

Article

# Modes of supply, UK experimental estimates: 2018

First exploratory estimates of UK trade in services by mode of supply, country and service type on a balance of payments basis using a new experimental dataset.

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# 1 . Main points

- Our new statistics estimate that approximately two-thirds of UK services exports, and half of UK services imports, were traded remotely in 2018 – that is, they did not involve the movement of people.
- Exports of financial services had the largest proportion of trade that was supplied remotely in 2018 at 89%.
- For imports, intellectual property had the largest proportion of trade that was supplied remotely in 2018 at 87%.
- Travel services, by definition, had the least amount of trade conducted remotely, with all associated trade flows allocated to “consumption abroad” – that is, customers travelling to another country.
- Personal, recreational and cultural services, and construction services are estimated to have the largest amounts of exports and imports conducted through the “presence of natural persons” – that is, suppliers’ personnel travelling to overseas customers.
- The USA is the UK’s largest trading partner – we estimate that 72% of UK exports to the USA were supplied remotely in 2018, while 64% of UK imports from the USA were provided remotely.

## 2 . Introduction

New statistics presented in this article have been achieved as part of our ambitious [trade development plan](#) to provide more detail than ever before about the UK’s trading relationships, using improved data sources and methods enabled by our new trade IT systems.

When thinking about trade, most people imagine lorries passing through ports. While this is true for trade in goods, this is not the case for trade in services, which are not physical. Trade in services statistics are by nature more challenging to measure, due largely to their intangible nature. While it is relatively straightforward to measure the number of cars that are imported and exported through UK ports, capturing the amount UK advertisers generate from providing services to overseas clients is much more challenging. Nevertheless, it is important that we continue to develop our trade in services statistics given the UK is an overwhelmingly services dominated economy.

While our trade in services statistics already record the type of products being traded (for example, financial services) and who it is being traded with (for example, Germany), policymakers are increasingly interested in how that trade is conducted. This type of information is critical for understanding what barriers businesses face when looking to trade, and to assist policymakers engaged in trade negotiations.

To increase the information available to users on how UK trade in services is conducted, we have been developing statistics on so-called “modes of supply”. The UK is one of the first countries to have developed such estimates.

This release presents our first ever experimental release of trade in services by modes of supply, which are broken down further by country and service type, on a balance of payments (BoP) basis. The release is accompanied by a detailed new dataset to help users explore how trade in services are delivered.

The methodology used to compile these experimental statistics can be found in [Section 5](#).

## 3 . Modes of supply categorise services by the way in which they are traded

## Mode 1: Remote trade

Where a supplier in one country sells a service to a customer in another, but without the movement of people. An example is UK legal or financial advice services being supplied by a UK business to overseas customers remotely by email or an online platform.

