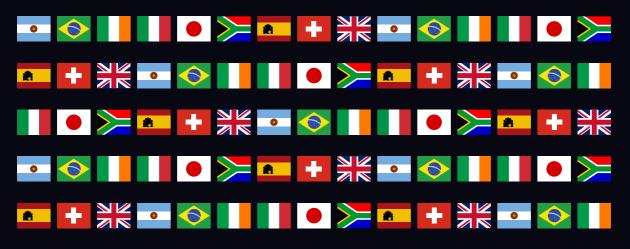
DRONE REGULATION

Ireland



••• LEXOLOGY ••• Getting The Deal Through **Consulting editor** Studio Pierallini

Drone Regulation

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Quick reference guide enabling side-by-side comparison of local insights into basic rules, regulators and drone classifications; drone design, manufacture, registration and identification; certification and licensing of drone operation; operations and maintenance; airspace; liability and accidents; import and export control; data privacy and IP protection; and recent trends.

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GENERAL FRAMEWORK

Basic rules and regulators

What basic rules govern the operation of remotely piloted aircraft and unmanned aircraft (drones) in your jurisdiction? Which regulatory bodies are charged with enforcing these rules?

Commission Implementing Regulation (EU) 2019/947 of 24 May 2019 on the rules and procedures for the operation of unmanned aircraft (Regulation 2019/247) governs the operation of unmanned aircraft systems in Ireland and has been applicable in all EU member states since 31 December 2020.

Different rules apply to the operation of drones depending on categorisation: open, specific or certified.

- Operations in the open category are considered the lower risk category and are not subject to prior operational authorisation or notification requirements before an operation takes place.
- Operations in the specific category require prior authorisation from the Irish Aviation Authority (IAA).
- Operations in the certified category require both the drone and the drone operator to be fully certified and, in some instances, the remote pilot to be licenced.

The IAA is the regulatory body charged with enforcing these rules in Ireland. Its responsibilities are outlined in article 18 of Regulation 2019/247 and include enforcing Regulation 2019/247, issuing certificates to drone operators, issuing licences to remote pilots, maintaining a list of geographical zones established within the national airspace, monitoring incidents of non-compliance by drone operators and promoting safety information and best practice guidelines for drone operators.

Law stated - 24 August 2021

What are the penalties for non-compliance with the laws and regulations governing drones?

The IAA has been tasked with implementing a system to detect and examine incidents of non-compliance. Members of the public are encouraged to report any alleged incidents of non-compliance of aviation safety rules to the IAA. Privacy or security matters related to drones should be reported to An Garda Síochána, which is the national police service.

There are no penalties for non-compliance provided for in Regulation 2019/247.

Law stated - 24 August 2021

Classification

Is there any distinction between public and private drones, as well as between leisure use and commercial use?

As a risk-based approach has been adopted, there is no distinction between public and private drones, nor between leisure and commercial activities; however, if a drone operator wishes to fly an unmanned aircraft outside the prescribed legal limits, the operator must apply for a specific operating permission from the IAA.

Is there a weight-based classification system for drones resulting in the application of different rules?

Yes. There are three categories for drone operations: open, specific and certified.

Open

Drone operations in the open category pose the lowest overall risk and are not subject to prior operational authorisation or notification requirements before an operation takes place. To be classified in the open category, the aircraft must:

- not exceed a maximum weight of 25kg;
- not fly above 120 metres (400 feet) from the earth;
- be operated within visual line of sight, kept at a safe distance from people and not flown directly over assembled crowds;
- not carry dangerous goods; and
- not be capable of dropping material from a height.

There are three further sub-categorisations of the open category: A1, A2 and A3. Operations in the:

- A1 subcategory cannot weigh more than 250g;
- A2 subcategory cannot weigh more than 4kg; and
- A3 subcategory cannot weigh more than 25kg.

Specific

Drone operations in the specific category pose a higher risk and require prior authorisation from the IAA. When applying for authorisation, the operator must perform a risk assessment and provide evidence of implementing adequate safety measures. The authority may issue an authorisation for a single operation or multiple operations if it is convinced that the risks posed are sufficiently mitigated.

There are specific scenarios outlined in the regulations in which authorisations may not be required, such as for model aircraft clubs that have already received a general authorisation for the activity.

