canada.html#liability> (accessed 22 November 2017). Amount is in Canadian dollars. Newman Insurance, "Liability Insurance for Commercial Drones is a must-have", <https://www.newmaninsurance.ca/Liability-Insurance-for-Commercial-Drones-is-a-Must-Have/>

<sup>32</sup> See ANAC, National Civil Aviation Agency – Brazil <https://www.anac.gov.br/en/faq/drones/operations>

<sup>33</sup> Therese Jones, Rand Corporation, "International Commercial Drone Regulation and Drone Delivery Services" (2017) [https://www.rand.org/content/dam/rand/pubs/research\\_reports/RR1700/RR1718z3/RAND\\_RR1718z3.pdf](https://www.rand.org/content/dam/rand/pubs/research_reports/RR1700/RR1718z3/RAND_RR1718z3.pdf)

3.14 The Federal Aviation Administration (FAA), the Civil Aviation Safety Authority (CASA) and the Civil Aviation Authority (CAA) NZ do not presently require operators of drones in the United States<sup>34</sup>, Australia and New Zealand, respectively, to take-out third-party liability insurance, but such cover is strongly recommended. For example, the Civil Aviation Safety Authority (CASA) does advise all commercial and recreational drone operators in its 'Advisory Circular on Remotely piloted aircraft systems – licensing and operations'<sup>35</sup> that:

"CASA strongly recommends that operators discuss with an insurer the potential liability for any damage to third parties resulting from RPAS operation [i.e. drone operation] and consider taking out suitable insurance."

3.15 CASA recommends that commercial operators of drones take out two kinds of insurance:

- (a) third party public liability insurance; and
- (b) first party property insurance or UAV insurance (being a specialized insurance product for unmanned aerial vehicles).

3.16 In addition, CASA may impose a condition on a licensed commercial drone operator to obtain insurance as part of that operator's risk management procedures. For example, it is likely such a condition would be imposed where the pilot seeks permission to operate the drone for commercial purposes at night. In addition, commercial RPAS operators are typically expected to have public liability coverage as part of state and territory business obligations.<sup>36</sup>

3.17 In the case of New Zealand, it should be noted that its no-fault accident compensation scheme (ACC scheme) governed by the Accident Compensation Act 2001, provides compensatory cover for those who suffer a personal injury in New Zealand, regardless of whether the injured party is a New Zealand citizen. The scheme also covers nervous shock or mental injuries that occur as a result of a physical injury or a sexual assault. The ACC scheme bars proceedings being brought for damages arising directly or indirectly out of any personal injury covered by the ACC scheme, either by the injured party, or by the Accident Compensation Corporation after it has paid compensation to the injured person. The operation of drones in New Zealand is governed by parts 101 and 102 of the Civil Aviation Rules, and failure to comply with these rules will generally be an offence under the Civil Aviation (Offences) Regulations 2006. However, liability for injuries or damage caused by drones is not governed by these regulations and will instead be governed by ordinary principles of negligence. The application of New Zealand's ACC scheme means that liability for injuries caused by drones in New Zealand will be limited to damage arising out of a mental injury not covered by the ACC scheme, and exemplary damages. Accordingly, it should be recognized that in relation to our closest neighbors there is no reason why owners and operators of drones are required (only strongly encouraged) to have compulsory third party liability insurance in New Zealand, because such cover is already, to significant extent, provided by virtue of the ACC Act.

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<sup>34</sup> Note that State legislatures having varying requirements. For example, the State of Minnesota requires a drone operator to have liability insurance up to USD \$ 100,000 per person and USD \$ 300,000 per accident. See Minnesota Department of Transportation <http://www.dot.state.mn.us/aero/drones/index.html>

<sup>35</sup> (July 2018); Para. 4.8.10.1.

<sup>36</sup> Department of Industry, Innovation and Science, *Arrange insurance for your business*, 10 May 2016, <https://www.business.gov.au/info/run/insurance-and-workers-compensation/arrange-insurance-for-your-business> (accessed 11 August 2019).

## 4 Implementation Options

4.1 Third party public liability insurance is a major issue for both commercial and recreational operators of drones, and a potential solution to these problems would be to replicate the regime, with necessary modifications and adjustments, that generally applies in Australia, the USA and the UK in respect of motor vehicles.