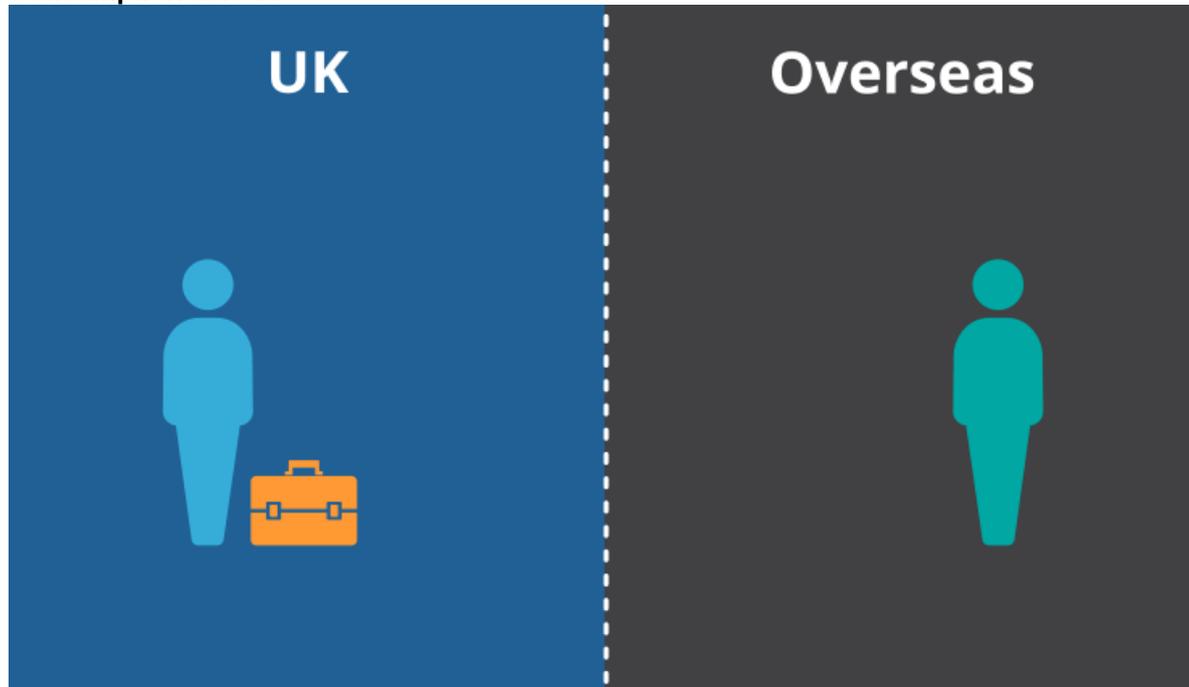
### Remote trade



## Mode 2: Consumption abroad

Where the person receiving the service travels to the supplier's country. For example, overseas citizens travelling to the UK and purchasing landmark tours.

## Consumption abroad



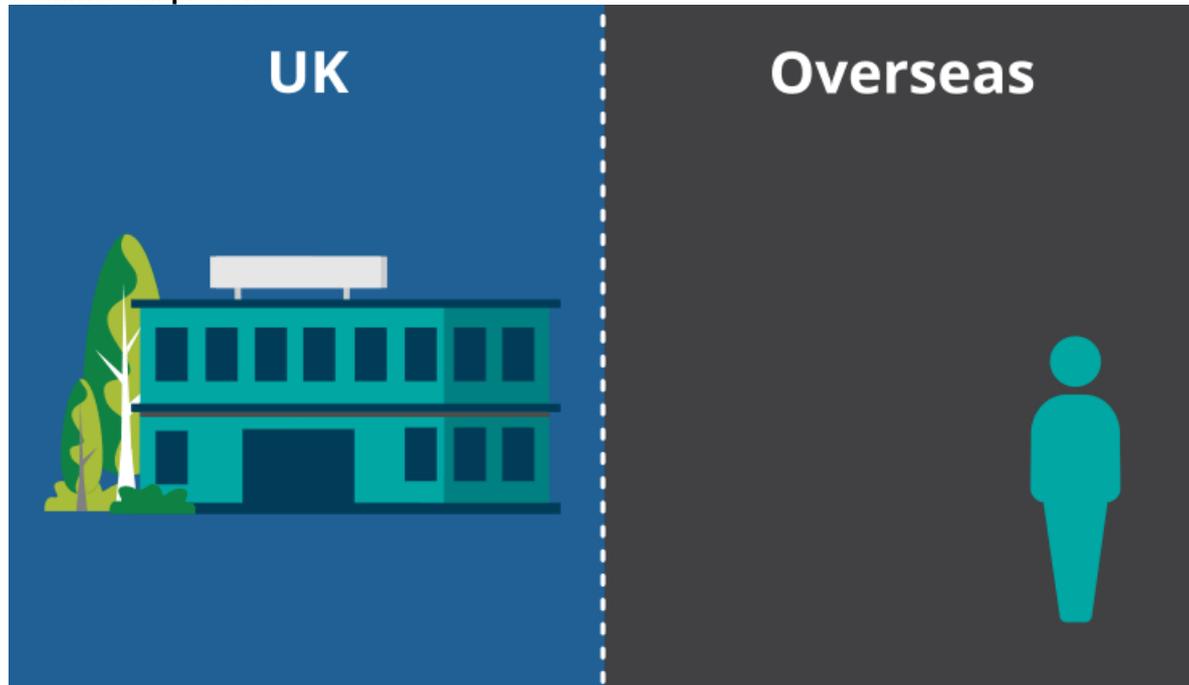
Source: Office for National Statistics

### Mode 3: Commercial presence

Where a foreign company sets up a subsidiary abroad to supply services to foreign customers directly in that country. For example, a UK telecoms company may establish a subsidiary in a foreign country to provide mobile phone services overseas.

