

# International trade in services QMI

Quality and methodology information for the International Trade in Services (ITIS) survey data detailing the strengths and limitations of the data, methods used, and data uses and users.

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# 1 . Output information

- National Statistic: yes
- Survey name: International Trade in Services
- Data collection: survey data
- Frequency: annual
- How compiled: survey
- Geographic coverage: UK
- Related publications: Annual International Trade in Services

## 2 . About this Quality and Methodology Information report

This quality and methodology report contains information on the quality characteristics of the data (including the European Statistical System five dimensions of quality) as well as the methods used to create it. The information in this report will help you to:

- understand the strengths and limitations of the data
- learn about existing uses and users of the data
- understand the methods used to create the data
- help you to decide suitable uses for the data
- reduce the risk of misusing data

## 3 . Important points

- International Trade in Services (ITIS) data measure the value of transactions of UK businesses by country of origin and destination.
- ITIS data are based solely on survey data.
- ITIS data are based on a quarterly sample of approximately 2,200 businesses and an annual sample of approximately 27,200 businesses.
- The annual results are supplemented by information collected via the Annual Business Survey (ABS).
- Data are collected by both industry and product on a geographical basis.
- The ITIS surveys are the main source of data for UK trade in services. ITIS data are an important element of the UK's [balance of payments \(BoP\)](#) and contribute towards the measure of [gross domestic product \(GDP\)](#).
- The surveys do not provide full coverage of the UK economy; excluded sectors are: travel and transport, banking and other financial institutions, higher education, and most activities in the legal professions.
- ITIS data are not seasonally adjusted.

## 4 . Quality summary

### Overview

International Trade in Services (ITIS) shows the import and export activity of UK companies overseas and is the main source of information for UK trade.

The ITIS survey collects company-level microdata on exports and imports of services products. The Office for National Statistics' (ONS) ITIS data are compliant with the latest international standards, as outlined in [The Manual on Statistics of International Trade in Services 2010 \(MSITS 2010\)](#) (PDF, 3.45MB).

Breakdowns are available by product, industry and geographical region. Products are classified using Extended Balance of Payments Services classification (EBOPS 2010). There are 52 products and 17 product groups.

The International Trade in Services (ITIS) survey is the main source of UK trade in services data, covering most industries but with a few exceptions:

- travel
- transport
- banking and other financial institutions
- higher education
- charities
- most activities within the legal profession

Data for the excluded industries are obtained from other sources and are not included in this dataset. Statistics presented are not seasonally adjusted.

The quarterly sample is made up of approximately 2,200 businesses and the annual sample is made up of approximately 27,200 businesses. The survey data from both the quarterly and annual results are combined to produce the [annual ITIS estimates](#) and are used as a main data source to compile total trade in services estimates.

In 2009, the ITIS survey incorporated the Film and Television survey, which was discontinued as a standalone survey in 2008. The ITIS survey is also supplemented by information collected via the [Annual Business Survey \(ABS\)](#) in relation to amounts paid or received for the imports or exports of services. Care is taken during the sampling and estimation process to avoid duplication between surveys.

ITIS data are collected by both industry and product on a geographical basis, by collecting data for the countries to which services are exported, and from where they are imported. These data are primarily used in the compilation of the services account for the UK's balance of payments (BoP), which in turn contributes towards the measure of UK gross domestic product (GDP). The ITIS estimates are published annually.

## Uses and users

The results of the annual and quarterly ITIS survey represent a main element of the BoP account and of GDP. The results are published in detail in the [ITIS annual publication](#). The results from the ITIS survey make up approximately 66% of total exports and 60% of total imports of the trade in services account for 2021.

As a condition of membership to the [International Monetary Fund \(IMF\)](#), the UK is obliged to provide detailed trade in services information. The [Organisation for Economic Cooperation and Development \(OECD\)](#) also requires a detailed geographical breakdown of trade in services products to allow for international analysis and comparison. The geographical data also allow the analysis of bilateral asymmetries between member states to take place. As such, businesses taking part in the ITIS survey are required to respond under the [Statistics of Trade Act 1947](#).