4.2 In Australia, for example, all jurisdictions have a range of statutes that supplement or supplant liability based on the general principles of negligence in the aftermath of road accidents. Compulsory Third Party (CTP) insurance schemes for personal injury and National Injury Insurance Schemes (NIIS) are in place in all Australian jurisdictions to provide lifetime care for catastrophic motor vehicle accident personal injuries.<sup>37</sup> As Mark Brady, Tania Leiman and Kieran Tranter<sup>38</sup> explain in a discourse on automated motor vehicles:

“This approach to motor vehicle accident personal injury contrasts with claims for motor vehicle accident property damage and other loss, where it has generally been left to the general law of negligence to determine driver liability for claims brought in negligence”.

4.3 Motor vehicles are required to have CTP insurance. In the event of a motor vehicle accident, this insurance covers any compensation claims that may arise and the motor vehicle accident victims are awarded compensation by the CTP insurer of the offending vehicle. Where the vehicle involved in an accident cannot be identified or is on the road illegally without CTP insurance, legislation across most Australian jurisdictions provides recourse for these victims through a Nominal Defendant<sup>39</sup>.

4.4 For example, in Queensland the Nominal Defendant is a statutory body established under the *Motor Accident Insurance Act 1994* (Qld) for the purpose of compensating people who are injured as a result of the negligent driving of unidentified and/or uninsured (no Compulsory Third Party (CTP) insurance) motor vehicles. The Nominal Defendant operation is funded by a levy within the CTP insurance premium with the levy being set on the basis of an actuarial assessment of claim trends. With regard to claims involving uninsured motor vehicles, the Nominal Defendant has the right to recover as a debt, the amount paid in settlement of the claim from the owner or driver (or both) of the uninsured motor vehicle.

4.5 The South Australian privatization model is particularly useful as an example of a framework that could be replicated in the drone context. The role of government is to mandate the CTP insurance, approve the standardized policy coverage and approve the insurers authorized to offer the insurance product. The authorized insurers under this competition model then compete on service, price and other policyholder benefits.<sup>40</sup>

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<sup>37</sup> See for example, Transport Accident Act 1986 (Vic.); Motor Accident Insurance Act 1994 (Qld); Motor Accidents Compensation Act 1999 (NSW); Lifetime Care and Support (Catastrophic Injuries) Act 2014 (ACT); Motor Accidents (Lifetime Care and Support) Act 2016 (NSW); National Injury Insurance Scheme (Qld) Act 2016; Motor Vehicle (Catastrophic Injuries) Act 2016 (WA).

<sup>38</sup> “Automated Vehicles and Australian Personal Injury Compensation Schemes” (2017) 24 Torts Law Journal 32, at 36.

<sup>39</sup> In the UK, the Motor Insurer’s Bureau compensates the victims of road accidents caused by uninsured and untraced motorists. Various arrangements apply in the United States including States that maintain unsatisfied judgment funds to provide compensation to those who cannot collect damages from an uninsured or under-insured driver.

<sup>40</sup> See for example “Car rego costs driven down with lower CTP insurance premiums in full competition,” 22 May 2019 <https://premier.sa.gov.au/news/car-rego-costs-driven-down-with-lower-ctp-insurance-premiums-in-full-competition> Accessed 5 June 2019.

- 4.6 The position is similar in the United Kingdom and the United States<sup>41</sup>. For example, pursuant to the *Road Traffic Act 1988* (UK) motorists must carry third party insurance against liability for injuries to others and for damage to other person's property, resulting from the use of a vehicle on a public road or in other public places; similarly, in the United States most States require the vehicle owner to carry some minimum level of liability insurance, with few exceptions; such as, allowing alternative arrangements such as posting cash bonds (New Hampshire and Mississippi) or paying an uninsured motor vehicle fee to the State (Virginia).
- 4.7 There are, of course, a diversity of legislative responses globally to the compensation of third parties arising out of the use of motor vehicles. For example, in South Africa, the Road Accident Fund (RAF) is a juristic person established by an Act of Parliament<sup>42</sup>, responsible for providing appropriate cover to all road users within the borders of South Africa and for rehabilitating and compensating persons injured as a result of motor vehicles. Contributions to the RAF are done by way of a levy on fuel used for road transportation.
- 4.8 Accordingly, it is suggested that an adaptation, with appropriate modifications, of the relevant compulsory third-party motor vehicle scheme with associated nominal defendant arrangements or of Accident Compensation arrangements could provide a tried and extensively tested pathway to resolving problems flowing from unregistered and/or uninsured drones.
- 4.9 In the context of drones, the following factors may be considered material:
- (a) The implementation of a compulsory CTP insurance regime in relation to commercial drone operations will resonate with the broader community interest, especially where personal safety is concerned.
  - (b) A model analogous to South Australian CTP insurance arrangements reduces the regulatory burden upon CASA and will align well with registration processes.
  - (c) The model contemplated will deliver revenue to the Federal Government.
  - (d) A differential premium model can be implemented taking into account considerations such as nature and location of the commercial operations, and whether the operator is accredited to the relevant UAS International Standard (UIS) for its operations.
  - (e) The benefits of public liability insurance cover extend far beyond individual compensation. Coupled with a robust registration regime, operators with insurance cover would become more visible, accountable, and traceable in the case of an accident or incident<sup>43</sup>.
- 4.10 In conclusion to this very brief description, it should be noted that in relation to autonomous vehicles, automated vehicles or driverless cars, the *Automated and Electric Vehicles Act 2018* (UK) extends compulsory motor vehicle insurance to cover the use of automated vehicles in automated mode. As such, any victim(s) (including the 'driver') of an accident caused by a fault in the automated vehicle itself are covered by the compulsory insurance in place on the vehicle. The insurer is initially liable to pay compensation to any victim, including