It is worth noting that Mode 3, when a service is supplied through a commercial presence in the territory of another country, is not captured under trade in services recorded in the balance of payments – where the focus is on residency rather than economic ownership. As such, data on this mode are not included within this release given it is based on flows captured in data unrelated to traditional trade statistics, such as foreign affiliate statistics.

## Commercial presence



Source: Office for National Statistics

## Mode 4: Presence of natural persons

Where a foreign supplier sends its personnel to the customer's country to provide services. For example, a UK consultancy business may send its business analysts to an overseas customer's offices to provide its services.

### Presence of natural persons



Source: Office for National Statistics

## 4 . Things you need to know about this release

## Experimental statistics

It is important to emphasise that the statistics included within this release are experimental. The methodology used to compile the data are subject to future improvements. Further detail regarding the methodology used to compile the statistics can be found in [Section 5](#).

## Data

Data within this release provide estimates of trade in services only.

All data within this release are reported in current prices. Data within this release have been subject to rounding, so small rounding discrepancies may exist.

We are making data available to users through two datasets. Firstly, we publish country by mode of supply by total service type for 67 countries and country regional groupings (that is, EU, non-EU and whole world) and secondly, country region by service type (extended balance of payments (EBOPs) one-digit), by mode of supply. There are two files accompanying this release, one for exports and one for imports, each file contains both datasets.

To view the dataset for country by mode of supply, filter the dataset by service type “0 Total Services”. This will provide estimates by country for each mode of supply across all products. To view the dataset for region by mode of supply and service type, filter the data to include all service types other than “0 Total Services”.

## Trade asymmetries

These data are our best estimates of bilateral UK trade flows, compiled following internationally agreed standards and using a wide range of robust data sources. However, in some cases, alternative estimates of bilateral trade flows are available from the statistical agencies for those countries or through central databases such as [UN Comtrade](#). Differences between estimates are known as trade asymmetries and are a known aspect of international trade statistics, affecting bilateral estimates across the globe not just the UK.

We are heavily engaged in analysis of these asymmetries, developing strong bilateral relationships with other countries to understand, explain and potentially reduce them. We have produced a [series of analyses](#) showing comparisons and the relative strengths of different estimates, which users may wish to reference to help them better understand the quality of our bilateral trade estimates.

# 5 . Data and methodology

## Data

The dataset for the trade in services analysis released alongside this article was compiled by combining data from the International Trade in Services (ITIS) survey, the International Passenger Survey (IPS) and other non-survey services sources, with the proportion of Mode 1 supply collected on the annual ITIS survey and proportions of Mode 2 and Mode 4 estimated using [Eurostat's proportional allocation of EBOPS categories to modes of supply](#). The data are consistent with the [UK trade in services by partner country](#) publication released on 24 July 2019.

## Methodology

## ITIS

The 2018 annual ITIS survey was re-developed to include new questions to capture the percentage of services exported and imported remotely for 14 broad service categories. This allowed us to produce a proportion of remote trade (Mode 1) for each service type captured by the ITIS survey. Using [Eurostat's proportional allocation of EBOPS categories to modes of supply](#), we have assigned the remaining data by service type to either consumption abroad (Mode 2) or presence of natural persons (Mode 4).

Further information can be found in the separate [methodology article](#).

Please note that no country breakdowns are available from the modes of supply questions, so mode of supply proportions are assumed to be the same for each country.

## Non-ITIS

Modes of supply estimates of financial services and insurance and pension services are based on data collected via the ITIS survey for remote trade (Mode 1) proportions, with the remainder allocated to presence of natural persons (Mode 4).

For the remaining non-ITIS data sources – transport, travel and government services – the allocation of modes of supply is based on [Eurostat's proportional allocation of EBOPS categories to modes of supply](#).

