

Data requirements for the topic "Global value chains"

Disclaimer: the data requirements described below reflect the current proposal as discussed on the technical level. It may be subject to change towards the first Implementing/Delegated Act, as well as in each following Implementing/Delegated Acts due to the dynamic character of the topic.

Elements of the data to be transmitted for the topic "Global value chains"

Statistical unit	Enterprise
Measurement unit	absolute figures
Reference period	Three calendar years
Statistical population	<p>Activity coverage:</p> <p>Market producers of NACE Sections B to N and P to R and divisions 95 and 96</p> <p>Size class coverage:</p> <p>Enterprises with 50 or more persons employed.</p> <p>1% rule may be applied</p>
Breakdowns	<p><u>Combination of breakdowns to be detailed in the delegated act laying down the subjects and characteristics in accordance with article 6(X) of Regulation No XX/XXXX</u></p> <p><i>Activity breakdown</i></p> <p>NACE Section level + special aggregates (<i>to be enumerated</i>)</p> <p><i>Business function breakdown:</i> Core business function: production of goods and/or services for the market; Support business functions: distributions and logistics; marketing, sales services and after sales services, incl. help desks and call centres; ICT services; administrative and management functions; R&D, engineering and related technical services; other support functions</p> <p><i>Geographical breakdown:</i> EU15, EU13, Russia, other European countries, China, India, Oceania and other Asian countries, USA and Canada, Rest of the world</p>
Data transmission deadlines	T+18M
First reference period	<i>To be determined</i>

Subjects and their characteristics for the topic "Global value chains"

1. The subjects to be covered for the reference year X and the reference period X-2 to X, shall be the following:
 - (a) Information about the group structure of the enterprise
 - (b) Employment in the enterprise by business function
 - (c) Domestic sourcing of business functions
 - (d) International sourcing of business functions
 - (e) Motivations and barriers for sourcing
 - (f) International back-sourcing of business functions
 - (g) International organisation of activities by business function in the foreign affiliates of the reporting enterprise

2. The following enterprise characteristics shall be collected:
 - (a) Information about the group structure of the enterprise in year X
 - (i) Part of an enterprise group,
 - (ii) Controlled by another enterprise in the group
 - (iii) Location of the global group head of the enterprise group: in own country, other EU-country, outside EU
 - (b) Employment in the enterprise by business function in year X
 - (i) Number of persons employed by business function
 - (c) Domestic sourcing of business functions in period X-2 to X
 - (i) Domestic sourcing by business functions
 - (d) International sourcing of business functions in period X-2 to X
 - (i) International sourcing of business functions by kind of business partner (enterprise within the enterprise group abroad, enterprise outside enterprise group abroad)
 - (ii) International sourcing of business function by geographical area
 - (iii) Number of jobs lost due to international sourcing by business function
 - (e) Motivations and barriers for sourcing in period X-2 to X
 - (i) Motivation factors broken down into 'very important', 'important' and 'not important':
 - Reduction of labour costs
 - Reduction of costs other than labour costs
 - Access to new markets
 - Lack of qualified labour
 - Access to specialised knowledge/technologies
 - Improved quality or introduction of new products
 - Focus on core business
 - Reduced delivery times
 - Less regulation affecting the enterprises, e.g. less environmental regulation
 - Strategic decision taken by the group head
 - (ii) Barriers
 - Legal or administrative barriers
 - Taxation issues, tariffs and trade barriers
 - Access to finance or other financial constraints
 - Linguistic or cultural barriers

- Proximity to existing clients needed
- Difficulties in identifying potential/suitable providers abroad
- Uncertainty of the quality of the products/services to be supplied abroad
- Concerns about the employees (including the trade unions)
- Overall concerns of the sourcing operation exceeding expecting benefits

Optional

- Lack of management resources and know-how
 - Missing documentation of own products and processes
- (f) International backsourcing of business functions in period X-2 to X
- (i) International backsourcing of functions to home country from abroad
 - (ii) International backsourcing by business function
 - (iii) Factors influencing decision to source back functions broken down into 'very important', 'important' and not 'important'
 - Difficult to manage due to physical distance, language and cultural differences
 - Insufficient quality of product/service at the foreign location
 - Low labour productivity at the foreign location, lack of qualified personnel at the foreign location, too long delivery time to customers
 - Problems with supplier flexibility and ability to supply
 - Higher than expected costs involved in sourcing activities
 - Strategic decision taken by the group head
 - (iv) International relocation other than backsourcing by enterprise
 - (v) International relocation by business function and geographical breakdown
- (g) International organisation of activities in the foreign affiliates of the reporting enterprise in period X
- (i) Control of foreign affiliates outside of home country
 - (ii) Control of foreign affiliates abroad by business function and geographical breakdown
 - (iii) Employment in foreign affiliates by business function and geographical breakdown