Certified

The certified category of drone operations is deemed to pose the highest potential risk and requires both the drone and the drone operator to be fully certified. Any individuals who will remotely pilot the drone as part of those operations must also be fully licensed by the IAA.

Examples of operations falling under this category include drones that:

- will fly over assemblies of people;
- be used for the purpose of transporting people; or
- be responsible for carrying dangerous or hazardous materials that pose a high safety risk in case of an accident.

Is there any distinction between completely autonomous drones and remotely piloted drones?

No, not in Ireland.

Law stated - 24 August 2021

DESIGN AND MANUFACTURE

Regulation

Do specific rules regulate the design and manufacture of drones in your jurisdiction?

Yes. Commission Delegated Regulation (EU) 2019/945 of 12 March 2019 on unmanned aircraft systems and on thirdcountry operators of unmanned aircraft systems regulates the design and manufacture of drones in Ireland. Drone products will only be made available on the market if they do not endanger the health or safety of persons, animals or property. Any unmanned aircraft not otherwise classified as a toy must also comply with relevant health and safety requirements relating to machinery set out in Directive 2006/42/EC.

For drone products intended to be operated in the open category (ie, those that do not require prior authorisation from an authority to operate), a series of technical requirements are outlined in the annex of Regulation 2019/945. These include maximum speed and height limits, fail-safe mechanisms, protection against unauthorised third-party interference, and geo-awareness functions that alert pilots if a potential breach of airspace limitations has been detected.

Manufacturers must also indicate on the product their name, registered trade name, website address and postal address. If in receipt of a request from the competent national authority, a manufacturer must also be in a position to provide the authority with all the information and documentation relating to the conformity of the product in paper or electronic form.

Law stated - 24 August 2021

Manufacturing authorisation

Must drone manufacturers obtain any licences or other authorisation to carry out their business? Are manufacturers subject to any other specific rules?

Regulation 2019/945 provides that manufacturers must ensure that any products placed on the EU market meet certain design and manufacturing requirements. Where compliant, manufacturers can declare the product's conformity with EU standards and affix the CE marking. Manufacturers must keep the technical information and declaration of conformity for 10 years after the product has been placed on the market.

Manufacturers of unmanned aircraft must ensure that the drone meets one of the predetermined types and has a unique serial number. The manufacturer's details must be indicated on the product, and it must be accompanied by the manufacturer's instructions and information notice in a language that can be easily understood by consumers and a copy of the EU declaration of conformity.

If a manufacturer has reason to believe that its product is not in conformity, it must take immediate corrective action, or withdraw or recall the product, as applicable. In those instances, the manufacturers are required to inform the Competition and Consumer Protection Commission.

Product liability

Do general product liability rules (or other specific liability rules) apply to the manufacture of drones?

There are no specific liability rules relating to the manufacture of drones in Ireland. As such, the general product liability rules under statute, tort and contract apply.

The primary statute in Ireland for product liability is the Liability for Defective Products Act 1991, which implements the Product Liability Directive 85/374/EEC and provides for tortious claims rather than criminal ones. Contractual claims may be brought under the Sale of Goods Act 1893 and the Sale of Goods and Supply of Services Act 1980, which imply that goods supplied under contract must be of 'merchantable quality'.

The European (Certain Aspects of the Sale of Consumer Goods and Associated Guarantees) Regulations 2003 also apply to contracts for the sale of goods to consumers, which provides that such goods must be in conformity with that contract. A manufacturer could also be liable for the tort of negligence for a defective product where a duty of care was owed, breached and ultimately caused damage.

The European Communities (General Product Safety) Regulations 2004 prohibit placing a product on the market unless it's safe. Manufacturers can be found criminally liable for failing to inform the Competition and Consumer Protection Commission in Ireland where they have reason to believe that a product that has been placed on the market is non-compliant with EU regulations.

Law stated - 24 August 2021

REGISTRATION AND IDENTIFICATION

Registration

Must drones be registered in a specific national registry? If so, who is entitled to register drones and what requirements and restrictions apply? Is the registry organised as an operator registry or an owner registry?