The data are also used by the ONS Supply and Use Production Branch within national accounts. Tables are provided containing industrial and non-industrial service breakdowns. They use the weighted flows of the industry and product matrix data from ITIS for the analyses of industrial and non-industrial services supplied by the ABS.

Finally, since 2019, the Subnational Trade team has been using the ITIS dataset to compile the [subnational trade in services dataset](#), which provides experimental estimated value of exports, imports and balance of services for International Territorial Level: ITL1, ITL2, ITL3, and city regions, including industry and partner country.

Government and business users also use the data for economic assessment. [Department for International Trade \(DIT\)](#) (now the Department for Business and Trade) states that the ITIS survey is the only source of product detail for UK services and is essential for UK regional exports analyses. DIT also use the ITIS survey data to monitor the competitiveness of UK businesses and to gain a better understanding of the level of service exports.

In addition, the [Scottish Government \(SG\)](#) also show significant interest in the survey results to supplement Scotland's [Global Connections Survey \(GCS\)](#). The [Department for Culture, Media and Sport \(DCMS\)](#) use the ITIS data in one of their main outputs, the [Creative Industries statistical bulletin](#).

## Strengths and limitations

### Strengths

- Product-level detail is published at both world total and sector level.

The ITIS survey is the only source of product detail for UK services and is essential for UK regional exports analyses.

## Limitations

- ITIS data are not representative of the whole economy; travel, transport and banking sectors are excluded.
- Only select countries are published, not a full geographic breakdown.
- Some published tables contain high volumes of suppressed data as a result of disclosure being applied.
- Sector-only estimates are published, not industry-level estimates.
- It is a sample survey, not a census.

## Recent improvements

In the 2019 annual sample, regional boosts for Wales and Scotland were introduced to the sample to increase the representation of those regions. These boosts have also been funded up to the 2022 sample, but it is not certain if these will be included in future years.

An additional sample boost was funded by the Office for National Statistics (ONS) subnational trade team for the 2021 sample to increase the representation of subnational trade. This boost has also been funded up to the 2022 sample, but it is not certain if it will be included in future years.

For 2020 collection onwards, [the ITIS sample was expanded to include microbusinesses](#) (those with an employment count below 10). This covers Great Britain and Northern Ireland. Data from microbusinesses are not yet included in official trade in services statistics, but the impact of this change on balanced gross domestic product (GDP) estimates is expected to be published in autumn 2025.

For 2021 collection onwards, the ITIS sample has been expanded to include new industries (notably in the financial sector and higher education). For 2022 collection onwards, the ITIS sample has also expanded to cover transport and travel industries. The data covering these industries are not yet included in official trade in services statistics but are expected to be included in autumn 2025 for education and finance, and transport and travel.

## 5 . Quality characteristics of the international trade in services data

This section provides a range of information that describes the quality and characteristics of the data and identifies issues that should be noted when using the output.

## Relevance

The International Trade in Services (ITIS) data are a major source of data for UK trade, which is a main economic indicator because of the importance of international trade to the UK economy.

The conceptual framework of the ITIS data corresponds to that of the International Monetary Fund (IMF) [Balance of Payments Manual sixth edition \(BPM6\)](#). It is also compliant with the latest international standards, as outlined in [The Manual on Statistics of International Trade in Services 2010 \(MSITS 2010\)](#) (PDF, 3.45MB). Both provide objective and coherent international standards to make data for the UK and other countries comparable, reflecting the needs of international and domestic users.

The UK economic territory excludes the Channel Islands and the Isle of Man, which have their own fiscal and monetary authorities. BPM6 was compiled in close co-operation with Eurostat, the Organisation for Economic Cooperation and Development (OECD), the United Nations and the World Bank.

The ITIS data, as a component of UK trade data, form part of the broader system of UK National Accounts. The international standard for national accounts is the System of National Accounts 2008 (SNA08) jointly published by the same organisations. The EU published its own version of SNA08, European System of National Accounts 2010 (ESA 2010), upon which the UK's National Accounts are based. BPM6, SNA08 and ESA 2010 are consistent.

The main users of the ITIS dataset are: the [Department for International Trade \(DIT\)](#) (now the Department for Business and Trade), the [Scottish Government \(SG\)](#), the [Welsh Government \(WG\)](#), the [Northern Ireland Statistics and Research Agency \(NISRA\)](#) and the [Department for Culture, Media and Sport \(DCMS\)](#).