3. The following enterprise background characteristics for all enterprises shall be collected or obtained from alternative sources:

- main economic activity of the enterprise, in the previous calendar year,
- average number of employees and self-employed, in the previous calendar year,

Data requirements for the topic "Innovation"

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Elements of the data to be transmitted for the topic "Innovation"

Statistical unit	enterprise
Measurement unit	absolute figures or national currency
Reference period	Three calendar years ending to each even year
Statistical population	<p>Activity coverage: NACE Sections B to E, H, J and K and divisions 46, 71, 72 and 73</p> <p>Size class coverage: Enterprises with 10 or more persons employed.</p>
Breakdowns	<p><u>Activity breakdown</u></p> <p>Aggregates of Sections and divisions as well as Sections and divisions: B+C+D+E+46+H+J+K+71+72+73, B+C+D+E, B, C, 10+11+12, 13+14+15, 16+17+18, 19, 20, 21, 22+23, 24+25, 26, 27, 28, 29+30, 31+32+33, D, E, 46+H+J+K+71+72+73, 46, H; J; 58+59+60, 61, 62+63, K, 71, 72, 73, 71+72+73</p> <p><u>Combined activity and size class of number of employees and self-employed</u></p> <p><i>Activity breakdown:</i></p> <p>Aggregates of Sections and divisions as well as Sections and divisions: B+C+D+E+46+H+J+K+71+72+73, B+C+D+E, B, C, D, E, 46+H+J+K+71+72+73, 46; H, J, K, 71+72+73</p> <p><i>Size class of employees and self-employed breakdown:</i></p> <p>10-49, 50-249, 250+</p>
Data transmission deadlines	T+14M
Data requirement type	Mandatory except for subjects and characteristics indicated as optional in the delegated act laying down subjects and characteristics
First reference period	<i>To be determined</i>

Subjects and their characteristics for the topic "Innovation"

1. The subjects to be covered for the reference year XXXX, shall be the following:
 - (a) Innovation activities;
 - (b) Product innovations
 - (c) Net turnover from product innovations
 - (d) Type of cooperation for innovation
 - (e) Expenditures related to product and/or process innovation activities
 - (f) Type of developers for innovation;
 - (g) Objectives for innovation
 - (h) Sources of information for innovation
 - (i) Hampering factors for innovation.

2. The following enterprise characteristics shall be collected:
 - (a) Innovation activities
 - (i) for all enterprises:
 - innovation active
 - non-innovation active
 - (ii) for innovation active enterprises:
 - process innovator
 - product innovator
 - organisational innovator
 - marketing innovator
 - ongoing product or process innovation activities only
 - abandoned product or process innovation activities only
 - ongoing and abandoned product or process innovation activities
 - product and/or process innovator (including enterprises with abandoned and/or ongoing activities)
 - (b) Product innovations
 - (i) New or significantly improved to your market
 - (ii) Only new or significantly improved to your firm
 - (c) Net turnover from product innovations
 - (i) From product innovations new or significantly improved to your market
 - (ii) From product innovations only new or significantly improved to your firm
 - (d) Type of cooperation for innovation
 - (i) Other enterprises within your enterprise group
 - (ii) Suppliers of equipment, materials, components or software
 - (iii) Clients or customers from the private sector
 - (iv) Clients or customers from the public sector
 - (v) Competitors or other enterprises in your sector
 - (vi) Consultants or commercial labs
 - (vii) Universities or higher education institutes
 - (viii) Government, public or private research institutes
 - (e) Expenditures related to product and/or process innovation activities
 - (i) In-house R&D
 - (ii) External R&D
 - (iii) Acquisition of machinery, equipment; software and buildings

