

# Market Opportunities in the United Kingdom and Ireland



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# **Country Profiles and Economic Overview**

### **United Kingdom**

With a population of 65 million people, the United Kingdom is the world's fifth-largest economy and the second-largest economy in the European Union. The U.K. economy is highly developed and diversified, and is the largest destination for U.S. service exports, as well as the fifth-largest for U.S. goods exports. Total goods and services exports from the U.S. to the U.K. were estimated at \$121 billion in 2016.

According to the U.S. Census in 2017, goods exports to the U.K. rose 1.97% to \$56,257 million. Imports from the U.K. declined 2.23% to \$53,060 million. The United States currently runs a trade surplus of \$3,197.6 million with the U.K., up roughly \$2,299 million from 2016.

### **U.K.** Country Profile

- **Population:** 65,648,100
- Median Age: 40.5 years
- Largest City: London
- **Area:** 243,610 sq km
- **GDP:** \$2.565 trillion
- GDP Real Growth Rate: 1.7%
- GDP per capita (PPP): \$43,600
- Inflation Rate: 2.6%
- Unemployment rate: 4.4%
- Currency: British Pound

Source: CIA World Factbook, 2017 est.

The U.K.'s largest export destination is the United States, representing 14.8% of all U.K. exports, followed by Germany (10.7%), France (6.4%), and the Netherlands (6.2%). The U.K. imports most from Germany at 13.6% of all imports, followed by the U.S. (9.3%), China (9.2%), and the Netherlands (7.4%).

In 2017, the U.K. held \$602.5 billion in foreign currency and gold. British GDP growth slowed slightly in 2017 to 1.7%, but unemployment also declined by 0.5% to 4.4% in 2017. Inflation rates jumped last year from 0.7% in 2016 to 2.6% in 2017.

Administratively, the UK is split into four "Home Nations," each of which maintains their own governments. The Home Nations are England, Scotland, Wales, and Northern Ireland. Each nation is further subdivided according to how they best see fit. Additionally, the UK is sovereign over fourteen British Overseas Territories and three Crown Dependencies, none of which are officially part of the UK.

Sources: Export.gov United Kingdom Guide, U.S. Census Foreign Trade Data, CIA World Factbook

### **Ireland**

Driven by focused policies supporting exports, attracting FDI, and increased market access, the Irish economy continues its recovery and looks on track to regain its previous prosperity. The trade relationship between Ireland the U.S. continues to remain significant. In 2017, US exports to Ireland grew by nearly 12% to reach \$10.707 billion, while imports from the country grew 7.18% to reach \$48,796 million.

U.S. investment in Ireland reached a total stock of \$343.4 billion in 2015, larger than U.S. investments in either Germany or France. Similarly, Ireland's investment in the U.S. reached \$13.5 billion, and is the 6<sup>th</sup> largest source of FDI inflows by ultimate beneficial owner.

The U.S. is Ireland's largest export destination, with 26% of

Irish products, followed by the U.K. (12.7%), Belgium (12.6%), and Germany (6.7%). Ireland imports the most from their neighbors in the U.K. at 28.8% of total imports, with the U.S. at 15.9%, followed by France (12.6%) and Germany (10.1%).

As Ireland continues to emerge from an economic downturn, its economy continues to grow at 4.1% in 2017, down from 5.1% in 2016. Unemployment is also down through recovery and targeted programs, falling from 7.9% in 2016 to 6.4% in 2017.

Ireland is the only member of both the European common market and the Eurozone monetary union which is natively English-speaking. Combined with significant cultural ties to the U.S. and an educated workforce, Ireland has positioned itself to be a key market-entry point for American business looking to access Europe. Ireland is highly receptive to U.S. products, and American products are thought of as high-quality.

Sources: Export.gov Ireland Guide, CIA World Factbook, U.S. Census Foreign Trade Data

### **Ireland Country Profile**

- **Population:** 5,011,102

- Median Age: 36.8 years

- Largest City: Dublin

- **Area:** 70,273 sq km

- **GDP:** \$325.6 billion

- GDP Real Growth Rate: 4.1%

- **GDP per capita (PPP):** \$72.600

- Inflation Rate: 0.4%

- Unemployment rate: 6.4%

- **Currency:** Euro

Source: CIA World Factbook, 2017 est.

### **Market Trends & Business Conditions**

#### **United Kingdom**

As one of the most advanced markets in the world, a strong emphasis is placed on lower costs and improved productivity, particularly in the IT sector. Following global trends, increased emphasis on cyber security is driving strong demand of both software and hardware related to security.

Government programs on infrastructure spending – combined with carbon-reduction goals – provide ample opportunities for renewable energy generation and energy efficiency technologies adaptation in coming years.

Being a globally integrated economy, U.S. exports to the U.K. face strong competition locally and from other exporting nations. Differentiated products offered at competitive prices are key for U.S. products to compete. Products must also face European Union regulatory requirements for the near future (until March 2019), which can be stricter than other markets.

Markets post-Brexit vote are largely unchanged structurally until March 2019. Until this time, the U.K. remains in the European Union and the European common market. The British government remains in ongoing negotiations with the EU to determine the exact relationship that will be in effect after March 2019.

Sources: Export.gov United Kingdom Guide

#### Ireland

The Irish market is continuing its recovery, with growth expected to exceed 3% over the next few years, primarily driven by increases in employment and consumer spending. As access to Ireland also provides access to the rest of the common European market, Ireland is often used as a stepping-stone to larger European nations such as Germany, Italy or Poland.

The Irish government has invested heavily in education to increase their capacity for research and development, particularly in fields such as medical devices and biotechnology. American companies frequently seek Irish partners for joint ventures, technology transfers, licensing, and logistics. U.S. products are well received in Ireland and are seen as having a high quality.

The U.S. Commercial Service notices significant opportunity in the fields of ICT, agricultural products, and medical devices in the Irish market. They also identify long-term prospects in sustainable energy, environmental technologies, and energy efficiency.

Sources: Export.gov Ireland Guide

#### **Brexit**

On June 23, 2016, a majority of the British voters elected to pass a referendum to invoke Article 50 of the Treaty on the European Union and to leave the European Union. While the exact future relationship between the UK and the EU is unknown and negotiations are ongoing, the UK will no longer be a member of the bloc on March 30, 2019. As no settlement has been negotiated, it is impossible to know with any certainty the economic impact of Brexit.

