Unmanned Aerial Vehicles (UAV)
This pack has been designed to provide information on setting up a business in the Unmanned Aerial Vehicles (UAV) industry in Scotland, as well as helping to inform the market research section of your business plan. You can find more information on how to write a business plan from the Business Gateway website (www.bgateway.com/businessplan), including an interactive template and tips to get you started.

This market report was updated by Business Gateway in August 2018. If you find the information contained in this document useful, tell us about it! Send us feedback here; we will use your comments to help improve our service.

What do I need to know about the Unmanned Aerial Vehicles (UAV) market?

The following summary statistics have been taken from market research reports and reliable resources that the Information Service uses to compile industry information. They should give you an indication of how your industry is faring at present and whether there is demand for your type of business:

♦ It is estimated that the global commercial UAS market will grow from $4.01 billion in 2016 to $5.04 billion in 2022, representing a 3.9% CAGR. Unit shipment growth is estimated to increase at 11.4% per year during 2016 to 2022. Over the forecast period, 2017 to 2022, the revenue CAGR is estimated to be negative 0.3% while the unit shipment CAGR is expected to be 6.9%. (Frost & Sullivan, Global Commercial UAS Market Forecast to 2022, February 2018).

♦ The market for civil unmanned aerial system (UAS) platforms is expected to reach nearly $1 billion by 2021. While growth should be significant, it will be muted by public concern over privacy. It will take many years for the general global population to become comfortable with the spectre of 24/7 aerial surveillance (Frost & Sullivan, Global Civil UAS Market Forecast to 2021, April 2016).

♦ New Drone Standards are to be unveiled for the first time in Spring 2018 which are expected to lead to strengthened public confidence in safety, security and compliance within an industry which is set to be one of the fastest growth sectors in the world. (British Association of Remote Sensing Companies – New Drone Standards in 2018 set to revolutionise UK and Global Economies, March 2018 - tinyurl.com/yaos8v7v)

♦ Research estimates there will be more than 76,000 drones¹ in use across UK skies by 2030. More than a third of these (36%) could be utilised by the public sector (including in areas such as defence, health and education). There are significant opportunities for economic gains across all sectors, but the GDP uplift generated by drones is forecast to have the largest impact on the wholesale and retail trade sector with an increase of 2.5%, amounting to around £7.7bn. (PwC Research – Drones could add £42bn to UK GDP by 2030, May 2018 - tinyurl.com/ycqh3gbm)

♦ Until recently, television and film work accounted for 75 per cent of UK commercial drone activity, according to Arpas, the trade association. Nowadays, property and construction are the biggest sectors, with drones being used to inspect buildings, wind turbines and pipelines, for land surveying and mapping, and for agriculture and video filming. (Financial Times – UK fledgling drone sector expands into new markets, January 2017 - tinyurl.com/y7mylwsg)

♦ Industry bodies include the Association of Remotely Piloted Aircraft Systems UK (ARPAS-UK), the Royal Aeronautical Society and the British Association of Remote Sensing Companies (BARSC).
Where can I find more information on my market?

The Information Service has access to a number of databases which can offer more detail on this industry. Some of these reports are listed below - if you would like to be sent extracts from any of these reports, please contact us on 0300 013 4753 or email info@bgateway.com.

♦ **Frost & Sullivan - Global Commercial UAS Market Forecast to 2022 (February 2018)**. Professional drones, costing $5,000 to $50,000, will account for the most revenue through 2017; however, starting in 2018, prosumer drones will generate the most revenue. This is because lower prices will drop many professional drones into the prosumer price range over the next few years. A large percentage of commercial drones are used for aerial photography and video because of the low barriers to market entry, but the percentage is decreasing as drone use for professional services such as inspections and mapping/surveying continue to increase.

♦ **Frost & Sullivan – Global Civil Unmanned Aerial Systems (UAS) Market (April 2016)**. While the civil UAS market is not growing as quickly as the commercial UAS market, demand for civil UAS is substantial to assist public agencies involved in law enforcement, emergency and disaster response, public safety, border management, and the protection of natural resources. The main driver for civil UAS is the fact that the technology has become so inexpensive and easy to use. This opens the market up to agencies that possess limited discretionary funds.

♦ **Frost & Sullivan – Global Commercial UAS Inspection and Monitoring Services Market (September 2016)**. Among the applications for which enough information was available to estimate revenue, power substation inspections, insurance claim inspections, wind turbine inspections, and tower inspections (cell and others) show the most potential. The adoption rate of drones to conduct inspections in these applications is expected to increase more rapidly due to favourable commercial UAS operating regulations. This fact is driving comparatively higher potential revenue values.

There are also a number of online resources you may find helpful:

♦ **Business Insider UK – Commercial Unmanned Aerial Vehicle (UAV) Market Analysis: Industry trends, companies and what you should know**, August 2017 (tinyurl.com/y8qo83zk). This article answers questions surrounding UAVs, their uses, manufacturers and current industry trends.

♦ **Insider Report – Why the £102bn drone industry is here to stay**, January 2018 (tinyurl.com/y9y6nh9a). Accountants PwC are predicting substantial growth within the industry, with use of drones spreading more widely into construction, health and safety, surveying, infrastructure, mapping and security.