- (iv) Acquisition of knowledge from other enterprises or organisations
- (v) All other innovation activities including design, training, marketing, and other relevant activities
- (f) Type of developers for innovation (separate simultaneously process and product innovators);
 - (i) Your enterprise by itself
 - (ii) Your enterprise together with other enterprises or organisations
 - (iii) Your enterprise by adapting or modifying goods or services originally developed by other enterprises or organisations
 - (iv) Other enterprises organisations
- (g) Objectives for innovation broken down into 'highly important' and 'not relevant' (optional)
 - (i) decrease in costs
 - (ii) increase in market share
 - (iii) increase in profit margins
 - (iv) increase in turnover
- (h) Sources of information for innovation broken down into 'highly important' and 'not relevant' (optional)
 - (i) information from clients or customers from the private sector
 - (ii) information from clients or customers from the public sector
 - (iii) information from competitors or other enterprises in your sector
 - (iv) information from conferences, trade fairs, exhibitions
 - (v) information within the enterprise or enterprise group
 - (vi) information from Government, public or private research institutes
 - (vii) information from consultants or commercial labs
 - (viii) information from scientific journals and trade/technical publications
 - (ix) information from professional and industry associations
 - (x) information from suppliers of equipment, materials, components or
 - (xi) information from universities or other higher education institutes
- (i) Hampering broken down into 'highly important' and 'not relevant' (optional)
 - (i) high costs of access to new markets
 - (ii) innovations introduced by competitors
 - (iii) dominant market share held by competitors
 - (iv) lack of adequate finance
 - (v) lack of demand
 - (vi) strong price competition
 - (vii) lack of qualified personnel
 - (viii) strong competition on product quality
 - (ix) high costs of meeting regulations

3. The following enterprise background characteristics for all enterprises shall be collected or obtained from alternative sources:

- main economic activity of the enterprise, in the **previous** calendar year,
- average number of employees and self-employed, in the **previous** calendar year,
- total value of net turnover excluding VAT, in the **previous** calendar year.

Data requirements for the topic "ICT-usage and e-commerce"

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Elements of the data to be transmitted for the topic "ICT-usage and e-commerce"

Statistical unit	enterprise
Measurement unit	absolute figures, except for characteristics related to expenditure or turnover national currency (thousands)
Reference period	calendar year of the adoption of the delegated act laying down the subjects and characteristic for the characteristics referring to the previous calendar year calendar year following the year of adoption of the delegated act laying down the subjects and characteristics for the other characteristics.
Statistical population	Activity coverage: NACE Sections C to J, L to N and group 95.1 Size class coverage: Enterprises with 10 or more employees and self-employed persons. Enterprises with less than 10 employees and self-employed persons may be covered optionally
Breakdowns	<i>Activity breakdown</i> for possible calculation of national aggregates: aggregates of NACE sections C, D, E, F, G, H, I, J, L, M, N, aggregates of NACE divisions or groups, 10 + 11 + 12 + 13 + 14 + 15 + 16 + 17 + 18, 19 + 20 + 21 + 22 + 23, 24+25, 26+27+28+29+30+31+32+33, 35+36+37+38+39, 41+42+43, 45+46+47, 47, 49+50+51+52+53, 55, 58+59+60+61+62+63, 68, and aggregate of the divisions and groups 26.1+26.2+26.3+26.4, 26.8, 46.5, 58.2, 61, 62, 63.1, 95.1 for contribution to the EU totals only aggregates of divisions and groups 10+11+12, 13+14+15, 16+17+18, 19, 20, 21, 22+23, 26, 27, 28, 29+30 31+32+33, 35, 36+37+38+39, 45, 46, 55+56, 58+59+60, 61, 62+63, 69+70+71+72+73+74+75,77+78+80+81+82, 79 and group 95.1 <i>Size class of number of employees and self-employed: 10+, 10-49, 50-249, 250+; optional: 0-9, 0-1, 2-9</i>
Transmission of	On voluntary basis

individual data records	
Data transmission deadline	5 October of the year following the adoption of the delegated act laying down subjects and characteristics

Subjects and their characteristics for the topic "ICT-usage and e-commerce"

1. The subjects to be covered for the reference year XXXX, shall be the following:
 - (a) ICT systems and their usage in enterprises;
 - (b) use of the internet and other electronic networks by enterprises;
 - (c) e-commerce;
 - (d) e-business processes and organisational aspects;
 - (e) ICT competence in the enterprise unit and the need for ICT skills;
 - (f) barriers to the use of ICT, the internet and other electronic networks, e-commerce and e-business processes;
 - (g) access to and use of technologies providing the ability to connect to the internet or other networks from anywhere at any time (ubiquitous connectivity).