## Accuracy and reliability

There is no simple way of measuring the accuracy of ITIS statistics, that is, the extent to which they measure the underlying "true" value for a particular period. [Non-sampling errors](#) are not easy to quantify and include errors of coverage, measurement, processing and non-response. Various procedures and checks are made to ensure these errors are minimised.

As ITIS is based on survey responses, the Office for National Statistics' (ONS) systems validate these entries and prompt confirmation of suspect data are sought. [Standard errors](#) are an estimate of the sampling error and provide a measure of the precision of the estimate. A low standard error indicates a precise estimate. To aid comparison, the standard error is also expressed as a percentage of the total value, allowing the standard error to be put in context.

Standard errors will be added to the QMI at a later date.

## Coherence and comparability

Coherence is the degree to which data that are derived from different sources or methods, but refer to the same topic, are similar. Comparability is the degree to which data can be compared over time and domain, for example, geographic level.

Every effort is made to ensure that the series are comparable over time. International standards (BPM6) are used in the production of ITIS data; therefore, figures published by the UK should be comparable with other countries. UK representation in international working groups help ensure that the UK is synchronised with any changes along with other countries.

## Accessibility and clarity

Accessibility is the ease with which users are able to access the data, also reflecting the format in which the data are available and the availability of supporting information. Clarity refers to the quality and sufficiency of the release details, illustrations and accompanying advice.

The annual survey data are published in the publication [International Trade In Services](#), which is available from the ONS.

Our recommended format for accessible content is a combination of HTML webpages for narrative, charts and graphs, with data being provided in usable formats such as CSV and Excel. Our website also offers users the option to download the narrative in PDF format. In some instances, other software may be used, or may be available on request.

Available formats for content published on our website but not produced by us, or referenced on our website but stored elsewhere, may vary. For further information please refer to the contact details at the beginning of this report. From the 2022 publication (covering 2021 data) onwards, the ITIS dataset will be published in accessible format allowing computed-assisted reading technologies.

For information regarding conditions of access to data, please refer to:

- [terms and conditions](#) (for data on the website)
- [copyright and reuse of published data](#)
- [accessibility](#)

Access to microdata can be requested via the [Secure Research Service \(SRS\)](#).

Further queries can be addressed to the ITIS public enquiry team by email to: [itis@ons.gov.uk](mailto:itis@ons.gov.uk).

## Timeliness and punctuality

Timeliness refers to the lapse of time between publication and the period to which the data refer. Punctuality refers to the gap between planned and actual publication dates.

The Annual ITIS dataset is published on our website 13 months after the end of the reference year.

For more details on related releases, our [release calendar](#) provides 12 months' advance notice of release dates. Publication dates for ITIS are fixed, but, in the unlikely event of a change to the pre-announced release schedule, public attention will be drawn to the change and the reasons for the change will be explained fully at the same time, as set out in the [Code of Practice for Statistics](#).

## Concepts and definitions (including list of changes to definitions)

Concepts and definitions describe the legislation governing the output and a description of the classifications used in the output.

The ITIS survey is mandatory and is collected under the [Statistics of Trade Act 1947](#). Detailed [Standard Industrial Classification: SIC 2007](#) is available. Data are collected in accordance with the latest edition of the Balance of Payments: BPM6 manual.

Table 2: Geographical groupings used in the International Trade in Services (ITIS) Survey