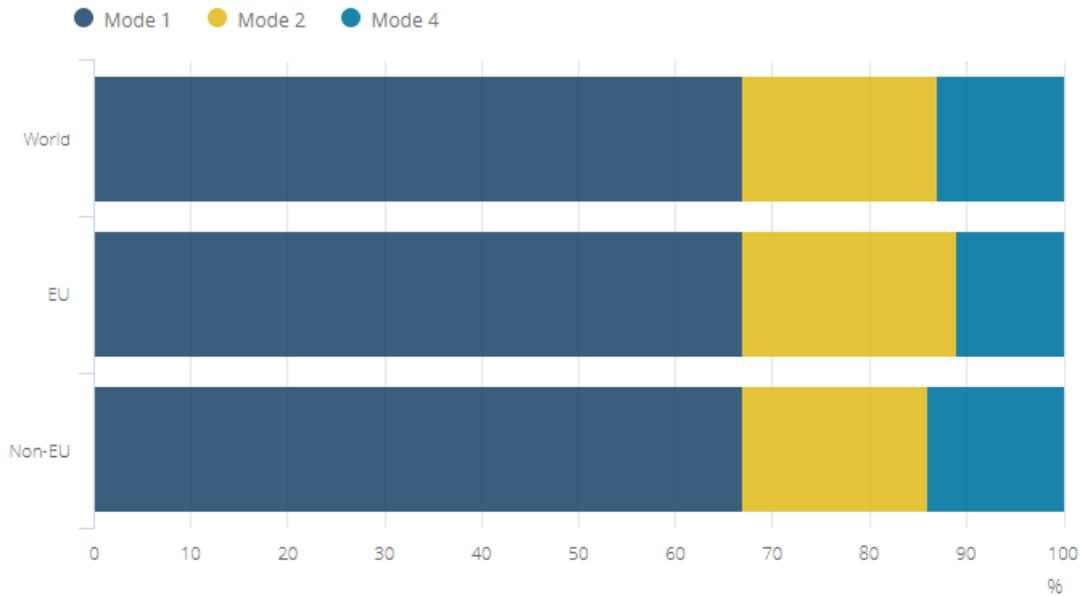
## 6 . Exports

Figure 1 presents our experimental estimates of the proportion of UK services exports by mode of supply in 2018.

Remote supply (Mode 1) made up 67% of total UK services exports in 2018. The proportion of remote trade in services was the same for both EU and non-EU countries at 67%. Consumption abroad (Mode 2) was the second-largest mode of supply, with 20% of total UK services exports conducted through this mode, followed by the presence of natural persons (Mode 4) with 13%.

**Figure 1: Remote supply (Mode 1) made up 67% of total UK services exports to the whole world in 2018**

**UK exports by modes of supply, 2018**



**Source: Office for National Statistics**

**Notes:**

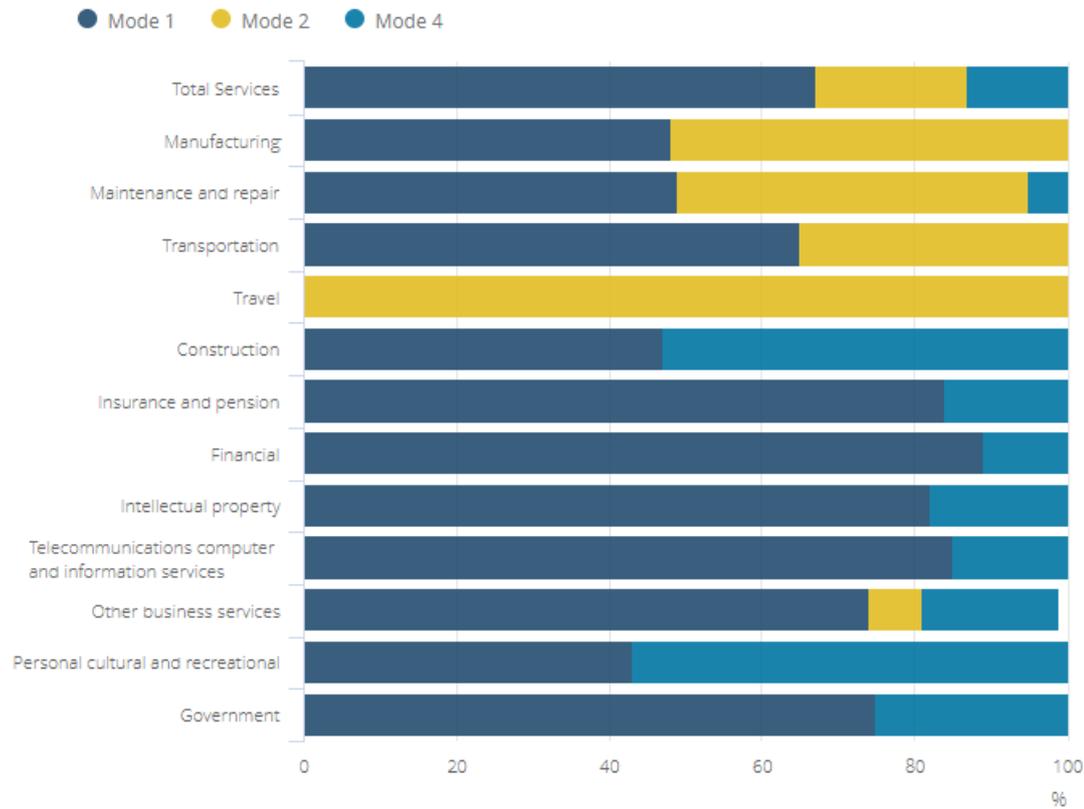
1. This analysis excludes Mode 3 trade (commercial presence).
2. Figures may not sum to 100 due to rounding.