2. The following enterprise characteristics shall be collected:
 - (a) ICT systems and their usage in enterprises
 - (i) for all enterprises:
 - computer usage;
 - (ii) for enterprises using computers:
 - (optional) persons employed or percentage of the total number of persons employed who use computers for business purposes.
 - (b) Use of the internet and other electronic networks by enterprises
 - (i) for enterprises using computers:
 - access to the internet,
 - issuing or sending invoices;
 - (ii) for enterprises having access to the internet:
 - persons employed or percentage of the total number of persons employed who use computers with access to the internet for business purposes,
 - internet connection: DSL or any other type of fixed broadband connection,
 - internet connection: mobile broadband connection via a portable device using mobile telephone networks ('3G' or '4G'),
 - (optional) internet connection: mobile broadband connection via portable computer using mobile telephone networks ('3G' or '4G'),

- (optional) internet connection: mobile broadband connection via other portable devices such as smartphones, using mobile telephone networks ('3G' or '4G'),
 - persons employed or percentage of the total number of persons employed using a portable device provided by the enterprise which allows internet connection via mobile telephone networks, for business purposes,
 - provision of portable devices that allow mobile internet connection to persons employed, for business purposes,
 - having a website,
 - use of social networks, not solely used for posting paid adverts,
 - use of enterprise's blogs or microblogs, not solely used for posting paid adverts,
 - use of multimedia content-sharing websites, not solely used for posting paid adverts,
 - use of wiki-based knowledge-sharing tools, not solely used for posting paid adverts;
- (iii) for enterprises having DSL or any other type of fixed broadband connection to the internet:
- maximum contracted download speed of the fastest fixed internet connection in Mbit/s in the ranges: [0,< 2], [2,< 10], [10,< 30], [30,< 100], [\geq 100];
- (iv) for enterprises having a website, information about the provision of the following facilities:
- description of goods or services, price lists,
 - online ordering or reservation or booking,
 - possibility for visitors to customise or design online goods or services,
 - tracking or status of placed orders,
 - personalised content in the website for regular/recurrent visitors,
 - links or references to the enterprise's social media profiles,
 - (optional) advertisement of open job positions or online job application;
- (v) for enterprises that offer their persons employed portable devices that allow a mobile internet connection for business purposes:
- provision of portable devices to access the enterprise's e-mail system,
 - provision of portable devices to access and modify the enterprise's documents,
 - provision of portable devices to use dedicated business software applications.

(c) E-commerce

- (i) for enterprises using computers:

- receipt of orders for goods or services that were placed via a website or ‘app’ (web sales), in the previous calendar year,
 - receipt of orders for goods or services via EDI-type messages (EDI-type sales), in the previous calendar year,
 - (optional) placement of orders for goods or services via a website, ‘app’ or EDI-type message, in the previous calendar year;
- (ii) for enterprises having received orders placed via a website or ‘app’ in the previous calendar year:
- value, or percentage of total turnover, of e-commerce sales resulting from orders placed via a website or ‘app’, in the previous calendar year,
 - percentage of e-commerce sales (turnover) to private consumers (Business to Consumers: B2C) resulting from orders placed via a website or ‘app’, in the previous calendar year,
 - percentage of e-commerce sales (turnover) to other enterprises (Business to Business: B2B) and e-commerce sales to public authorities (Business to Government: B2G) resulting from orders placed via a website or ‘app’, in the previous calendar year,
 - (optional) use of online payment systems for sales via a website or ‘app’, i.e. payment integrated in the ordering transaction,
 - (optional) use of offline payment systems for sales via a website or ‘app’, i.e. payment not integrated in the ordering transaction;
- (iii) for enterprises having received orders for products or services via EDI-type messages:
- value or percentage of the total turnover of e-commerce sales resulting from orders received via EDI-type messages, in the previous calendar year;
- (iv) for enterprises having placed orders via a website, app or EDI-type message the following information is optional:
- placing of orders for goods or services via a website or ‘app’, in the previous calendar year,
 - placing of orders for goods or services via EDI-type messages, in the previous calendar year,
 - placing of orders via a website, ‘app’ or EDI-type message for goods or services to the value of at least 1 % of the total value of purchases, in the previous calendar year.
- (d) E-business processes and organisational aspects
- (i) for enterprises using computers:
- (optional) analysis of Big Data using the enterprise's own data from smart devices or sensors as a data source, during the previous calendar year,
 - (optional) analysis of Big Data using geolocation data as a data source, during the previous calendar year,