<b>Europe</b>	<b>The Americas</b>	<b>Asia</b>	<b>Australasia, Oceania and Polar Regions</b>	<b>Africa</b>
<b>Specified countries</b>	<b>Specified countries</b>	<b>Specified countries</b>	<b>Specified countries</b>	<b>Specified countries</b>
Austria	Brazil	China	Australia	Nigeria
Belgium	Canada	Hong Kong	New Zealand	South Africa
Bulgaria	Mexico	India		
Croatia	United States (Including Puerto Rico)	Indonesia	Other countries	Other countries
Cyprus		Israel	American Samoa	Algeria
Czechia	Other countries	Japan	Antarctica	Angola
Denmark	Anguilla	Malaysia	Bouvet Island	Benin
Estonia	Antigua And Barbuda	Pakistan	Christmas Island	Botswana
Finland	Argentina	Philippines	Cocos (Keeling) Islands	British Indian Ocean Territory
France (Including Monaco)	Aruba	Saudi Arabia	Cook Islands	Burkina Faso
Germany	Barbados	Singapore	Fiji	Burundi
Greece	Belize	South Korea	French Polynesia	Cameroon
Guernsey	Bermuda	Taiwan	French Southern and Antarctic Lands	Cape Verde
Hungary	Bolivia	Thailand	Guam	Central African Republic
Iceland	Bonaire, Sint Eustatius And Saba		Heard Island and Mcdonald Islands	Chad
Ireland	Cayman Islands	Other countries	Kiribati	Comoros
Isle Of Man	Chile	Afghanistan	Marshall Islands	Congo
Italy	Colombia	Armenia	Micronesia	Congo (Democratic Republic)
Jersey	Costa Rica	Azerbaijan	Nauru	Djibouti
Latvia	Cuba	Bahrain	New Caledonia	Egypt
Liechtenstein	Curacao	Bangladesh	Niue	Equatorial Guinea
Lithuania	Dominica	Bhutan	Norfolk Island	Eritrea
Luxembourg	Dominican Republic	Brunei	Northern Mariana Islands	Eswatini
Malta	Ecuador	Cambodia	Palau	Ethiopia
Netherlands	El Salvador	East Timor	Papua New Guinea	Gabon
Norway	Falkland Islands	Georgia	Pitcairn	Ghana
Poland	Greenland	Iran	Samoa	Guinea
Portugal	Grenada	Iraq	Solomon Islands	Guinea-Bissau
Romania	Guatemala	Jordan	South Georgia And The South Sandwich Islands	Ivory Coast

Russia	Guyana	Kazakhstan	Tokelau	Kenya
Slovakia	Haiti	Kuwait	Tonga	Lesotho
Slovenia	Honduras	Kyrgyzstan	Tuvalu	Liberia
Spain	Jamaica	Laos	Us Minor Outlying Islands	Libya
Sweden	Montserrat	Lebanon	Vanuatu	Madagascar
Switzerland	Nicaragua	Macao	Wallis And Futuna	Malawi
Turkey	Panama	Maldives	Polar Regions	Mali
	Paraguay	Mongolia		Mauritania
Other countries	Peru	Myanmar (Burma)		Mauritius
Albania	Sint Maarten	Nepal		Morocco
Andorra	St Kitts And Nevis	North Korea		Mozambique
Belarus	St Lucia	Oman		Namibia
Bosnia And Herzegovina	St Vincent	Palestinian Territory		Niger
Gibraltar	Suriname	Qatar		Rwanda
Moldova	The Bahamas	Sri Lanka		Sao Tome And Principe
Montenegro	Trinidad And Tobago	Syria		Senegal
North Macedonia	Turks And Caicos Islands	Tajikistan		Seychelles
San Marino	Uruguay	Turkmenistan		Sierra Leone
Serbia	Venezuela	United Arab Emirates		Somalia
Ukraine	Virgin Islands, British	Uzbekistan		South Sudan
Vatican City State	Virgin Islands, U.S.	Vietnam		St Helena, Ascension And Tristan Da Cunha
		Yemen		Sudan
				Tanzania
				The Gambia
				Togo
				Tunisia
				Uganda
				Zambia
				Zimbabwe

Source: Office for National Statistics

## Output quality

This provides a range of information that describes the quality of the outputs and details any points that should be noted when using the output. We have developed guidelines for measuring statistical quality; these are based upon the five European Statistical System (ESS) quality dimensions covered in this section.

## Why you can trust our data

The ONS is the UK's largest independent producer of statistics and is the country's national statistics institute. The [Respondent Charter for Business Services](#), available on the ONS website, detail how data are collected, secured and used in the publication of statistics. We treat the data that we hold with respect, keeping it secure and confidential, and we use statistical methods that are professional, ethical and transparent. More information about our [data policies](#) is available.