♦ **Totally Unmanned** (www.totallyunmanned.com) has articles on UAV use within various sectors including oil and gas, media, agriculture, infrastructure and emergency services.

♦ **Civil Aviation Authority (CAA), Unmanned Aircraft** (tinyurl.com/zhpjuuw). Guidance for operating Unmanned Aircraft Systems and Unmanned Aerial Vehicles in the UK is available from the CAA. The list of CAA-approved commercial operators of Small Unmanned Aircraft (SUA), of which there are 2,897 as of 2nd June 2017, may be useful for identifying competitors and/or business partners.

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How can I find out about my competitors?

Business Gateway’s online guide to Competitor Analysis explains how to find your competitors, how to research what they’re doing and how to act on what you learn about them.

Immediate competition will be from other businesses in your local area. There are several online directories which can be used to find company information and generate lists easily and at no expense. Many Local Authorities also publish local business directories on the web. Below are some key web resources:

♦ General business directories such as Yell, Thomson Local or Google Maps
♦ Trade specialists like EuroPages (European directory), The Wholesaler or Free Index
♦ Business to business (B2B) specialists such as Kompass

Likewise, your local Chamber of Commerce may publish a members’ directory; find your local Chamber on the Scottish Chambers website.

Once you’ve identified who your competitors are, the next step is to gather information on the way they do business. Which services do they provide? How do they market themselves? How much do they charge?

To learn about your competitors:

♦ Look for articles or adverts in local newspapers, trade press and directories.
♦ Try to read their marketing material; if the company has an online presence, visit the company’s website as a first port of call. Not only does it give you a better understanding of the company’s activities, it can also offer a wealth of information such as a company history or staff biographies, as well as the company’s partners or suppliers
♦ Search for information on limited UK companies via the Companies House website
♦ Gain an insight into your competitor’s performance using credit checks and the accounts that limited companies are required to submit to Companies House each year.

We can provide credit checks free of charge; if you are interested in using this resource, or looking for us to help you find relevant publications, please contact us by emailing info@bgateway.com or by calling 0300 013 4753
What about suppliers?

Choosing and Managing Suppliers can help you decide what you need from a supplier, how to identify one and how to choose one to deal with.

Trade associations or industry specific organisations may also be able to recommend suppliers or contacts. You can also use the aforementioned resources for finding competitors to find suppliers.

Once you have decided on a supplier, we can run a credit check on the company to help assess their financial stability. We provide credit checks free of charge; if you are interested in using the resource please info@bgateway.com or by calling 0300 013 4753.

Who are my customers?

Your business plan should include information about the customers you would expect. Business Gateway’s guides on Retaining and Grow Your Customer Base (tinyurl.com/c2fw4o4) will help you to identify who your customers are, how to use this information to sell more effectively and how to actively compete in your marketplace.

It can be useful to group your customers by geographical location, age or lifestyle. The websites listed below are freely available and can provide most of this information. If you can’t find what you’re looking for from these website, please contact us and one of the team will be happy to help:

♦ Access the latest population estimates from the National Records of Scotland (NRS). NRS also offers demographic factsheets for each council area in Scotland, which can provide summary statistics for the area you will be based in.

♦ Information from the most recent census in 2011 is released via the official website. See in particular the Census Area Profiles. Clicking on your area of interest will give the latest population figures, including estimates by age.

♦ Understanding Scottish Places has interactive profiles of towns and cities across Scotland. It can be useful for understanding the interrelationships and flows between towns, and also gives comparisons between two or more places.

♦ Scottish Government Statistics provide accurate and up-to-date statistics on Scotland, covering population, health, education and housing.

♦ The Scottish Household Survey provides information on the structure, characteristics, attitudes and behaviour of Scottish households, both at a national and local level.

♦ Office for National Statistics (ONS) is the recognised national statistical body for the UK. ONS covers a wide range of demographic, economic and social issues at a UK level.
How can you help me with other aspects of starting my business?

The Business Gateway website has guides, videos, online tutorials and tips on all aspects of starting up a business in Scotland. Follow the links below to explore each resource:

**Accountancy**
Institute of Chartered Accountants of Scotland’s (ICAS) “Find a Chartered Account” tool

**Funding**
Practical information on finance and funding for starting and growing your business

**Insurance**
Business insurance guide

**Legal Help**
Gov.uk “Licence Finder” tool
Law Society of Scotland’s “Find a Solicitor” tool

**Pricing**
Business Companion Pricing & payment guide.
Please note: the most effective way to research pricing is to conduct your own research – visit wholesalers or suppliers to obtain price lists, find quotes from similar companies and work out what other businesses in your area are charging

**Promotion**
BG guides to Marketing

**Training**
Skills Development Scotland’s My World of Work
Funding for training
Small Business Bonus Scheme (Scotland)

Your local Business Gateway can offer events, workshops and 1:2:1 support on all aspects of starting and developing your business. Call the helpline on 0300 013 4753 to find out what is available in your area.

We hope you find this Market Report useful and we’d love to hear your feedback here.

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**Updated by:** Fiona Elliot