Figure 2 presents modes of supply breakdowns for service types exported from the UK in 2018.

As shown in Figure 2, all travel is conducted by consumption abroad (Mode 2), reflecting that this is the only possible mode of delivery for this service account. For the remaining 11 service types, financial services had the largest proportion of remote supply (Mode 1) at 89%, followed by telecommunications, computer and information services at 85%. Personal, cultural and recreational services had the largest proportion of presence of a natural person (Mode 4) at 57%.

**Figure 2: Financial services had the largest proportion of remote supply (Mode 1) exports at 89%**

**Total exports of service type by modes of supply, 2018 percentage**



**Source: Office for National Statistics**

**Notes:**

1. This analysis excludes Mode 3 trade (commercial presence).
2. Figures may not sum to 100 due to rounding.

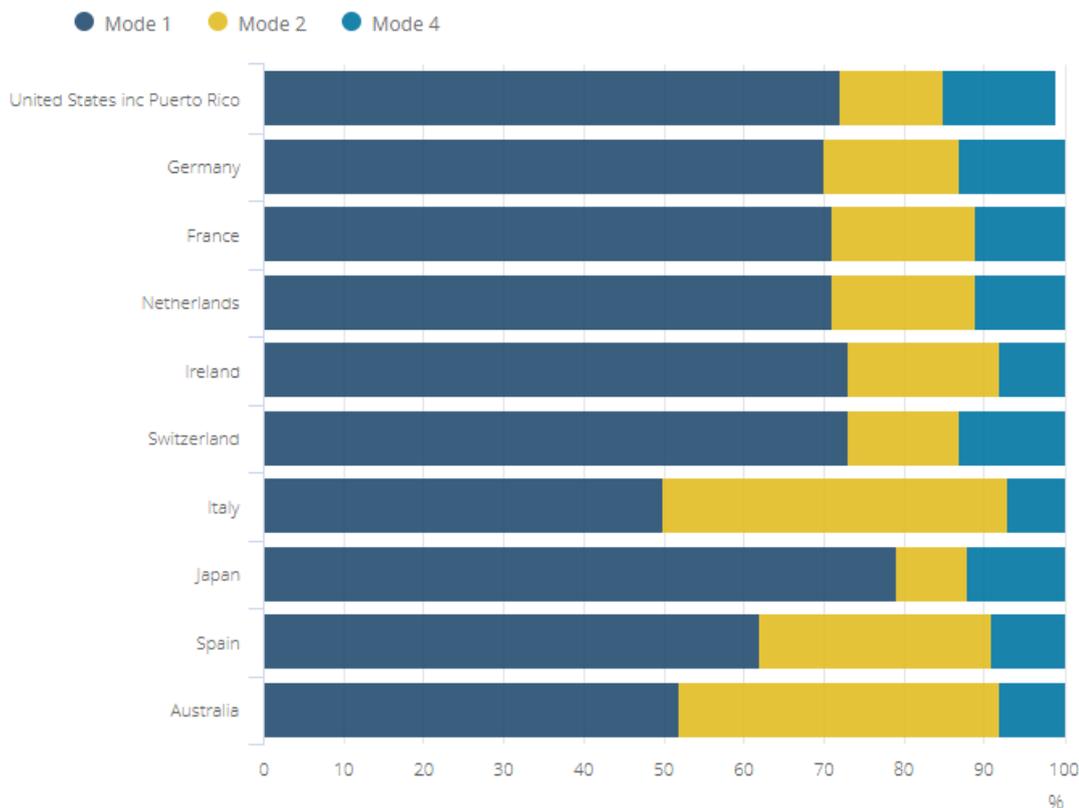
Figure 3 presents modes of supply breakdowns for the UK's top 10 export markets in 2018.