## 6 . Methods used to produce the international trade in services data

### How we collect the data, main data sources and accuracy

#### Data collection

Annual International Trade in Services (ITIS) data are collected using digital questionnaires with manual input of data onto the system, while quarterly ITIS data are input via batch take on from Quarter 1 (Jan to Mar) 2017.

To improve the efficiency of the survey operations and reduce the burden on respondents, Telephone Data Entry (TDE) is now being used for all annual respondents to register a nil response.

Data relating to the import or export of goods are excluded from this survey as they are already collected in the estimates for [UK trade](#). However, merchanting (earnings from arranging the sale of goods between two countries outside the UK and where the goods never physically enter the UK) are included along with earnings from commodity trading. As with merchanting, the services element is calculated as the businesses' profit minus the loss.

#### Response

Written reminders are issued to non-responders, which are subsequently followed by telephone reminders to try to minimise non-response and any associated non-response bias. The ITIS survey is covered under the Statistics of Trade Act 1947, meaning legal action can be taken against persistent non-responders, though we prefer to work together with businesses to produce the necessary information. Response rate targets are 85% for both annual and quarterly ITIS.

### How we process the data

#### Annual ITIS Processing Cycle based on 2021 as the reference period:

- selection: September to October 2021
- dispatch forms: January 2022
- close for provisional results: June 2022 (not included in 2022)
- deliver provisional results: August 2022
- close for final results: September to October 2022
- deliver final results: November to December 2022
- benchmark quarterly data using 2020 estimates: November to December 2022
- ITIS statistical dataset published: January to February 2023

## How we analyse and interpret the data

Analysis of ITIS is carried out at a number of levels to limit the margin for error. This is carried out at product, country, industry and concern level. Concern is an identifier used to determine which part of the sample reporting units are found in.

## How we quality assure and validate the data

### Validation

Returned information is run through a series of checks to identify errors. These checks ensure that:

- responses to individual questions are consistent within the questionnaire, that is, totals equate to the sum of the parts
- the return is consistent with historical data from the business

### Data clearance

Data clearance is the point at which data become error-free. The target clearance rates for both annual and quarterly ITIS are 98% of the achieved response by the agreed closedown date.

### Outliers

The method of outlier detection and treatment is based on the principle of Winsorisation. The aim is to identify the sample observations, which are felt not to be representative of unsampled companies. Outlier values are identified and modified before estimation using one-sided Winsorisation (since there are no negative values given as part of ITIS).

### Imputation

Imputation takes place when sampled respondents do not respond. Two methods of imputation are used by ITIS. Ratio imputation is used where historical data for a non-responder are present; data are taken from the previous corresponding periods and updated by the average growth within the same cell (that is, among similar businesses in terms of industry and size). Mean or median imputation is used where no historical data are present; an imputed value is calculated by averaging returns from within the same cell as the non-responder.

### Estimation

For the annual survey, Horvitz-Thompson estimation is used to produce estimates for the entire population from sampled data. Estimates are produced separately for each industry by employment stratum and aggregated to produce high-level estimates.

The exception is the data obtained from the Annual Business Survey (ABS). Estimation is performed by multiplying design-weighted responses by the imputation weight and aggregating to the appropriate level.

### Disclosure

[Statistical disclosure control](#) methodology is applied to ITIS survey data. This ensures that information attributable to an individual or individual organisation is not identifiable in any published outputs. The [Code of Practice for Statistics](#) and specifically the Principle on Confidentiality set out practices for how we protect data from being disclosed. The Principle includes the statement that the ONS outputs should "ensure that official statistics do not reveal the identity of an individual or organisation or any private information relating to them, taking into account other relevant sources of information".

## How we disseminate the data

ITIS data are published annually in the annual ITIS dataset. It also forms part of UK trade outputs, [UK Economic Accounts](#), [UK balance of payments: The Pink Book](#), and [UK trade](#).

## How we review and maintain the data processes

Previous data are used to ensure the quality of the data time series. For example, at the aggregate level (country, industry, product and product group), checks are undertaken to ensure the latest years are comparable as part of the time series in comparison with previous year values. If not, data queries are sent to understand drivers behind movements in the data.

## 7 . Cite this methodology

Office for National Statistics (ONS), released 9 February 2023, ONS website, methodology, [International trade in services Quality and Methodology Information](#)