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<sup>41</sup> See also the third-party liability compensation schemes in Canada, Hong Kong, Hungary, Indonesia, India, Italy, Norway, Romania, Russian Federation, Spain and the United Arab Emirates. This is not an exclusive list.

<sup>42</sup> *Road Accident Fund Act, 1996* (Act No. 56 of 1996).

<sup>43</sup> *Submission 51*, p.2; Senate Standing Committees on Rural and Regional Affairs and Transport, Regulatory requirements that impact on the safe use of Remotely Piloted Aircraft Systems, Unmanned Aerial Systems and associated systems, 31 July 2018.

to the driver who legitimately handed over control to the vehicle. The insurer then has the right to recover costs from the liable party under existing common law and product liability law<sup>44</sup>.

- 4.11 It is not a quantum leap to entertain the notion that accidents involving automated 'aerial' vehicles might be similarly dealt with.

## 5 Conclusions

- 5.1 One difficulty facing regulators is to appropriately assess the risk and to introduce a regulatory framework that is commensurate with that risk. The regulatory intervention ideally needs to tread a path that does not stifle innovation and is not so "heavy handed" as to unduly impact commercial and recreational uses of drones<sup>45</sup>. This is no easy task because the rapid development of drone technology in the industry requires active and ongoing regulatory attention, and regulators are still trying to assess the various risks.<sup>46</sup>
- 5.2 It is the Government's ambition in developing the Policy Issues Paper to travel a balanced and proportionate path. The Department of Infrastructure, Transport, Regional Development and Communications states as follows:

"Noting the potential economic and social benefits, the rationale for a national policy is to provide certainty for industry investment and provide a clear policy and legal framework that actively encourages and facilitates the use of this technology. However, the policy and legal framework will also include a range of measures to mitigate potential risks and impacts on the community. It is vital that these technologies operate in a manner that is safe, secure and considerate of the community and the environment"<sup>47</sup>.

- 5.3 In its endeavors to achieve '*middle ground*', caution should be exercised lest it repeat the errors of the recent past as exemplified by the recent fast tracked legislation, the Civil Aviation Safety Amendment (Remotely Piloted Aircraft and Model Aircraft – Registration and Accreditation) Regulations 2019 (Cth). These regulations, promulgated in July 2019, respond to recommendations from the 2018 Senate Inquiry into drone operations by introducing drone registration and training requirements. The Australian Senate Inquiry Report, released on 31 July 2018, was critical of regulations introduced in 2016 which had (controversially) relaxed regulatory requirements for drones weighing less than 2kg. The Senate Inquiry committee criticized those changes on the basis that even small drones are capable of causing considerable damage to rotorcraft and aircraft. Instead, the Senate Inquiry Committee recommended a mandatory registration regime for all drones weighing more than 250 grams, together with a tiered education / training program. Such a compulsory

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<sup>44</sup> See Commentary on provisions of Bill/Act <http://www.legislation.gov.uk/ukpga/2018/18/notes/division/6/index.htm>