Approximately 72% of the UK services exported to our largest export partner, the USA, were done remotely. Presence of natural persons (Mode 4) was the second-largest mode at 14%, followed by consumption abroad (Mode 2) at 13%.

Of the top 10 countries, UK exports to Japan had the largest proportion of remote supply (Mode 1) at 79%, while exports to Italy had the smallest proportion at 50%.

**Figure 3: Remote supply (Mode 1) made up 72% of exports to the US in 2018**

**Top 10 exporting countries by modes of supply, 2018 percentage**



Source: Office for National Statistics

**Notes:**

1. This analysis excludes Mode 3 trade (commercial presence).
2. Figures may not sum to 100 due to rounding.

## 7 . Imports

Figure 4 presents our experimental estimates of the proportion of UK services imports by mode of supply in 2018.

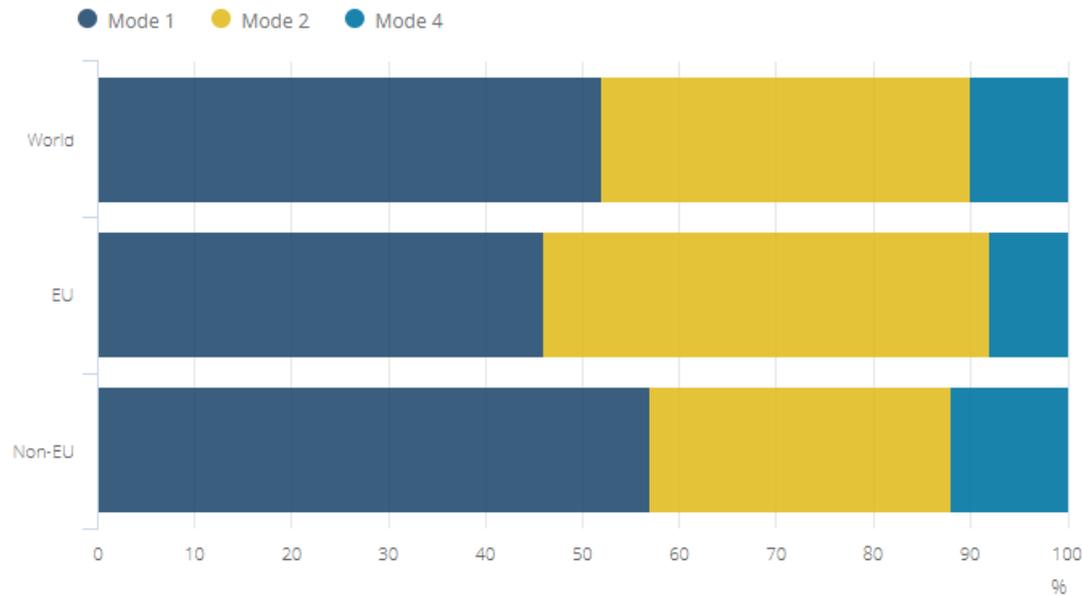
Our estimates suggest that just over half of UK imports were supplied remotely (Mode 1). This is notably lower than the proportion of exports that are estimated to be supplied remotely and is largely explained by the fact that services products that require movement of people – such as travel – account for a larger proportion of UK imports than exports.

In contrast to exports, the proportion of imports that are provided remotely does vary depending on region; while just 46% of UK imports from the EU were supplied remotely, this rose to 57% for imports from non-EU countries.

Consumption abroad (Mode 2) was the second-largest mode of supply, accounting for 38% of total UK services imports, followed by the presence of natural persons (Mode 4) at 10%.

