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Third-Party Service Providers Sector

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## About Third-Party Service Providers

Third-Party Service Providers (3PSPs) support the commercial drone industry by providing essential services regarding maintenance, airspace deconfliction, weather services, software services, and other safety management. Similar to 3PSPs which provide services for Part 121 and Part 135 manned aircraft operations (e.g., 14 CFR Part 141 “Pilot Schools” and Part 145 “Repair Stations”), 3PSPs are critical to the safety and effective employment of aviation operations across the United States. The scaling of Beyond Visual Line of Sight (BVLOS) operations would provide significant economic benefits to the 3PSP industry which would also benefit crewed aircraft operations and the American economy as a whole.

3PSPs would be an entirely new set of regulated entities for the Federal Aviation Administration (FAA), and important ones to support the safety of complex BVLOS drone operations. In many cases, especially as operations scale up, it would be too complex or costly for each drone operator to perform all the safety management functions by themselves. This would be like expecting a crewed aircraft pilot today to certify their own aircraft, or rely on their own wits instead of air traffic control under Instrument Flight Rules.

3PSPs take on some of the responsibilities from a drone operator in a systematic and documented manner, so that the operator can trust that their flights will be safe, while being able to focus on their core operating capabilities. However, operators are unlikely to sign up for a service – even if it provides a demonstrable safety benefit – unless the FAA has already accepted, approved, or certified the service.

A regulatory framework that allows for certification of services – combined with maximum flexibility for operators to choose which service to use – will enable a diverse ecosystem of services based on industry’s needs, at a variety of price points to support BVLOS drone operations. This new regulation has the potential to unlock an entirely new economic sector. Service providers need skilled software engineers, aviation safety experts, and other roles, which will result in tangible job creation. Drone operators will be able to reduce their capital expenses and overhead when they can rely on trusted, safe, and certified service providers – making it more likely that their businesses will be able to ensure and expand, resulting in additional job creation.

Over the last year, we have seen the success of an initial approach for the FAA to accept services under existing regulations. FAA and industry, through the North Texas Unmanned Aircraft System Traffic Management (UTM) Operational Evaluation, as well as the Near-Term Approval Process (NTAP) – have demonstrated that a predominately declarative acceptance process can simultaneously ensure FAA’s airspace safety and efficiency statutory authority prerogatives are fulfilled, while providing industry with clear, achievable, and predictable benchmarks for acceptance.<sup>1</sup> Through this process, the FAA can focus on performance-based regulatory oversight, while continuing to use many of its existing tools to ensure airspace safety.

Already, FAA regulatory acceptance under existing regulations is providing clarity and certainty for investors, which improves the economic outlook for 3PSPs. However, the current acceptance process is not scalable, since it is fully dependent on operational waivers or exemptions. Each operator that wants to use a 3PSP – even a service that FAA has already reviewed and accepted – must go through a time-consuming process to gain approval to use that service. This would be like if the FAA re-certified an airliner each time a different air carrier bought a new one: a waste of industry and also government resources, while overly burdensome in relation to the assessed level of risk.

Therefore, a regulatory framework that enables FAA certification or approval of services, decoupled from case-by-case operational approvals, is critical to the economic viability of the nascent 3PSP ecosystem. Case-by-case service approvals are time-consuming and costly for industry and the agency alike, and therefore not scalable. Such a framework provides a direct path to sustainable revenue models for 3PSPs, and a transition away from fluctuating venture capital funding upon

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<sup>1</sup> [https://www.faa.gov/uas/advanced\\_operations/traffic\\_management](https://www.faa.gov/uas/advanced_operations/traffic_management)

which many 3PSPs are reliant today. A 3PSP ecosystem will ensure safety in the NAS through interoperable, standards-based data exchanges that enable multiple service providers to compete for customers to ensure cost effective services. This promotes the dynamic sharing of information that ensures safe BVLOS operations and improves the efficiency of proximate airspace users and stakeholders.