<sup>45</sup> See, for example, Kyle Bowyer, "The Robotics Age: Regulatory and Compliance Implications for Businesses and Financial Institutions" The European Financial Review, April 21, 2018 [www.europeanfinancialreview.com/the-robotics-age-regulatory-and-compliance-implications-for-businesses-and-financial-institutions/](http://www.europeanfinancialreview.com/the-robotics-age-regulatory-and-compliance-implications-for-businesses-and-financial-institutions/) Accessed 20 May 2019. "Regulation needs to strike a balance between controlling risk and stifling growth. Interestingly, the call for regulation often comes from innovators and thinkers such as Elon Musk and Bill Gates and it is becoming increasingly evident that existing laws regulating product liability, consumer rights, property law, intellectual property and tort law, to name but a few, may not be adequate to manage and control the risks associated with rapidly advancing AI (including technologies such as drones)."

<sup>46</sup> See Ben Norris, "The search for risk-based rules," 2019 Commercial Risk Europe 14. In the article, Jeff Ellis from Clyde & Co is quoted as saying: "Regulations are meant to mitigate a risk. But before you figure out what risk mitigation should be, you need to understand the risk itself. So regulators are now trying to assess the risk. As regulators are satisfying themselves via various testbeds, the rules are going to change".

<sup>47</sup> Emerging Aviation Technologies National Aviation Policy Issues Paper September 2020; at page 4. <https://www.infrastructure.gov.au/aviation/drones/files/drone-discussion-paper.pdf>

registration regime in Australia would align Australia's regulations with those currently in force in jurisdictions across the world, including the USA and UK where drones over 250g are required to be registered prior to flight.

- 5.4 Registration requirements of all drones would allow enforcement agencies to identify the operator and owner of any drone involved in a near-miss incident or collision and to monitor and penalize unlawful activity. The Senate Inquiry Committee also recognized that more should be done to ensure that all drone users, whether recreational or commercial, undertake some form of mandatory education and training before flying their drones . The committee was alarmed by numerous reports of reckless drone operations which had hindered emergency operations, flown close to commercial aircrafts, or intruded upon restricted airspace. Accordingly, the committee recommended that drones users be required to undertake mandatory education and training so all operators understand the rules which will ultimately reduce the risks to public safety. These recommendations as to registration and training are implemented through significant amendments to Australia's current drone regulations by the Civil Aviation Safety Amendment (Remotely Piloted Aircraft and Model Aircraft – Registration and Accreditation) Regulations 2019 (Cth) . These regulations amend Part 11, Part 47 and Part 101 of the Civil Aviation Safety Regulations 1998 (Cth) and reverse many of the changes introduced by the 2016 Regulations.
- 5.5 Registration and licensing initiatives will make it easier for ‘on board’ identification of drone owners, pilots, or operators but in the absence of compulsory third-party insurance there is no certainty that damages awards will be satisfied. This problem is compounded where the drone is unlicensed and/or unregistered and the responsible party cannot be identified.
- 5.6 Unlike earlier fundamental changes and evolutions – such as the automobile, the airplane, the train<sup>48</sup> – the RPA industry has unique aspects that make it less well placed to evolve along the same regulatory trajectory and timeframes of these industries – or to adopt their existing frameworks in entirety. Although all of these industries have had take-up of registration and tracking requirements that lagged behind their evolutions with limited consequences, employing common law principles such as *Ryland and Fletcher*<sup>49</sup> in the process as gap fillers, this approach is flawed in relation to the RPA liability market for several reasons:
- (a) Early iterations of prototypes in relation to motor vehicles and airplanes, for example, were expensive, industry oriented and limited in distribution. Drones conversely arise out of inexpensive technology that has already been positioned most broadly as a consumer ‘toy’ of sorts, with recent enhancement of this technology ‘*flowing up*’ to commercial sector uses. They are cheap to produce, reverse engineer and/or procure second hand.
  - (b) The forerunner industries referenced above did experience lag times in relation to registration and liability around registration/operational requirements but, on the basis of direct nexus between operators and vehicles, it was possible in most instances to rely on classic tort liability principles to determine and to affix liability as to trespass, negligence and injury. The ownership of a drone, or the identification of its operator, can be much more difficult thereby rendering general liability principles less susceptible to the application -in particular where operators choose to use them for nefarious purposes. Indeed, analogizing drones to handguns in this limited respect could be argued as those who have licenses and operate legitimately are not the users of

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<sup>48</sup> Perhaps even the currently emerging driverless car.