Perhaps most importantly for American businesses with ties to Ireland, is the overall impact on the Irish economy of any potential Brexit. The US and UK are Ireland's top trading partners, and any Brexit deal that establishes trade barriers between Ireland and the UK will likely have adverse impacts on the Irish economy.

The Economist Intelligence Unit puts the two most likely scenarios each at 30% probability. The first is that the UK remains in the customs union and the single market, or "soft Brexit," which would likely have little impact on regulation or tariffs from the US. The second is that the ruling party elect new leadership under new elections, and lead tougher negotiations with the EU, with the outcome less predictable for international business with the country.

Sources: Economist Intelligence Unit: Brexit Hanging in the Balance Between Two Main Scenarios

### Relations with the U.S.

#### **United Kingdom**

One of the U.S.'s longest tenured allies, the United Kingdom and the United States have been strong military and economic partners for over two centuries. Both countries encourage further cooperation and coordination with one another, with the two nations being intertwined through trade, war, common language and ideals. The United Kingdom was a founding member of the North Atlantic Treaty Organization (NATO), and both countries are members of the G-7 economic summit. Citizens of one country may visit the other for tourism purposes for up to 90 days through the Visa Waiver Program.

Source: U.S. State Dept. UK Fact Sheet

#### Ireland

Common cultural and ancestral ties have driven the U.S. closer to Ireland over the decades since the nation's independence from the U.K. Ireland remains a popular study-abroad destination for American students, and the J-1 Summer Work Travel visa is a popular means of working in the U.S. for young adults from Ireland. The two countries maintain significant trade ties, but investment flows are what really bring the two nations together. Over 700 American-owned firms employ 150,000 Irish citizens, and over 400 Irish-owned firms employ 100,000 American workers. These include high-profile companies such as Google, Facebook, and Twitter, who choose to locate their European headquarters in Ireland.

Source: <u>U.S. State Dept. Ireland Fact Sheet</u>

# **Trade Overview**

### United Kingdom Imports & Exports 2017 (in \$million)<sup>1</sup>

	Imports From Country	2017
	Total	636639
1	Germany	88145
2	United States	60833
3	China	59538
4	Netherlands	51901
5	France	34527
6	Belgium	32041
7	Italy	24146
8	Norway	23493
9	Spain	19982
10	Ireland	18761

	<b>Exports to Country</b>	2017
	Total	441031
1	United States	58326
2	Germany	46489
3	France	30185
4	Netherlands	27446
5	Ireland	25048
6	China	21220
7	Switzerland	19676
8	Belgium	17766
9	Spain	13252
10	Italy	13188

HS	Imports by Product	2017
	Total	644061
	Industrial Machinery,	
84	Computers	82522
87	Vehicles	72585
85	Electrical Machinery	63929
27	Mineral Fuels, Oils	51904
	Precious Metals, Stones,	
71	Pearls	49252
30	Pharmaceuticals	33161
39	Plastics	18386
	Optical, Photo, Medical	
90	Equip	17780
88	Aircraft and Parts	14904
	Furniture, Bedding, Mat-	
94	tresses	11596

HS	<b>Exports by Product</b>	2017
	Total	441031
	Industrial Machinery,	
84	Computers	65494
87	Vehicles	53831
27	Mineral Fuels, Oils	35457
30	Pharmaceuticals	32683
	Precious Metals,	
71	Stones, Pearls	32016
85	Electrical Machinery	28535
88	Aircraft and Parts	21071
	Optical, Photo, Medical	
90	Equip	18050
39	Plastics	11835
29	Organic Chemicals	10572

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<sup>&</sup>lt;sup>1</sup> WiserTrade: <u>EU Database</u>

### U.S. Exports to the United Kingdom 2017 (in \$million) $^2$

HS	US Exports to UK by Sector	2017	2016	%2016-2017
	Total US Exports to UK	56258	55169	2%
88	Aircraft, Spacecraft, and Parts	9384	10977	-15%
71	Nat Etc Pearls, Prec Etc Stones	6629	5640	18%
84	Industrial Machinery, Computers	5909	5695	4%
85	Electric Machinery, Sound Equip, TV Equip	4016	3858	4%
27	Mineral Fuel, Oil	3525	1496	136%
97	Works of Art, Collectors Pieces and Antiques	3307	3144	5%
30	Pharmaceutical Products	3126	3666	-15%
87	Vehicles	2782	3128	-11%
90	Optic, Photo, Medical Equip	2607	2653	-2%
98	Special Classification Provision	2548	2440	4%

HS	New England Exports to UK by Sector	2017	2016	%2016-2017
	Total New England Exports to UK	3833	2833	35%
71	Nat Etc Pearls, Prec Etc Stones	1000	393	154%
88	Aircraft, Spacecraft, and Parts	870	432	101%
84	Industrial Machinery, Computers	572	466	23%
90	Optic, Photo, Medical Equip	292	314	-7%
85	Electric Machinery, Sound Equip, TV Equip	257	271	-5%
30	Pharmaceutical Products	113	167	-32%
39	Plastics and Articles Thereof	85	87	-2%
34	Soap, Waxes, Polish	81	139	-42%
98	Special Classification Provision	70	68	3%
38	Misc. Chemicals	42	37	14%

<sup>&</sup>lt;sup>2</sup> WiserTrade: U.S. State Database

### Ireland Imports and Exports 2016 (in \$ millions) $^3$

Rank	Imports from Country	2017
	Total	87927
1	UK	25179
2	United States	17270
3	France	10656
4	Germany	8337
5	Netherlands	3545
6	China	3364
7	Italy	2394
8	Belgium	1898
9	Spain	1393
10	Norway	1227

Rank	<b>Exports to Country</b>	2017
	Total	137085
1	United States	37183
2	United Kingdom	18336
3	Belgium	15037
4	Germany	11114
5	Switzerland	7009
6	Netherlands	6678
7	France	5874
8	China	4877
9	Spain	2935
10	Japan	2886

HS	Imports by Sector	2017
	Total	87927
88	Aircraft and Parts	18054
30	Pharmaceuticals	10234
	Industrial Machinery,	
84	Computers	7963
	Mineral Fuels, Mineral	
27	Oils	5275
85	Electrical Machinery	5052
29	Organic Chemicals	4127
87	Vehicles	4107
39	Plastics	2799
90	Optical Equipment	2587
99	Other (Not in 2-Digit HS)	2498