- (optional) analysis of Big Data using data generated from social media as a data source, during the previous calendar,
- (optional) analysis of Big Data using other data sources not specified in this point, during the previous calendar year;
- (ii) for enterprises that analyse Big Data:
 - (optional) use of enterprise's own employees for performing big data analysis,
 - (optional) use of external service providers for performing big data analysis;
- (iii) for enterprises using computers:
 - issuing/sending any type of invoice whether in electronic or in paper form to other enterprises, during the previous calendar year,
 - issuing/sending any type of invoice whether in electronic or in paper form to public authorities, during the previous calendar year,
 - issuing/sending any type of invoice whether in electronic or in paper form to private consumers, during the previous calendar year,
 - percentage of all invoices received as electronic invoices, in a standard structure suitable for automated processing (eInvoices), during the previous calendar year,
 - percentage of all invoices received as invoices in paper form or in electronic form not suitable for automated processing, during the previous calendar year;
- (iv) for enterprises that issued/sent invoices to other enterprises or public authorities, during the previous calendar year:
 - percentage of all invoices issued/sent as electronic invoices in a standard structure suitable for automated processing (eInvoices), to other enterprises or public authorities, during the previous calendar year,
 - percentage of all invoices issued/sent as invoices in electronic form not suitable for automated processing, to other enterprises or public authorities, during the previous calendar year,
 - percentage of all invoices issued/sent only as invoices in paper form, to other enterprises or public authorities, during the previous calendar year.
- (e) ICT competence in the enterprise unit and the need for ICT skills
 - (i) for enterprises using computers:
 - employment of ICT specialists,
 - provision of any type of training to develop ICT-related skills for ICT specialists, during the previous calendar year,
 - provision of any type of training to develop ICT-related skills for other persons employed, during the previous calendar year,

- recruitment or attempted recruitment of ICT specialists, during the previous calendar year,
 - performance of the following ICT functions during the previous calendar year broken down into ‘Mainly by own employees including those employed in parent or affiliate enterprises’, ‘Mainly by external supplier’, or ‘Not applicable’:
 - maintenance of ICT infrastructure (servers, computers, printers, networks),
 - support for office software,
 - development of business management software/systems,
 - support for business management software/systems,
 - development of web applications,
 - support for web applications,
 - security and data protection;
 - (ii) for enterprises using computers and which have recruited or tried to recruit ICT specialists during the previous calendar year:
 - vacancies for ICT specialists that were difficult to fill.
- (f) Barriers to the use of ICT, the internet and other electronic networks, e-commerce and e-business processes
- (i) for enterprises using computers:
 - (optional) obstacles limiting or preventing sales via a website or ‘app’ due to goods or services not being suitable for web sale,
 - (optional) obstacles limiting or preventing sales via a website or ‘app’ due to problems related to logistics,
 - (optional) obstacles limiting or preventing sales via a website or ‘app’ due to problems with payment,
 - (optional) obstacles limiting or preventing sales via a website or ‘app’ due to problems with ICT security or data protection,
 - (optional) obstacles limiting or preventing sales via a website or ‘app’ due to problems with the legal framework,
 - (optional) obstacles limiting or preventing sales via a website or ‘app’ due to excessively high investment costs compared with the expected benefits.
- (g) Access to and use of technologies providing the ability to connect to the internet or other networks from anywhere at any time (ubiquitous connectivity)
- (i) for enterprises having access to the internet:
 - provision of remote access to the enterprise's e-mail system, documents or applications,
 - payment of advertisements on the internet,
 - use of cloud computing services, excluding free-of-charge-services;

- (ii) for enterprises that pay for advertisements on the internet using any of the following targeted advertising methods:
 - advertising method based on webpages' content or keywords searched by users,
 - advertising method based on the tracking of internet users' past activities or profile,
 - advertising method based on geolocation of internet users,
 - any other method of targeted advertising on the internet not specified above;
- (iii) for enterprises having access to the internet and buying cloud computing services:
 - use of e-mail as a cloud computing service,
 - use of office software as a cloud computing service,
 - hosting the enterprise's database(s) as a cloud computing service,
 - storing files as a cloud computing service,
 - use of finance or accounting software applications as a cloud computing service,
 - use of Customer Relationship Management (CRM) as a cloud computing service,
 - use of computing power for running the enterprise's own software as a cloud computing service,
 - use of cloud computing services delivered from shared servers of service providers,
 - use of cloud computing services delivered from servers of service providers exclusively reserved for the enterprise.

3. The following enterprise background characteristics for all enterprises shall be collected or obtained from alternative sources:

- main economic activity of the enterprise, in the previous calendar year,
- average number of employees and self-employed, in the previous calendar year,
- total value of net turnover, in the previous calendar year.