<sup>49</sup> *Rylands v Fletcher* [1868]UKHL1; (1868) LR 3 HL 330.

concern to society. It is the unlicensed guns with remote accountability that cause damage.

- (c) As damages go, the capacity of drones dramatically exceeds these other industries in nascent contexts not only because of prolific use and availability (as above), but because of the magnitude of damages capable of being inflicted. To date, concerns have focused primarily on privacy invasion or limited physical impact injuries. However, recent events such as the capacity to close down airports, bomb oil fields, and cause wider scale disaster – while unregistered and potentially unattached to any recognizable operator for liability purposes – means that a measured, graduated timeline of simultaneous evolution and regulation is a level of leisure tax payers can ill afford. Taxpayers at present constitute the safety net for injuries or property damage arising out of the use of drones where the owner or operator of the drone causing injury or damage does not have private liability cover, cannot be found, or is impecunious. This may be because the drone in question was not properly registered and insured – intentionally or unintentionally – or because many of the users of this inexpensive type of technology may prove to be judgment proof at the end of the day even if found liable.

5.7 The drone, is, in other words, a new beast of a very different liability hue.

5.8 Given how entrenched compulsory third-party motor vehicle insurance is, it makes little sense that insurance in relation to person or property of third parties arising out of the use of drones is optional. Further, not only is there exponential growth in the number and scope of operations of drones, initiatives such as home-deliveries and other uses in close proximity to people increase significantly risk to person and property of third parties.

5.9 An adaptation, with appropriate modifications, of the compulsory third-party motor vehicle scheme with associated nominal defendant arrangements provides a tried and extensively tested pathway to resolving problems flowing from unregistered and/or uninsured drones.

5.10 It should be noted further, that the benefits of public liability insurance cover extend far beyond individual compensation. Coupled with a robust registration regime, operators with insurance cover would become more visible, accountable, and traceable in the case of an accident or incident. According to one submission to the Australian Senate Inquiry Committee<sup>50</sup> the possession of an operator's certificate and the associated insurance policy for a business, regularly acts as a deterrent for unsafe flight. In contrast, amateur or recreational operators who have '*no skin in the game*' may be more inclined to illegally take on jobs or unsafe operations as '*they will most likely lose nothing but the fee they got for the job anyway*'<sup>51</sup>.

5.11 There is emerging debate in relation to product liability in relation to the manufacture of drones and other autonomous vehicles. For example, it is interesting to note that certain leading car manufacturers have expressed strong support for the legal position that all manufacturers who sell fully driverless cars must accept liability for cars involved in accidents that were in full autonomous mode at the time of the accident.<sup>52</sup>

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<sup>50</sup> Mr Ashley Fairfield, *Submission 51*, p.2; Australian Senate Inquiry Committee, see footnote 11 above.

<sup>51</sup> Mr Ashley Fairfield, *Submission 51*, p.2; Australian Senate Inquiry Committee, see footnote 11 above.

<sup>52</sup> See for example **Parliament of Australia Social issues relating to land-based automated vehicles in Australia** (August 2017) [https://www.aph.gov.au/Parliamentary\\_Business/Committees/House/Industry\\_Innovation\\_Science\\_and\\_Resources/Driverless\\_vehicles/Report/section?id=committees%2Freportrep%2F024056%2F24939](https://www.aph.gov.au/Parliamentary_Business/Committees/House/Industry_Innovation_Science_and_Resources/Driverless_vehicles/Report/section?id=committees%2Freportrep%2F024056%2F24939)  
Volvo Car Australia, Submission 11, p. [7].