Yes, certified unmanned aircraft must be registered with the Irish Aviation Authority (IAA) in the same way as manned aircraft. Open and specific drones do not need to be registered with the IAA; however, operators of drones in the open or specific category must register the drone with the IAA if it meets two conditions:

- if the drone could transfer more than 80 joules of kinetic energy to a human that it collides with; and
- if the drone's operation could present a risk to privacy, protection of personal data, security or the environment.

Drone operators are entitled to register drones. There is no minimum age for operating a drone in Ireland, but an individual must be 16 years or over to register as a drone operator. Remote pilots must complete certain online training courses and complete online theoretical knowledge examinations before they can fly unmanned aircraft. Further theoretical knowledge examinations and licences are also required for the higher risk categories.

Operator registration information is shared with other national aviation authorities in the European Union and enables the drone operator to operate in any Member State once registered with the IAA.

The registry is organised as an operator registry.

Identification

Are drones identified through a marking system similar to that used for manned aircraft?

The IAA issues drone operators, and all unmanned aircraft that require registration, with a unique digital registration number upon registration. The drone operator must display this registration number on all unmanned aircraft, including drones that have been privately built.

Law stated - 24 August 2021

CERTIFICATION AND LICENSING

Basic requirements and procedures

What certificates or licences are required to operate drones and what procedures apply?

Drone operators must be registered with the Irish Aviation Authority (IAA). The registration is valid for a set period determined by the IAA and is valid in all EU member states.

A drone operator only has to register once, regardless of the number of drones operated. A drone operator does not need to register if their drone:

- weighs less than 250g and does not have a sensor that is able to detect personal data (ie, a camera or listening device); or
- weighs less than 250g and has a sensor that is able to detect personal data but is considered a toy under Directive 2009/48/EC.

Remote pilots must complete the UAS Proof of Online Training course available on the IAA's MySRS platform, which comprises a number of questions. Successful completion of the course allows remote pilots to fly in the A1 and A3 subcategories of the open category.

Remote pilots must complete further training to fly in the specific category or the A2 subcategory of the open category. This UAS Remote Pilot Competency Certificate is provided by a drone training organisation and comprises a theoretical examination of a number of questions and a practical test. Remote pilots in the specific category, depending on the risk assessment associated with the operation, will require a remote pilot licence.

Remote pilots operating in the certified category are expected to hold the appropriate manned aviation pilot's licence associated with the operation.

Training must be renewed every five years using the IAA's MySRS platform.

Drone operator organisations may also apply for a light UAS operator certificate (LUC); however, this requires ongoing compliance with a number of additional requirements, including the establishment, implementation and maintenance of a safety management system corresponding to the size of the organisation or the nature and complexity of its activities.

Law stated - 24 August 2021

Taxes and fees

Are certification and licensing procedures subject to any taxes or fees?

Registration as a drone operator incurs a fee of €30 for a two-year operator registration certificate, which is payable at the point of registration via the IAA's MySRS platform. The UAS Proof of Online Training course is free. Fees for the UAS Remote Pilot Competency Certificate vary depending on the drone training organisation.

Law stated - 24 August 2021

Eligibility

Who may apply for certifications and licences? Do any restrictions apply?

The minimum legal age for registering as a drone operator in Ireland under the open and specific categories is 16 years. A legal person (ie, organisation or company) is eligible to apply for a LUC.

Law stated - 24 August 2021

Remote pilot licences

Must remote pilots obtain any certifications or licences to operate drones? If so, do the relevant procedures differ based on the type of drone or operation?

To operate drones, remote pilots must complete a UAS Proof of Online Training course, which is available on the IAA MySRS platform and comprises 40 questions. Successful completion of this course allows remote pilots to fly in the A1 and A3 subcategories of the open category.

Remote pilots must complete further training to operate a drone in the specific category or the A2 subcategory of the open category. The UAS Remote Pilot Competency Certificate is provided by a drone training organisation and comprises a theoretical examination of 30 questions and a practical test.

Training must be renewed every five years using the IAA's MySRS platform.

Law stated - 24 August 2021

Foreign operators

Are foreign operators authorised to fly drones in your jurisdiction? If so, what requirements and restrictions apply?

Foreign operators are authorised to fly drones in Ireland in the open category in the same manner as they would be in their home member state, provided that the foreign operator is registered with the competent national authority in their home member atate. Any Irish airspace restrictions must be complied with, and foreign operators should also carry their registration and remote pilot competency details.