HS	Exports by Sector	2017
	Total	137085
30	Pharmaceuticals	38353
29	Organic Chemicals	23800
90	Optical Equipment	13808
85	Electrical Equipment	9069
33	Essential Oils	8444
84	Industrial Machinery, Computers	7533
88	Aircraft and Parts	6711
38	Misc. Chemical Products	3719
02	Meat and Edible Offal	3502
04	Dairy Produce and Eggs	2698

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<sup>&</sup>lt;sup>3</sup> WiserTrade: <u>EU Database</u>

U.S. Exports to Ireland 2017 (in \$million)<sup>4</sup>

US Exports to Ireland by Sector		2017	2016	%2016-2017
HS	Total	10708	9565	12%
30	Pharmaceutical Products	3362	2118	59%
88	Aircraft, Spacecraft, Parts	1785	2062	-13%
84	Industrial Machinery, Computers	1022	1029	-1%
90	Optical, Photo, Medical Equip	933	975	-4%
29	Organic Chemicals	782	688	14%
85	Electric Machinery	743	621	20%
39	Plastics	338	331	2%
98	Special Classification Provision	229	184	24%
37	Photographic or Cinematographic Goods	180	177	2%
33	Essential Oils, Perfumery, Cosmetics	158	146	8%

New England Exports to Ireland		2017	2016	%2016-2017
HS	Total	1423	1253	14%
30	Pharmaceutical Products	829	716	16%
84	Industrial Machinery, Computers	161	180	-11%
85	Electric Machinery, Sound Equip, TV Equip	118	59	100%
90	Optic, Photo, Medical Equip	115	111	4%
38	Misc. Chemicals	47	47	0%
39	Plastics and Articles Thereof	34	43	-21%
88	Aircraft, Spacecraft, Parts	25	25	0%
29	Organic Chemicals	22	13	69%
73	Articles of Iron or Steel	9	8	13%
28	Inorganic Chem, Rare & Prec Earth Metals	8	2	300%

<sup>&</sup>lt;sup>4</sup> WiserTrade: U.S. State Database

### **Life Sciences and Medical Devices**

#### Overview

Like many developed countries, the U.K. has a large aging population. Of the country's 65.6 million residents, roughly 30% are aged 55 and older, with another 40% sitting between ages 25-54. Great Britain's population is growing at 0.54% per year. As a percentage of GDP, the U.K. spends 9.9% (£179 Billion) on healthcare — this is higher than average for countries belonging to the Organization for Economic Cooperation and Development (OECD).

The National Health Service (NHS) is the primary administrator of health services in the U.K., covering roughly 85% of all expenditures on health care. NHS is managed in four different segments, each representing one of the four "home nations" of the U.K. – NHS England, NHS Scotland, NHS Wales, and HSC Northern Ireland. Private healthcare or direct paid healthcare is largely limited to secondary services such as plastic surgery, nursing homes, or dentistry.

Similar to the U.K., some 23% of Ireland's residents are aged 55 or older, with 43% between ages 25-54. Ireland is growing faster than their neighbors, at a population growth rate of 1.15%. In 2016, Ireland spent 11% of their Gross National Income (GNI) on healthcare – roughly \$5,528 per person. In 2015, 70% of all health care expenses were paid via public financing, with the remainder split evenly via private health insurance (15%) and out-of-pocket payments (15%).

Sources: <u>CIA World Factbook est. 2017</u>, <u>Export.gov UK Guide – Medical Equipment</u>, <u>Office for National Statistics (GB)</u>, <u>Department of Health (IE) – Health Expenditure</u>

#### **Medical Device Market**

In 2017, the medical device market in the U.K. was estimated to be around \$11.3 billion, of which \$1.3 billion was imported from the U.S. The U.S. International Trade Administration projects strong markets for U.S. medical device exports in both countries, ranking the U.K. 7<sup>th</sup> and Ireland 19<sup>th</sup> globally.

The majority of medical devices are purchased through acute hospital trusts, which may purchase equipment a variety of ways. Trusts can purchase individually, by forming ad-hoc groups of trusts, or buy purchasing through centralized purchasers specifically for NHS. The largest two centralized purchasers are NHS Supply Chain and NHS Commercial Solutions.

Source: Export.gov UK Guide - Medical Equipment

#### **Life Science Market**

Ireland is the world's seventh largest exporter of pharmaceutical products, and production comes from over 160 companies located in the country. Nine of the ten largest producers in the world have manufacturing capabilities in Ireland. Furthermore, the FDA has approved 33 production facilities in the Republic. Domestically, efforts have been made between government and Irish pharmaceutical producers to reduce overall medication costs from \$723 per capita per year to the OECD average of \$515. In addition, the Irish government has placed increased emphasis on the generic drug market, encouraging Irish consumers and providers to make greater use of these medications, which could spur growth in the market.

Source: Export.gov Ireland Guide - Drugs and Pharmaceuticals

#### U.S. EXPORTS OF MEDICAL & SCIENTIFIC INSTRUMENTS TO THE UNITED KINGDOM (\$ thousands, 2016-2017)<sup>5</sup>

				%2016-
HTS Code	Product	2016	2017	2017
90	Total	1336211	1273461	-5%
	Instruments and appliances used in medical, surgical, dental or vet-			
	erinary sciences, including scintigraphic apparatus, other electro-			
0040	medical apparatus and sight-testing instruments; parts and accesso-	540444	424205	470/
9018	ries thereof	518141	431305	-17%
	Instruments and apparatus for physical or chemical analysis; in-			
	struments and apparatus for measuring or checking viscosity, po-			
	rosity, expansion, surface tension or the like; instruments and apparatus for measuring or checking quantities of heat, sound or light;			
9027	microtomes; parts and accessories thereof	357454	361465	1%
3027	Orthopedic appliances, including crutches, surgical belts and truss-	337 13 1	301103	170
	es; splints and other fracture appliances; artificial parts of the body;			
	hearing aids and other appliances which are worn or carried, or im-			
	planted in the body, to compensate for a defect or disability; parts			
9021	and accessories thereof	171340	193731	13%
	Oscilloscopes, spectrum analyzers and other instruments and appa-			
	ratus for measuring or checking electrical quantities, excluding me-			
	ters of heading 9028; instruments and apparatus for measuring or			
0020	detecting alpha, beta, gamma, X-ray, cosmic or other ionizing radia-	450043	1.46750	<b>C</b> 0/
9030	tions; parts and accessories thereof	156612	146759	-6%
	Apparatus based on the use of X-rays or of alpha, beta or gamma			
	radiations, whether or not for medical, surgical, dental or veterinary uses, including radiography or radiotherapy apparatus, X-ray tubes			
	and other X-ray generators, high tension generators, control panels			
	and desks, screens, examination or treatment tables, chairs and the			
9022	like; parts and accessories thereof	132664	140201	6%