The economic impact of enabling a regulatory approval path for 3PSPs is in the creation of a broader market for safety critical connections and information feeds that have not been required for drone or conventional aircraft operations to date. 3PSPs can aggregate airspace awareness information, localized weather and obstacle data, specialized command and control (C2) communications connections, and enable coordination across both traditional and remote or uncrewed operators. This approach has worked well for traditional aviation in areas such as weather forecasting, aeronautical information, repair, maintenance, and training.

In the near future, these 3PSPs may also serve the growing Advanced Air Mobility (AAM) and traditional aviation markets in our modernized airspace. For example:

- **UTM:** Collaborative UTM systems will become essential for safely managing high density BVLOS operations, fostering a market for UTM service providers to develop and deploy sophisticated and secure traffic management solutions. These UTM systems support both civil and government use, and are already being widely deployed and used through the FAA's Operational Evaluation focused on uncrewed aircraft systems (UAS) operations with UTM in Dallas and other locations.<sup>2</sup>
- **Localized Weather Services:** BVLOS operations will increase demand for precise, real-time weather data to ensure safe drone flights that are not available from conventional aviation weather sources.
- **Detect and Avoid (DAA), Airspace Awareness and Obstacle Tracking:** DAA to manage interactions between UAS and crewed aircraft can be deployed as a service at scale, safely enabling BVLOS operations at scale. Other services could include high-fidelity population, terrain, and obstacle data for use in flight planning further enhancing operational safety and efficiency.
- **C2 Links:** Reliable, managed, and appropriately licensed C2 links are critical for BVLOS operations, easing the complex regulatory burden for individual operators, while ensuring that limited spectrum is used equitably and efficiently.

### Market Impact Enabled by Use of Shared Services

The aviation industry is central to American and global economics. Today, existing services help safely enable over 45,000 flights per day, more than sixteen million flights annually, moving tens of millions of passengers and over forty-four billion pounds of freight. Over ten million jobs have been created from aviation with an economic impact exceeding \$488 billion.<sup>3</sup> This is what American aviation can do today with an FAA registered fleet of 217,793 aircraft. The FAA has 791,597 drones registered and we have not even begun regular BVLOS operations. The vast majority of those drones are not engaged in the types of operations that are being discussed in the context of the BVLOS rule – there is a new fleet coming.

The 3PSPs on this meeting will enable a BVLOS fleet in the millions that makes an economic impact in local communities across America, growing jobs, saving lives, and transforming the way goods are transported. The global autonomous BVLOS drone market was valued at **\$1.2 billion in 2024** and is expected to grow at a **Compound Annual Growth Rate (CAGR) of over 25.9%** from 2025 to 2034 based on reporting from Global Insights.<sup>4</sup> And by 2029, the market for autonomous BVLOS drones is projected to reach approximately **\$3.03 billion**, with a strong **CAGR of 23.26%**.<sup>5</sup>

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<sup>2</sup> <https://github.com/utmimplementationus/getstarted>

<sup>3</sup> [https://www.faa.gov/air\\_traffic/by\\_the\\_numbers](https://www.faa.gov/air_traffic/by_the_numbers) and [https://www.faa.gov/data\\_research/aviation/aerospace\\_forecasts](https://www.faa.gov/data_research/aviation/aerospace_forecasts)

<sup>4</sup> <https://www.gminsights.com/industry-analysis/autonomous-beyond-visual-line-of-sight-bvlos-drone-market>

<sup>5</sup> Id.

These numbers represent early growth. But for this growth to happen, operations need to be enabled at a much larger scale than they are currently. Most drone operators are not able to absorb the high cost of developing their own technical capabilities and would benefit from services that spread that cost across many operators. Looking at the UTM market alone, it is expected to reach **\$1.5 billion by 2028** based on a **CAGR of 20.1%** from 2023.<sup>6</sup>

Despite being hungry to invest, private capital has sat on the sidelines after being stung with losses that amount to hundreds of millions. Without clear BVLOS rules, there is a lack of understanding of risk associated with future revenue – a risk that private capital cannot bear. We recently heard the following from a venture capitalist, “if BVLOS is unlocked from a regulatory perspective we’ll start dumping money to create commercial value out of this regulation.”