**Figure 4: Remote supply (Mode 1) made up 52% of total services imports in 2018**

**UK imports by modes of supply, 2018**



**Source: Office for National Statistics**

**Notes:**

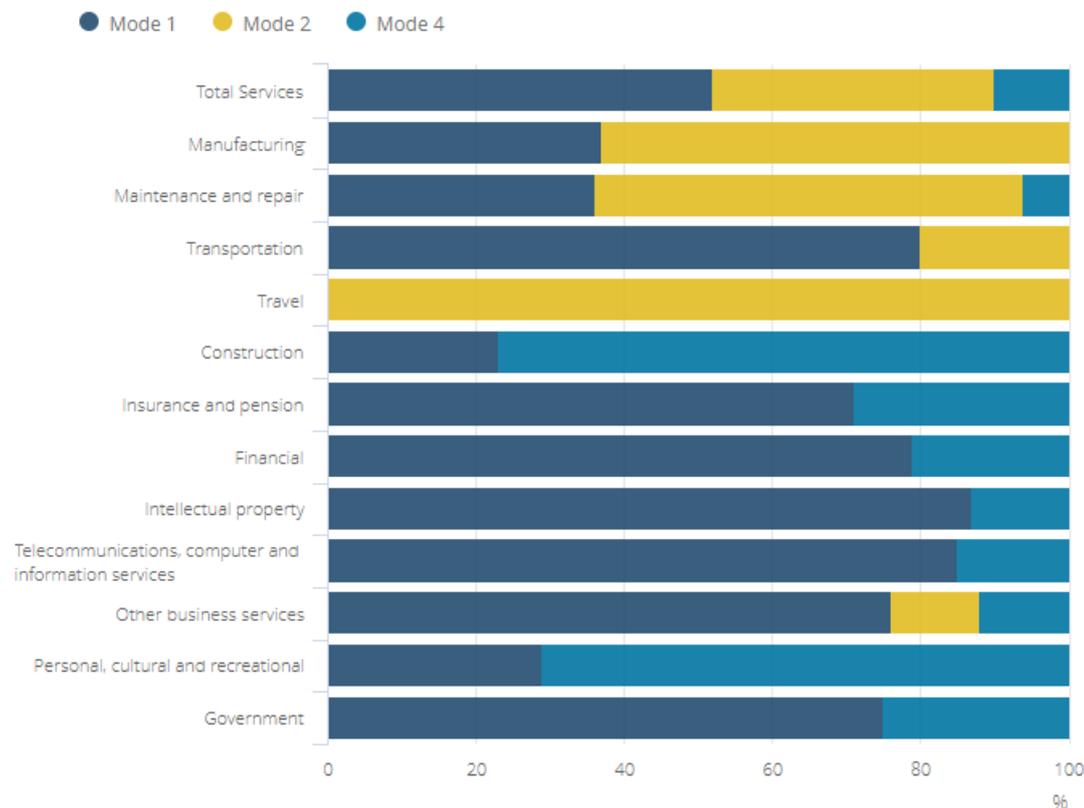
1. This analysis excludes Mode 3 trade (commercial presence).
2. Figures may not sum to 100 due to rounding.

Figure 5 presents modes of supply breakdowns for service types imported by the UK in 2018.

Similar to exports, travel is the only service type that is exclusively allocated to consumption abroad (Mode 2). Of the remaining 11 service types, intellectual property services had the largest proportion of remote trade (Mode 1), at 87%, followed by telecommunications, computer and information services, at 85%. Construction had the largest proportion of trade conducted through the presence of natural persons (Mode 4), at 77%.