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<sup>&</sup>lt;sup>5</sup> WiserTrade Database

U.S. EXPORTS OF PHARMACEUTICAL PRODUCTS TO THE UNITED KINGDOM (\$ thousands, 2016-2017)<sup>6</sup>

HS Code	Category	2016	2017	%2016-2017
30	Total	3665654	3126436	-14.71%
3004	Medicaments (excluding goods of heading 3002, 3005 or 3006) consisting of mixed or unmixed products for therapeutic or prophylactic uses, put up in measured doses (including those in the form of transdermal administration systems) or in forms or packings for retail sale	2092479	1771254	-15.35%
3002	Human blood; animal blood prepared for therapeutic, prophylactic or diagnostic uses; antisera, other blood fractions and immunological products, whether or not modified or obtained by means of biotechnological processes; vaccines, toxins, cultures of microorganisms (excluding yeasts) and similar products	1439206	1186685	-17.55%
3003	Medicaments (excluding goods of heading 3002, 3005 or 3006) consisting of two or more constituents which have been mixed together for therapeutic or prophylactic uses, not put up in measured doses or in forms or packings for retail sale	58038	107955	86.01%
3001	Glands and other organs for organotherapeutic uses, dried, whether or not powdered; extracts of glands or other organs or of their secretions for organotherapeutic uses; heparin and its salts; other human or animal substances prepared for therapeutic or prophylactic uses, not elsewhere specified or included	37977	27302	-28.11%
3006	Pharmaceutical goods specified in note 4 to this chapter	22929	19943	-13.02%
3005	Wadding, gauze, bandages and similar articles (for example, dressings, adhesive plasters, poultices), impregnated or coated with pharmaceutical substances or put up in forms or packings for retail sale for medical, surgical, dental or veterinary purposes	15026	13298	-11.50%

#### **Opportunities**

Given aging populations and steadily increasing healthcare expenses as percentage of GDP, demand for medical devices and equipment should be expected to continue rising. The procurement process in both the U.K. and Ireland often involves public tender announcements, via <u>eTenders Public Procurement</u> in Ireland, and via <u>Contracts Finder</u> in the U.K.

British NHS agencies may hold competitive bids or competitions to invent specific solutions for specific problems. SBRI Healthcare is one of the NHS component agencies that holds such competitions.

<sup>&</sup>lt;sup>6</sup> WiserTrade Database

In both countries, private hospitals are a smaller, but not insignificant portion of the healthcare market. Ireland has 19 private hospitals, and the U.K. has several private hospital groups through which opportunities may arise.

#### **Promising Sub-Sectors**

#### U.K.

- Telemedicine
- Assistive Technologies
- Electronic Monitoring Equipment
- Home Care Technology
- Cancer Care technology
- Rehabilitation equipment
- Diagnostics

#### Ireland

- Diagnostics
- Cardio and Surgical Equipment
- Electro-medical apparatus
- Orthopedic Equipment
- Rehabilitation Equipment
- Assisted Living and Homecare products
- e-Health

#### Regulations

The U.K. and Ireland are, as of now, members of the EU. As such, medical devices are regulated under three overarching policies – Medical Devices Directive, Active Implantable Medical Devices Directive, and the In-Vitro Diagnostic Medical Devices Directive. The EU is currently revising these policies, to be supplanted by new regulation between 2018 and 2020. Additionally, medical devices in the U.K. are regulated by the National Institute for Health and Clinical Excellence (NICE) in England, and the Scottish Medicines Consortium (SMC). In Ireland, the Health Products Regulatory Authority is the responsible regulatory agency.

Sources: Export.gov UK Guide, Export.gov Ireland Guide

# **Aquaculture**

#### Overview

While global fisheries production may have stalling growth rates, global aquaculture production is rising rapidly at 4.5%, and the trade value of such production growing even faster at 7.8% in 2017. Rising aquaculture production is helping to meet demand that is left by low fish stock levels and traditional capture in Europe.

The UK is the destination for roughly \$104 million worth of US fish and seafood products in total (roughly half of which is canned salmon), whether by capture or aquaculture, making it a key driver of US seafood production. As with other food products, the US competes for UK market share with other EU countries, as well as growing production from China, Canada, and countries in Southeast Asia. Salmon tops the overall import market to the UK by value, followed closely by cod and tuna.

According to BIM (Ireland's Seafood Development Agency), €335 million of seafood was imported to Ireland in 2017, of which 68% was imported from the UK. Ireland is a net exporter of seafood, with an export value of €666 million.

Sources: <u>FAO GlobeFish Report</u>, <u>Sea Fish Industry Authority</u> – UK seafood industry overview, <u>Bord lascaigh Mhara (BIM)</u> – Business of Seafood 2017

#### **Opportunities**

Growth opportunities in the British and Irish markets continue to expand, with the highest growth in volume from 2016-2017 in species such as warm-water shrimp, crab, coley, and monkfish.

Globally, 77% of all capture fish stocks monitored by the UN Food and Agriculture Organization (FAO) are rated as "fully exploited" to "depleted." Most of the countries and seafood species being imported to the UK and Ireland, such as northeast Atlantic stocks of cod, salmon, and haddock are listed in the worst FAO category of "depleted." As volume of landings decrease, prices are expected to rise, making U.S. aquaculture imports to the region competitive and necessary to serve excess demand.

In addition to food products, the domestic aquaculture sector in the UK and Ireland is expected to grow as well, providing opportunities to producers of cages, tanks, software, and reticulating aquaculture systems. Scotland alone accounts for over 90% of the value produced in UK aquaculture, and the Scottish government continues to invest heavily in the sector's development. Major cost factors in the UK and Ireland for aquaculture production include the rising price of energy – thus energy-efficiency in their processes and machinery is of the utmost importance when deciding on sourcing. In Ireland, the government notes particular opportunities in the development of shell-fish such as oysters, and the need to increase overall capacity. Services exports, such as scientific or business consultancy, will also be in high demand throughout the region as they attempt to ramp-up production.