The unfortunate reality is that we have deferred the opportunity to leverage innovative BVLOS solutions to our peers as well as our competitors. These countries have greatly enhanced safety and enabling technologies in the UAS BVLOS space, positioning them ahead of the United States in this critical area. It is now time for the U.S. to pick up the mantle of leadership and open the innovation engine to full throttle. To succeed, the drone market is expected to demonstrate viability. This depends on UAS BVLOS operations at scale across a range of populated and unpopulated environments, and in shared airspace via services 3PSPs can provide.

### **Current Operational Approval Processes**

The current operational approval mechanism is burdensome and overly conservative. The current regulatory structure requires operational authorization for every operator using a third-party service causing repeated lengthy review of the same information from the service provider. The new regulations may permit independent self-certification against industry standards that can be reused by every operator.

The current regulatory process requires each applicant to justify the use of standards for each approval – the new regulations may allow the FAA to officially recognize industry consensus standards as a means of compliance with the regulations. FAA and other interested agencies are contributing to the development of the standards to ensure the safety and security of services that use those standards. And lastly, the proposed new structure follows existing processes for third-party services approved independently for traditional aviation and this process evolves from those successful examples.

### **BVLOS Aviation Rulemaking Committee Recommendations**

The need to standardize BVLOS operations to benefit 3PSPs is not a novel concept. The BVLOS Aviation Rulemaking Committee (ARC) recommended a declaration-based certification pathway for third-party service suppliers and justified the economic benefits:

- The ARC recommended establishing a clear regulatory framework for BVLOS operations that will provide certainty for businesses and encourage investment in new technologies and services.<sup>7</sup>
- The ARC recommended using industry consensus standards to enable multiple providers to participate to provide robust and economically viable infrastructure to support the UAS industry.<sup>8</sup>
- The recommendations build on lessons learned from crewed aviation where FAA regulations support a robust set of third-party services providing value and increased safety to the aviation industry.<sup>9</sup>

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<sup>6</sup> Id.

<sup>7</sup> [https://www.faa.gov/regulations\\_policies/rulemaking/committees/documents/index.cfm/document/information/documentID/5424](https://www.faa.gov/regulations_policies/rulemaking/committees/documents/index.cfm/document/information/documentID/5424)

<sup>8</sup> Id.

<sup>9</sup> Id.

- Early learnings from the FAA’s current Near-Term Approval Process for UTM services under existing regulations has shown this to be a viable path forward to enabling regulatory acceptance of services that provide a safety benefit or risk mitigation for UAS operators. Declaration-based acceptance has already proven to be faster and therefore more cost-effective than full certification required in other countries.<sup>10</sup>
- The BVLOS ARC report provides many detailed examples of how 3PSPs could be approved and the benefits of those services for the safety and economic viability of the UAS industry.<sup>11</sup>

### **Conclusion and Why Now?**

The BVLOS ARC issued its recommendations almost three years ago and regulatory transparency, consistency and certainty are critically important to provide the marketplace with stability. Early FAA efforts to accept UTM services are proving to be effective but are not scalable under current regulations. This is because those service approvals require an underlying operational waiver or exemption.

Venture backed startup businesses are at risk of failure before they can scale in ways that will be permitted by these new rules. Companies have already failed due to regulatory uncertainty in UAS BVLOS operations. Not moving this rule before the next administration will create an indefinite delay. Maintaining the current regulatory structure is deciding to restrict the growth of this industry and position the United States even further behind other countries as we move into the next generation of flight.

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<sup>10</sup> Id.

<sup>11</sup> Id.