Foreign operators are authorised to fly drones in Ireland in the specific category with prior authorisation from the IAA but do not have to apply for authorisation or conduct a risk assessment if the foreign operator holds an operational authorisation from their home member state. In this instance, the foreign operator only needs to provide a copy of the operational authorisation and the details of any mitigation measures specific to the operational risks to the IAA. The operation can only be commenced once the IAA has provided confirmation.

If the operation is covered by a standard scenario, the foreign operator only needs to provide the IAA with a copy of the

declaration submitted to their home member state and a copy of the verification of completeness received from their home member state.

Non-EU drone operators are regulated by the competent national authority of the first member state in which they intend to operate.

Law stated - 24 August 2021

Certificate of airworthiness

Is a certificate of airworthiness required to operate drones? If so, what procedures apply?

All unmanned aircraft must comply with standards of airworthiness except for those that are privately-built, used in model aircraft clubs and organisations or meet the requirements as an open category aircraft. Certificates of airworthiness are required to operate certified drones, in which case the drone itself is registered.

Law stated - 24 August 2021

OPERATIONS AND MAINTENANCE

One drone, one pilot

Does the 'one drone, one pilot' rule apply in your jurisdiction?

Operations in the open category must be conducted in a visual line of sight (VLOS) at all times except when the drone is being flown in 'follow-me mode' or when using an unmanned aircraft observer. While operating in VLOS, the remote pilot must be able to maintain continuous unaided visual contact with the unmanned aircraft to avoid collisions with other aircraft, people and obstacles. An unmanned aircraft observer may assist the remote pilot in keeping the drone in VLOS.

While not expressly stated, the above suggests that there should only be one pilot for each drone, with the assistance of an observer in some instances.

Law stated - 24 August 2021

Maintenance

Do specific rules regulate the maintenance of drones?

Unmanned aircraft operators must maintain specific category drones in a safe condition in accordance with the manufacturer's user manual and keep an up-to-date record of any maintenance activities conducted on the drone for a minimum of three years. The maintenance of unmanned aircraft must be certified if the drone meets any of the following four conditions:

- it is 3 metres or more in dimension and is designed to be operated over assemblies of people;
- · it is designed for transporting people;
- it is designed for the purposes of transporting dangerous goods and requires a high level of robustness to mitigate risks to third parties in case of accident; and
- it is intended to be used in the specific category of operations, and the operational authorisation notes that it must be certified.

Basic operational rules and restrictions

What rules and restrictions apply to flights performed in 'visual line of sight' (VLOS) and 'beyond visual line of sight' (BVLOS)? Is there a distinction in this regard?

There are four general rules that apply:

- 1. during flight, the unmanned aircraft must be maintained within 120 metres from the closest point of the surface of the earth, which can be adjusted in accordance with the applicable geographical terrain;
- 2. when flying an unmanned aircraft 50 metres from an artificial obstacle that is higher than 105 metres, the unmanned aircraft may fly 15 metres above the height of the obstacle at the request of the entity responsible for the obstacle;
- 3. the maximum height of the operation must not exceed 30 metres above the maximum height allowed in (1) and (2); and
- 4. during flight, the unmanned aircraft must not carry dangerous goods.

There is no distinction in those general rules between operations performed in VLOS and BVLOS.

While operating in a VLOS, the remote pilot must be able to maintain continuous unaided visual contact with the unmanned aircraft. BVLOS operations are those that are not conducted in VLOS.

Remote pilots must keep unmanned aircraft in VLOS when operating in the open category to avoid any risk of collision with any manned aircraft, except when flying in follow-me mode or when using an unmanned aircraft observer. The operation should be discontinued if it poses a risk to other aircraft, people, animals, environment or property.

Law stated - 24 August 2021

What rules and restrictions apply to critical and non-critical operations? Is there a distinction in this regard?

There is no distinction; however, when operating in the open and specific categories at night, remote pilots must ensure that the green flashing light on the unmanned aircraft is activated for visibility purposes.

Law stated - 24 August 2021

Transport operations

Is air transport via drone (eg, cargo and mail) regulated in your jurisdiction? If so, what requirements, limitations and restrictions apply?