Sources: <u>UN FAO</u> – General Situation of World Fish Stocks, <u>Government Office for Science</u> – Future of the Sea Trends in Aquaculture, <u>SEAFISH</u> – Aquaculture in England, Wales, and Northern Ireland, <u>Depart-</u>

ment of Agriculture, Food, and the Marine – National Strategic Plan for Sustainable Aquaculture Development

#### Regulation

As with all EU member nations, the UK and Ireland adhere to the same regulations under EU seafood import laws. The most important laws that impact US exports are the Common Fisheries Policy and the Food Hygiene Legislation. Aquaculture products in particular must be exported from only EU-approved locations within allowable zones. Health certificates for export to the EU are certified by the U.S. National Marine Fisheries Service under NOAA. For retail sale, EU labeling laws require the following information: Commercial name of species, production method, fishing gear, and catch area. For more information, consult the US Commercial Service's guide to Exporting Seafood to the EU.

U.S. AQUACULTURE EXPORTS GLOBALLY BY VALUE (\$ thousands)<sup>7</sup>

Product	2013	2014	2015	2016	2017
Pacific salmon, frozen 1/	488,733	477,624	598,652	486,150	768,239
Salmon, canned and prepared 2/	237,830	213,433	204,204	187,014	170,063
Scallops 4/	150,570	141,092	136,524	149,515	138,387
Clams 4/	89,648	83,602	100,950	113,609	115,938
Pacific salmon, fresh 1/	78,622	63,917	81,778	104,978	109,501
Shrimp, fresh and prepared 3/	47,677	74,790	70,830	67,151	57,375
Shrimp, frozen	64,482	80,140	134,437	51,001	38,714
Atlantic salmon, fresh	52,235	39,025	23,815	78,414	38,327
Oysters 4/	24,214	25,432	26,743	23,470	23,197
Ornamental fish	10,465	9,772	9,113	8,179	10,306
Trout, fresh and frozen	6,670	7,045	4,358	6,766	10,221
Atlantic salmon, frozen	534	756	838	3,415	4,166
Mussels 4/	1,728	2,363	2,300	2,149	3,589
Trout, live	1,023	754	816	684	461

Includes salmon with no specific species noted.
Includes smoked and cured salmon.
Canned, breaded, or otherwise prepared.
Fresh or prepared.
Source: Department of Commerce, Bureau of the Census.

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<sup>&</sup>lt;sup>7</sup> <u>USDA Economic Research Service</u> – Aquaculture Data

# **Defense and Security Products**

#### Overview

The United Kingdom has Europe's largest defense budget, coming in at \$53.5 billion in 2016. This figure also makes it the second largest in NATO, behind only the US. The UK is also the fourth largest export destination of US military products, with 6.7% of all military exports in 2015. In addition, the UK's 2016 budget plans on investing over \$39.9 billion through 2017. In 2010, the US and the UK signed the Defense Trade Cooperation Treaty. This treaty aims to make trade of military goods more efficient and beneficial to both nations. British forces are currently deployed worldwide, including in Afghanistan, Iraq, and Africa.

As the Irish Defence Forces are significantly smaller and with a smaller budget, more opportunities arise in the general safety and security equipment markets. Commercial, industrial and consumer demands are the key drivers. It is estimated the overall market for security products in Ireland to be between \$2 and \$4 billion.

The UK faces growing concern over public safety and counter-terrorism along with many other countries worldwide. Political pressure may result in higher budgets for homeland security and policing services, where small enterprises with distinct solutions may stand to gain. Overall demand for security products is estimated at \$16 billion, with the personal protective equipment market making up \$1.8 billion in 2014.

Sources: Export.gov UK Guide – Safety and Security, Export.gov Ireland Guide – Safety and Security, International Trade Administration – Defense Top Markets Report

#### **Opportunities**

Defense spending by the UK is expected to remain high as they aim to reach NATO's target of 2% of GDP. Precision weapon systems, land equipment, surface ships, submarines, and anti-air missiles are expected to be focus areas of government spending. Additional spending is expected on airborne surveillance systems, as well as upgrades to cargo planes and helicopter airframes.

The US Commercial Service in the UK expects "high probability of success" in the following security product categories: video surveillance systems, scanning equipment, article surveillance systems, counter-terrorism and policing equipment and IT security. Other sectors listed as "more opportunities than challenges" include: intrusion detection, physical security, personal protection products, and consultancy services.

Public sector procurement in Ireland is handled through contracts posted on their eTenders portal. The US Commercial Service sees "more opportunities than challenges" in all sectors of the Irish security market, except in the bodyguard and security guard sub-sector.

Several trade shows exist in the UK, with attendees from many EU nations. Infosecurity Europe focuses on IT security, with other shows such as the Counter Terror Expo or the Security Policing Show offering

chances to network with purchasers and distributors. IFSEC International is Europe's largest security trade show and is conveniently located in London.

Sources: Export.gov UK Guide – Safety and Security, Export.gov Ireland Guide – Safety and Security, International Trade Administration – Defense Top Markets Report

# IT/Software

#### Overview

The U.K. and Ireland are sophisticated economies reliant on the latest in digital technology and software. 90% of households in the U.K. had access to the internet, with an additional 73% of adults using the internet on mobile platforms. With more business and individuals accessing and storing information on the internet, cyber security has been placed at a premium, and is expected to be the largest market for security software and products in Europe.

Cyber-security products are an estimated \$5 billion industry in the U.K., and are projected to continue growing. In 2015, 90% of large companies in Great Britain reported cyber security breaches. New regulations through the EU set higher standards and higher penalties for companies which allow data breaches, potentially prompting further investment in cyber security from companies operating in Europe.

Ireland has focused itself as a producer of software and other IT products, and exports of 97% of domestic production in the sector. The U.S. contributes to this production significantly, with over 60% of Irish software exported being produced by a subsidiary of an American company.

Most software is now downloaded digitally, and not bought via physical CD or floppy disk. Under CROSS ruling HQ 960179, no duties are charged on digitally transmitted software<sup>8</sup>.