**Figure 5: Intellectual property had the largest proportion of remote supply (Mode 1) imports at 87%**

**Total imports of service type by modes of supply, 2018 percentage**



Source: Office for National Statistics

**Notes:**

1. This analysis excludes Mode 3 trade (commercial presence).
2. Figures may not sum to 100 due to rounding.

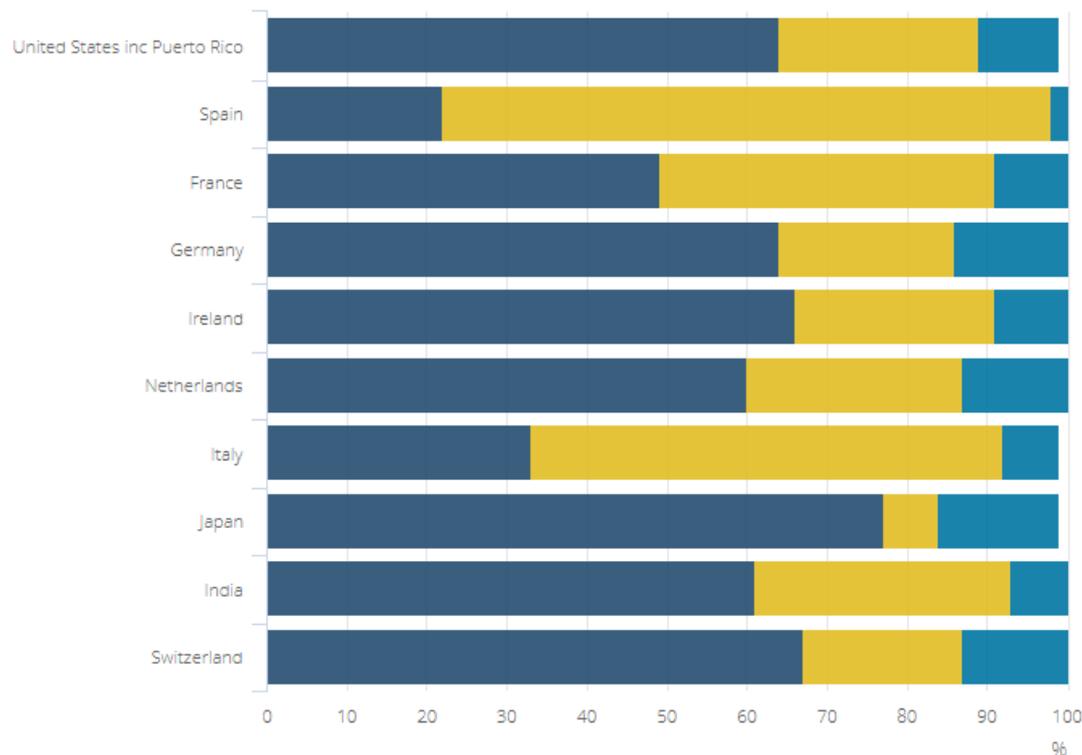
Figure 6 presents the proportions of modes of supply for the UK's top 10 importing countries in 2018.

The USA is our largest import trading partner and 64% of our imports were supplied remotely (Mode 1) in 2018. Consumption abroad (Mode 2) was the second-largest mode at 25%, followed by presence of natural persons (Mode 4) at 10%.

Of the top 10 countries, Japan had the largest proportion of remote supply (Mode 1) at 77%, while Spain had the smallest proportion at 22%. Spain's largest mode of supply was consumption abroad (Mode 2), which aligns with Spain being a major destination for UK tourists travelling abroad.

**Figure 6: Remote supply (Mode 1) made up 64% of imports from the US in 2018**

**Top 10 importing countries by modes of supply, 2018 percentage**



Source: Office for National Statistics

**Notes:**

1. This analysis excludes Mode 3 trade (commercial presence).
2. Figures may not sum to 100 due to rounding.

## 8 . Conclusions

We have developed these estimates in response to increasing policy demand and this release reflects an important milestone of our [trade development plan](#).

There are several areas that the Office for National Statistics (ONS) is considering to further develop the information on modes of supply, including:

- continuing modes of supply questions in future annual International Trade in Services (ITIS) surveys to develop an understanding of the changing nature of trade in services by modes of supply over time
- incorporating foreign affiliates statistics (FATS) for Mode 3, which is estimated by Eurostat to constitute the largest proportion of trade in services; this will allow us to provide the most comprehensive picture of how the UK trades its services
- exploring alternative data sources to supplement the modes of supply data collected through ITIS, such as [International migration statistics](#) and [Travel and tourism statistics](#), particularly to review the assumptions around Mode 2 and Mode 4

In addition, the ONS plans to continue to participate with Eurostat, the World Trade Organisation and the Organisation for Economic Co-operation and Development, as well as other National Statistics Institutes, to work on further improvements to mode of supply data, and to ensure our estimates continue to meet the guidelines and recommendations agreed upon internationally.