No, air transport via drone is not specifically regulated in Ireland, although Commission Implementing Regulation (EU) 2019/947 (Regulation 2019/947) does restrict drones within the open category from carrying dangerous goods or dropping material from a height. As such, any drones looking to carry materials will likely require authorisation under the specific or certified category. For example, Manna Aero – an Irish drone delivery operator – had to obtain a light UAS operator certificate (LUC) from the Irish Aviation Authority (IAA) to trial its drone delivery services.

Do any specific provisions governing consumer protection and tracking systems apply with respect to cargo and delivery operations via drone?

No, air transport via drone is not specifically regulated in Ireland.

Law stated - 24 August 2021

Insurance requirements

What insurance requirements apply to the operation of drones?

Regulation (EC) No. 785/2004 provides that all unmanned aircraft must be insured for third-party risks, except those with a maximum take-off weight of less than 20kg and that are being used for sporting or recreational purposes.

Law stated - 24 August 2021

Safety requirements

What safety requirements apply to the operation of drones?

Regulation 2019/947 opts for a risk-based approach in many aspects, including safety. Drone operators are required to conduct risk analyses prior to an operation during which they must propose a target level of safety, equivalent to the safety levels in manned aviation, in light of the specific characteristics of the operation. Drone operators must also identify the possible mitigation measures necessary to meet the proposed target level of safety for the operation, taking a number of factors into account, and must determine the robustness of the proposed mitigation measures.

In the specific category, drone operators are required to declare their commitment to comply with the mitigation measures required for the safety of the operation.

Drone operator organisations who apply for a LUC are required to establish, implement and maintain a safety management system corresponding to the size of the organisation or the nature and complexity of its activities.

A new concept of standard scenario has been introduced, which allows drone operators to declare that the safety risk assessment has already been conducted by the European Aviation Safety Agency or the IAA.

Law stated - 24 August 2021

AIRSPACE

Air traffic control

How is air traffic control regulated in your jurisdiction? Which authority provides air traffic control services for drones?

Air traffic control of the Irish airspace is provided and regulated by the Irish Aviation Authority. These services are also provided to unmanned aircraft in controlled airspace, where applicable.

Restrictions

Are there any airspace restrictions on the operation of drones?

Yes. The IAA has the power to designate certain geographical zones of the Irish airspace as restricted or prohibited zones, taking account of safety, security, privacy and environmental concerns (the UAS Geographical Zones). These zones may be prohibited, require particular conditions be met or require prior flight authorisation by certain or all unmanned aircraft.

All information relating to UAS Geographical Zones is publicly available on the IAA's website, including any conditions that must be complied with in those zones and the periods of validity. At present, the IAA has designated geographical zones over all Irish airports and aerodromes, hospitals, prisons, military barracks, refuelling bases and currency centres.

Law stated - 24 August 2021

Take-off and landing

Must take-off and landing of drones take place in specific areas or facilities?

No, provided that any conditions, restrictions or prohibitions in the geographical zones designated by the IAA are complied with.

Law stated - 24 August 2021

LIABILITY AND ACCIDENTS

Cargo liability

Are there any specific rules governing the liability of drones for losses or damage to cargo?

No, the liability of drones for losses or damage to cargo is not specifically regulated in Ireland.

Law stated - 24 August 2021

Third-party liability

Are there any specific rules governing the liability of drones for damage to third parties on the surface or in the air?

No, the liability of drones for damage to third parties on the surface or in the air is not regulated in Ireland. All unmanned aircraft, other than those with a maximum take-off weight of less than 20kg and that are being used for sporting or recreational purposes, must be insured for third party risks.

Law stated - 24 August 2021

Accident investigations

How are investigations of air accidents involving drones regulated in your jurisdiction?

Air accidents involving drones are investigated by the Air Accident Investigation Unit (AAIU) pursuant to SI No. 460/2009 – Air Navigation (Notification and Investigation of Accidents, Serious Incidents and Incidents) Regulations

2009 (SI). The SI provides that every accident and serious incident shall be the subject of a formal investigation conducted by the AAIU. Incidents that are not considered serious incidents may also be investigated if the chief inspector considers that significant air safety lessons may be drawn from the investigation.

Investigations are conducted in accordance with Annex 13 of the Chicago Convention 1944.

Law stated - 24 August 2021

Accident reporting

Is there a mandatory accident and incident reporting system for drone operators in your jurisdiction?