Sources: Office of National Statistics - Internet Access, Export.gov U.K. Page – Cyber Security, Export.gov Ireland Page – Computer Software

#### **Sub-Sector Best Prospects**

In the UK, cyber-security products drive growth in the sector. Many of the world's largest financial institutions are based in or have operations in the UK. With a renewed focus on consumer data privacy and security, demand is expected to increase for the latest technologies. The UK government has also allocated \$2.4 billion over five-years to fund the National Cyber Security Strategy, largely aimed at hardening national infrastructure to cyber attacks.

In Ireland, growth in the IT sector is expected to grow at 3.6%. Cloud computing is projected to make up most of the growth, including software as a service. Short term growth in cloud computing in Ireland may be up to 40% annually according to the ITA Cloud Computing Top Markets Report. Overall, annual spending on business software in Ireland is valued at €258 million per year, and cyber security software at €124 million.

<sup>&</sup>lt;sup>8</sup> CROSS Ruling HQ 960179

#### Regulation

As a growing number of companies worldwide have faced significant data breaches or cyber attacks, new regulation is constantly being developed to ensure consumer protection. Most important to software exporters to EU member countries will be the new General Data Protection Regulation (GDPR), which took effect May 2018. The UK also enacted a new Data Protection Act 2018, to come into effect the same day as the GDPR. The UK's Information Commissioner's Office is responsible for the administration of these two regulations in the UK. In Ireland, the Data Protection Commission is responsible for managing GDPR.

Additional agreements have been made regarding data protection requirements when data is transferred between an EU country and the US. The Privacy Shield Frameworks have been in effect since 2016, and protect US, EU, and Swiss consumers privacy.

Sources: UK ICO GDPR Guide, IE Data Protection Commission GDPR Guide, Privacy Shield Framework

# **Building Materials**

#### Overview

Residential construction in the UK takes up almost 40% of the total construction value. This number is expected to increase as commercial construction is expected to decline in market value. Renewed investment in public infrastructure is included in the 2017 Budget, including a £690 million competition to ease congestion in urban areas.

"Green building" has long had demand in the UK. A voluntary sustainability rating system, Building Research Establishment Environmental Assessment Method (BREEAM), has been in place for twenty years, and many local governments require new buildings be BREEAM certified. In addition, strong emphasis has been placed on sustainable construction to achieve the UK's greenhouse gas and climate change goals, largely via improvements in energy efficiency.

US building products have a high reputation for quality in the UK. Nevertheless, there are challenges faced by US products entering the market. While the US does pay tariffs on certain building supplies, they face competition from EU countries such as Germany who do not owe such tariffs. Product performance and post-sales service is crucial to maintaining business relationships.

Sources: Export.gov UK Guide – Building Materials and Sustainable Construction, International Trade Administration – Top Markets Guides

SELECTED U.S. EXPORTS OF BUILDING MATERIALS TO THE UNITED KINGDOM (\$ thousands, 2016-2017)

HTS Code	Products included in HTS Code	2016	2017	%2016-2017
8415	A/C Units	61994	84310	36%
8416	Furnaces	4452	5574	25%

8418	Refrigeration	74319	88546	19%
7019.39.10	Fiberglass Insulation	8143	7760	-5%
3214.10.0010	Foam Insulation	14860	13875	-7%
4418	Carpentry Products (inclusive of .99 and .90)	5017	2729	N/A
4418.99	CLT and other misc. carpentry products	N/A	1847	N/A
4418.90	CLT and other misc. carpentry products	3137	N/A	N/A

NOTE: HTS Code 4418.90 includes bamboo products. Under the 2017 <u>revisions</u> to the Harmonized System, bamboo products were designated 4418.91 and all other woods 4418.99.

Source: WiserTrade: US Export Database

#### **Sub-Sector Best Prospects**

Wood Products – While the US is the source of only 3.3% of the UK's wood product imports, market share is growing for US products in the \$5.3 billion import market. Over a five year period 2009-2014, wood product imports grew at 14% compound annual growth.

HVACR – The US is currently second behind Germany in HVACR imports to the UK, holding 10.7% of the import market. In the period 2009-2014, growth of US imports to the UK grew faster than overall imports did – 9.3% growth for US products against 6.7% overall.

Insulation – Insulation imports from the US rank first in the UK, holding 28.8% of market share. Imports from the US grew at 26% compound annually from 2009-2014. Insulation products from the US are seen as particularly competitive in the British market.

Others – Sub-sectors such as plumbing, lighting, windows and doors, and glass do have market penetration, import market share remains low and in many sub-sectors is declining. Concerted efforts to build and maintain distributor relationships are crucial in these areas.

Source: <u>International Trade Administration</u> – 2016 Top Markets Report Building Products and Sustainable Construction UK Case Study

#### Regulation

In addition to BREEAM certification, the EU Construction Product Regulation (CPR) is the biggest policy hurdle US products must clear to be sold in EU member states such as the UK and Ireland. Products may need to be re-tested and re-certified to meet EU requirements, should they differ enough from US requirements.

When exporting a product to the UK or Ireland, adhering to the CPR is required if said product has been covered by a European harmonized standard, or a European Technical Assessment has been passed. Steps in the CPR include an EU Declaration of Conformity and possible testing.

Post-Brexit, it is uncertain which regulations will remain in place, and which will be changed – however, one can reasonably assume minimal changes due to the large number of imports and exports traded between Great Britain and the rest of the European common market.

Source: <u>International Trade Administration</u> – 2016 Top Markets Report Building Products and Sustainable Construction UK Case Study

### **Education**

#### Overview

Being English-speaking nations, the UK and Ireland are popular destinations and sources of international educational exchanges. In the 2016/2017 school year, the 11,489 British students studied at the post-secondary level in the US, in addition to 1,217 Irish students. Inversely, 39,140 US students studied in the UK, while 11,070 more chose to spend time studying in Ireland. 50% of British students in the US studied at the undergraduate level, while 38% of Irish students were undergraduates.

According to the OECD, both Ireland and the UK spend above average public and private funds on tertiary education compared to other OECD member nations. The UK produces the highest percentage of students in the natural sciences and mathematics fields, relative to other OECD nations. The most popular fields of study in Ireland are business, administration, and law.

Students from the UK added \$470 million to the US economy in the 2016-2017 academic year, which averages to roughly \$41,000 per student. In Maine, foreign students were estimated to spend roughly \$53 million in 2017.