- 5.12 The allocation of liability to the manufacturer of drones does represent a potential solution in relation to some injury or damages sustained through the operation of a drone, but there is no simple solution, as the operator, absent a completely autonomous system or inherent failure of the drone, must bear partial responsibility for the control of the drone.
- 5.13 Nevertheless, the development of a consistent regulatory and operational framework for drones must of necessity consider product liability issues which in turn are closely connected to the development of drone-specific airworthiness standards, including mandated 'fail-safe' functions. The Australian Senate Inquiry Committee<sup>53</sup> in 2018 recognized that to allow drones to fully integrate into shared airspace, they must be subject to standards of airworthiness. The committee recommended that airworthiness standards should extend to drones that arrive in the country through foreign imports, similar to model rockets and laser pointers. The committee also recommended that drones should include a number of fail-safe redundancies, such as return-to-home functionality and forced flight termination.
- 5.14 Finally, the Policy Issues Paper emphasises that, in relation to policy and regulation *'it will be essential that responses are coordinated and consistent across Commonwealth and State/Territory governments.... to achieve a nationally consistent and coordinated approach moving forward, facilitating industry compliance and interoperability'*<sup>54</sup>. To this end, as is noted above, regard should be had to the approach adopted by the National Transport Commission, in their Report "Automated Vehicle Reform Program Approach" (October 2019). That report records that the Australian Transport Ministers have agreed that existing motor accident injury schemes expand to cover crashes caused by automated vehicles - an approach already enshrined in the United Kingdom in the *Automated and Electric Vehicles Act 2018*. When considering drones (i.e. automated aerial vehicles) it is not, therefore, too much of a stretch to contemplate that they should be treated similarly to the proposed treatment of automated vehicles, especially when the drone is an aerial taxi, or aerial delivery vehicle operating in a high density population area. It is, therefore, not unreasonable that the operator of such a drone should carry appropriate and adequate liability insurance to ensure that members of the public have recourse to compensation for death, injury or property damage.
- 5.15 Clyde & Co previously offered to provide the Government with advice from a global perspective in relation to the matters canvassed in this Submission<sup>55</sup>. That offer followed the creation by Clyde & Co in 2018 of a 'Global Drones Strategy Group', founded and chaired by Maurice Thompson, comprising 24 specialist lawyers across 14 different areas of law<sup>56</sup> in 9 countries and including external third party RPAS and insurance experts Dr. Tony Tarr, Professor Julie-Anne Tarr and Professor Ron Bartsch. Clyde & Co has been a first mover in

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See also Parker O' Very, "3 ways self-driving cars will affect the insurance industry" January 26, 2018 <https://venturebeat.com/2018/01/26/3-ways-self-driving-cars-will-affect-the-insurance-industry/> "Google, Volvo, and Mercedes-Benz already accept liability in cases where a vehicle's self-driving system is at fault for a crash. Tesla is taking things a step further by extending an insurance program to purchasers of Tesla vehicles".

<sup>53</sup> Senate Standing Committee on Rural and Regional Affairs and Transport, Regulatory requirements that impact on the safe use of Remotely Piloted Aircraft Systems, Unmanned Aerial Systems and associated systems, 31 July 2018 [https://www.aph.gov.au/Parliamentary\\_Business/Committees/Senate/Rural\\_and\\_Regional\\_Affairs\\_and\\_Transport/Drones/Report](https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Rural_and_Regional_Affairs_and_Transport/Drones/Report) (accessed 1 August 2019); hereafter referred to as 'Australian Senate Inquiry Committee'. Para. 8.27 – 8.38.

<sup>54</sup> Ibid., p54.

<sup>55</sup> See:

- (i) 'Proposal on RPAS Compulsory Third Party Liability Insurance', provided to the Office of the Deputy Prime Minister, 13 October 2019; and
- (ii) Letter and proposal to Simon Moore – Air Traffic Policy: Department of Infrastructure, Transport, Cities & Regional Development, 9 December 2019.

<sup>56</sup> Maritime; Energy; Oil & Gas; Aviation (Liability, Casualty, Regulatory); Resources & Commodities; Space; Insurance; Terrorism; Casualty Response; Personal Injury; Big Data; Cyber; Product Liability; and Construction

this space globally and has been extensively reviewing how drones will impact different industries and sectors in different legal jurisdictions internationally. The Firm remains willing to provide such assistance as the Government might request.

5.16 It should be noted that Clyde & Co is engaged to address compulsory third party liability insurance and other liability issues in relation to a RPAS Consultancy for the Pacific Aviation Safety Office (PASO)<sup>57</sup>. This work is temporarily suspended due to COVID-19 related circumstances. On resumption, however, given that the PASO Project will be delivering legal, regulatory and insurance recommendations to PASO Member States: Cook Islands; Kiribati; Niue; Nauru; Papua New Guinea; Samoa; Solomon Islands; Tonga; Tuvalu; Vanuatu; and Associate Member State Fiji, there would, in our opinion, be merit in exploring a degree of regional alignment on many of the issues addressed in our Submission.

Yours faithfully

Maurice Thompson  
Partner  
**Clyde & Co**  
Australia Group Head: Maritime, Aviation & International Trade  
Global Chair: Drones Strategy Group

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<sup>57</sup> Consultancy Agreement with AvLaw Pty Ltd, 12 February 2020