Drone operators must report any safety-related occurrences or accidents involving drones to the Irish Aviation Authority (IAA). Any incidents should be reported to fod@iaa.ie.

Law stated - 24 August 2021

Safety management and risk assessment

Are drone operators required to implement safety management systems and risk assessment procedures within their organisation?

Drone operator organisations who apply for light UAS operator certificates are required to establish, implement and maintain a safety management system corresponding to the size of the organisation or the nature and complexity of its activities.

Drone operator organisations in the specific category must establish procedures adapted to the type of the intended operation and the risk involved.

When applying for an operational authorisation, a drone operator must provide the IAA with an operational risk assessment. In conducting a risk assessment, the drone operator should:

- · describe the characteristics of the unmanned aircraft operation to a certain level of detail;
- propose adequate operational safety objectives;
- identify the risks of the operation on the ground and in the air, taking certain factors into consideration;
- · identify a range of possible risk mitigating measures; and
- determine the necessary level of robustness of the selected mitigating measures in such a way that the operation can be conducted safely.

Law stated - 24 August 2021

ANCILLARY CONSIDERATIONS

Import and export control

Do specific import and export control rules apply to drones in your jurisdiction?

Commission Delegated Regulation (EU) 2019/945 provides that importers shall only place products on the EU market that are compliant under the regulations.

Prior to placing a product on the EU market, importers must ensure that:

- the appropriate conformity assessment procedure has been carried out by the manufacturer;
- the manufacturer has drawn up the technical documentation;
- the product bears a CE marking; and
- the product is accompanied and in compliance with certain requirements.

If importers have reason to believe that a product that they have placed on the EU market does not conform to the regulations, they must take immediate corrective action or withdraw or recall the product, as appropriate. In those instances, the importer is required to inform the Competition and Consumer Protection Commission.

Importers must keep the declaration of conformity for 10 years after the product has been placed on the market and ensure the technical documentation can be made available to the authorities upon request. They must also cooperate with any reasoned requests from the Irish Aviation Authority. Similar rules apply to distributors of products, who must act with due care.

Law stated - 24 August 2021

Data privacy and IP protection

How are personal data privacy and IP protection regulated in your country with specific reference to drone operations?

Data protection in Ireland is governed by the Data Protection Acts 1988–2018, which include the General Data Protection Regulation (EU) 2016/679. The Data Protection Commission has not issued specific guidance on the use of drones in Ireland but has noted that drone users should have regard for the location in which they are using drones, the possibility of identifying any individuals in recordings and whether they are required to comply with certain obligations under data protection law.

Commission Implementing Regulation (EU) 2019/947 recognises the potential for drones to violate the privacy of individuals, so all drones that are equipped with a camera or listening device must be registered, irrespective of weight or other factors.

Law stated - 24 August 2021

UPDATE AND TRENDS

Sector trends and regulatory developments

Which industry sectors have seen the most development in the use of drones in your jurisdiction and which sectors are expected to see further development in future? Have there been any notable recent regulatory developments relating to drones?

Emergency services, infrastructure inspection and surveying, and delivery services have seen the most developments in the use of drones in Ireland.

- The Dublin Fire Brigade and the Irish Coast Guard have begun using drones as part of their emergency responses and search and rescue operations.
- ESB Networks, a national electricity provider, has completed a pilot project using drones to inspect their power lines and wind turbines.
- Manna Aero has also been trialling drone deliveries in Galway county with a number of local service providers and food delivery services signing up. The company also offered medical and critical supplies delivers in Offaly

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county.

It is expected that each of those industry sectors will see further developments in the future, along with agricultural monitoring.

The introduction of Commission Implementing Regulation (EU) 2019/947 has been the most recent regulatory development relating to drones. It replaces the previous Irish Aviation Authority (Small Unmanned Aircraft (Drones) and Rockets) Order 2015.

Jurisdictions

Argentina	Freidenberg Freidenberg & Lifsic
Srazil	Basch & Rameh Advogados Associados
Ireland	A&L Goodbody
Italy	Studio Pierallini
Japan	Mori Hamada & Matsumoto
South Africa	Christodoulou & Mavrikis Inc
Spain	Augusta Abogados
Switzerland	gbf Attorneys-at-law
United Kingdom	Stewarts