Source: <u>Institute for International Education</u> – Open Doors Report 2017, <u>OECD GPS Education</u> – UK, <u>OECD GPS Education</u> – Ireland, <u>Export.gov UK Guide</u> – Education, <u>Open Doors Fact Sheet</u> - Maine

#### **Trends and Recent Developments**

Tuition fees were first introduced in the UK in 1998, have risen to a cap of \$12,025 per student in the 2017/2018 academic year. Tuition hikes tend to draw UK institutions relatively closer in cost to US institutions, making a US education relatively less of a financial leap. Enrollment from the UK fell in percentage terms for the first time in eight years in 2016/2017, potentially due to the depreciation of the British Pound in relation to the US dollar, making American institutions relatively more expensive than before, even counting rising UK tuition. Notably, the only sector in which enrollment has declined is in the non-degree seeking students.

The US-UK Fulbright Commission has found that the key drivers of British studies in the US are quality and flexibility of education, scholarship funding, athletic programs, and traditional US campus life that differs from that in the UK. The same report found the top issues concerning students thinking about studying in the US are visas, healthcare, tuition levels, safety and security, and reputation of the academic institution.

Enrollment from all countries into the US show significantly different trends based on school location and admissions selectivity. Public institutions saw an 11.3% year over year decrease in international enrollment from Fall 2016 to Fall 2017. Private institutions saw no significant changes. Enrollment dropped significantly for schools admitting 25% or more, with larger drops coming at higher acceptance rates. From 25%-10% acceptance rates, enrollment was up 2.5% and for less than 10% of students admitted, enrollment was up 6.3%. All regions of the country saw decreases of international enrollment (from -19.3% to 0.7%), with New England being the only region with an increase in international student enrollment (2.1%). Lastly, US schools cite visa issues as the number one reason for falling enrollment, from 33.8% of institutions citing it as a problem in 2016 to 68.4% in 2017. Additional causes were cost of tuition (57.3%), and the social and political environment in the US (from 15.4% in 2016 to 56.3% in 2017).

Maine ranks 49 out of 53 US States and territories in terms of the number of foreign students enrolled in tertiary education, with 1,341 in 2017. This is down 3.9% from the previous years. Neither the UK nor Ireland appears in the top five sending countries for students in Maine, meaning less than 42 students come from either country in the last academic year.

Sources: <u>Export.gov UK Guide</u> – Education, <u>IIE</u> – Fall 2017 Hot Topics Report, <u>Open Doors Fact Sheet</u> - Maine

#### **Opportunities**

Despite the challenges, several opportunities are present for schools looking to attract students from the UK and Ireland. Students from the UK pursuing Optional Practical Training (OPT) in the US in academic year 2016/2017 are up 3.4% from 2015/2016. Both undergraduate studies and graduate studies are up 1.8% and 1.7% respectfully. Conversely from Ireland, OPT and undergraduate studies have fallen 5.8% and 3.3%, while non-degree studies are up 15%, as well as graduate studies 6.5% increase.

The US-UK Fulbright Commission report identified three key sources of information that British students claimed influenced their enrollment which could be improved by institutions wishing to seek more students from the UK. The university website, campus visit programs, and a university prospectus highlighting degree programs were the top three.

Sources: IIE Open Doors 2017 - Places of Origin Data, Export.gov UK Page - Education and Training

### **Food and Beverages**

#### Overview

The UK and Ireland together make a large export market for US agricultural, fish, and forestry products. In 2016, the UK imported \$2.9 billion of agriculture-related products, while in 2015 Ireland imported \$434 million of US products. In total, the UK imports over half their domestic food consumption, with an additional 30% coming from EU member nations. North America only supplies 4% of total UK food consumption.

The US exports \$1.2 billion worth of consumer-oriented food products to the UK. Fruits, vegetables, and nuts make up 35% of this consumer-oriented market. Some of the largest successes in the UK come from Californian wines, along with well-known name brand snack foods. Like most high-income countries, consumers in the UK can afford the luxury of turning to specialty foods, health foods, and other high-quality and high-value products.

In Ireland, the largest food and beverage products purchased are those used to make beverages. In 2015, \$72 million was imported from the US for flavorings alone. End-use products grew in 2015 by 15% over the previous year in Irish stores.

Sources: <u>Department for Environment, Food & Rural Affairs</u> – Food Statistics in Your Pocket 2017, <u>Export.gov UK Guide</u> – Agricultural Sectors, <u>Export.gov Ireland Guide</u> – Agricultural Sectors

U.S. EXPORTS OF FOOD AND BEVERAGE PRODUCTS TO THE UNITED KINGDOM (\$ thousands, 2016-2017)9

HTS Code	Product Category	2016	2017	%2016-2017
22	Beverages, Spirits, and Vinegar	501,262	487,575	-3%
08	Edible Fruits and Nuts	280,951	273,849	-3%
21	Misc Edible Preparations	249,400	214,766	-14%
07	Edible Vegetables and Certain Roots	128,144	128,522	0%
12	Oil Seeds, Misc Grain	154,208	70,026	-55%
10	Cereals	67,385	67,378	0%
15	Animal or Vegetable Fats and Oils	53,932	59,624	11%
19	Prep Cereal, Flour, Starch or Milk	61,964	55,566	-10%
20	Prep Vegetables, Fruits, Nuts	46,905	51,225	9%
03	Fish, Crustaceans & Aquatic Invertebrates	56,917	49,705	-13%
18	Cocoa and Cocoa Preparations	37,001	42,234	14%
16	Edible Preparations of Meat, Fish, Crustaceans	52,227	37,894	-27%
17	Sugars and Sugar Confectionary	35,045	32,181	-8%
02	Meat and Edible Meat Offal	13,925	30,835	121%
13	Lac, Gums, Resins, other veg. saps and extracts	37,052	30,178	-19%
05	Products of animals not otherwise specified	18,683	23,041	23%
09	Coffee, Tea, Mate & Spices	36,751	22,889	-38%
11	Milling Products, Malt, Starch	9,835	12,489	27%
04	Dairy Products, Eggs, Honey, etc	8,955	7,449	-17%
14	Vegetable Products not elsewhere specified	426	346	-19%

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<sup>&</sup>lt;sup>9</sup> WiserTrade US State Database

U.S. EXPORTS OF FOOD AND BEVERAGE PRODUCTS TO IRELAND (\$ thousands, 2016-2017)<sup>10</sup>

HTS Code	Product Category	2016	2017	%2016-2017
10	Cereals	49,850	22,214	-55%
15	Animal or Vegetable Fats and Oils	22,184	16,134	-27%
13	Lac, Gums, Resins, other veg. saps and extracts	13,568	13,912	3%
22	Beverages, Spirits, and Vinegar	17,662	13,894	-21%
21	Misc Edible Preparations	8,459	13,066	54%
07	Edible Vegetables and Certain Roots	9,633	8,950	-7%
08	Edible Fruits and Nuts	5,530	5,471	-1%
12	Oil Seeds, Misc Grain	4,153	4,996	20%
04	Dairy Products, Eggs, Honey, etc	802	3,867	382%
20	Prep Vegetables, Fruits, Nuts	2,888	2,412	-16%
18	Cocoa and Cocoa Preparations	1,751	1,674	-4%
17	Sugars and Sugar Confectionary	1,344	1,325	-1%
05	Products of animals not otherwise specified	733	1,074	47%
11	Milling Products, Malt, Starch	102	298	192%
09	Coffe, Tea, Mate & Spices	144	148	3%
14	Vegetable Products not elsewhere specified	111	128	15%
19	Prep Cereal, Flour, Starch or Milk	465	113	-76%
02	Meat and Edible Meat Offal	999	89	-91%
03	Fish, Crustaceans & Aquatic Invertebrates	73	59	-19%
16	Edible Preparations of Meat, Fish, Crustaceans	0	0	N/A

#### **Sub-Sector Best Prospects**

Fish and Seafood – The UK imported \$104 million fish and seafood products in 2016, of which roughly half is canned salmon. With the continued decline of domestic fisheries, fresh and frozen salmon and pollack are now being imported to cover market demand. The Foreign Agricultural Service (FAS) reports average annual US import growth over the last five years at 18.6%

Beer – US beer imports to the UK are rising rapidly, amounting \$27.7 million last year and an astonishing average growth rate of 455% over the last five years. Specifically, FAS sees growth potentially for American microbrews that are "unique beers with a story." In addition, beer imports into the UK are tariff free according to the US FAS, but are still subject to excise duty and VAT.

Preserved Fruits and Nuts – With a market interested in healthier foods, the fruit and nut market has grown 56.6% per year over the last five years on average. A total of \$34.3 million was imported from the US last year. Blueberries might be particularly interesting to higher-end distributors.

Sources: <u>US Foreign Agricultural Service</u> – UK Exporter Guide 2017

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<sup>&</sup>lt;sup>10</sup> WiserTrade US State Database

#### Regulation

As with other products, any food or beverage entering the EU must abide by EU regulations, which can differ significantly from US regulations. Such regulations include labeling standards. This is particularly true for food products. EU regulators may be slower to identify and address advances in genetic engineering, which may prevent products and their byproducts from being exported to EU nations. More information regarding EU food and beverage regulation can be found under the EU Food & Agriculture Import Regulations (FAIRS). FAS also note that additives, pesticides, and packaging may all be subject to EU standards.

## **Civilian Aerospace**

#### Overview

The UK's civilian aerospace sector is the second largest in the world, behind the US, valued at roughly \$41 billion in 2016. Most importantly to Maine companies, it is the states' largest export sector to the UK by value, at \$8.3 million in 2017. The sector is also the only UK manufacturing sector to have a trade surplus – all other UK manufacturing has been in deficit since 2003. British companies such as BAE systems, Rolls-Royce, and GKN are well-known within the UK and around the globe, and global companies such as Boeing (US), Airbus (EU), and Bombardier (CAN) have major presences within the UK market.

Sources: Export.gov UK Guide – Aerospace Products, ITA Top Markets Reports – Aircraft Parts

#### **Opportunities**

While the UK does have an established and world-class domestic industry, opportunity exists to break into the British aerospace market. The US Commercial Service reports a record backlog of orders for British companies, and suggests forming partnerships with existing companies in the market to help increase their capacity while also gaining a foothold and brand recognition in the country. Entry to the market may need to happen at a lower level of the supply chain than companies are accustomed to.

The 2009 US-EU Bilateral Aviation Safety Agreement (BASA) helps to streamline aircraft safety standards between the US and EU manufacturers. Certain aircraft parts under the agreement that have been approved by the Federal Aviation Administration (FAA) may be exported to the EU without any additional EU regulatory approval. Additionally, Parts Manufacturing Approval (PMA) program manufacturers have the unique advantage of being third-party manufacturers of replacement parts, able to potentially provide parts at a cheaper cost than OEM manufacturers. The US is the only country to have such a program, and American companies should look to take advantage of this competitive industry.

Sources: ITA Top Markets Reports – Aircraft Parts

#### **Sub-Sector Best Prospects**

Avionics, propulsion systems, and aero structures are still the leading sectors in the aerospace industry. Additionally, cloud computing software to assist in flight planning or fleet management has seen an increased demand.

3D Printing (additive manufacturing) has been identified as one of the best market opportunities for US companies, which may find customers for low-volume specialized parts. Components may include discs, hubs, spacers, seals, landing gear, and aircraft interior parts.

Composite lightweight materials are also finding a foothold in the British market, with innovative materials being adopted for their corrosion resistance, temperature resistance, and high strength properties. The US Commercial Service reports the UK Government has invested \$33 million to create a UK National Composites Centre at the University of Bristol for design and use of composites.

Sources: Export.gov UK Guide - Aerospace Products

# **Other Opportunities**

Beyond the industries highlighted above, the U.S. Commercial service sees further opportunities in the UK in sectors such as:

- Other Healthcare Products
- Nuclear Energy
- Pet Products
- Travel and Tourism
- Smart Grids
- Media and Entertainment

In Ireland, sectors such as electrical power systems, travel, and tourism have also been identified.

While these industries have all been identified as have great opportunities, there is no ruling out other sectors as well, given the right circumstances.

### **Additional Resources**

- Export.gov UK Guide
- Export.gov Ireland Guide
- International Trade Administration's Top Markets Guides
- USDA Foreign Agricultural Service's <u>UK Page</u> <u>Ireland Page</u>
- Export Development Canada's UK Page Ireland Page