

# Tourism Satellite Account of Spain. Statistical Review 2019

**Methodological Notes** 

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# 1. Tourism Satellite Account of Spain in the context of the 2019 Statistical Review of National Accounting operations

The publication of the Tourism Satellite Account of Spain (CSTE) of December 2019 follows the concepts and methodological development of the entire CSTE series<sup>1</sup>, however, and given the close connection of this operation with the Spanish National Accounts (CNE), the statistical review carried out by the latter<sup>2</sup>, has a direct consequence in the design and dissemination of the CSTE.

The effort carried out at the CNE in the framework of this statistical review has had a very favourable impact on the CSTE's compilation and dissemination possibilities, providing a more detailed solid framework of activity and product branches, which allow for a broader outline of CSTE tables. Taking advantage of this effort, the 2019 publication of the CSTE proposes a change in information dissemination, which includes the standard international methodology indicators in the tourism analysis, attempting to complete the concepts and variables collected by it as closely as possible to said methodology<sup>3</sup>. Likewise, the complementary procedures and estimates that the CSTE series has prepared, especially the estimation of the Gross Domestic Product linked to tourism, are also respected, while certain estimates are updated, in line with the new availability of information sources and the more detailed CNE framework.

In the section regarding new information sources, worth noting is the update of the sources of tourist demand, in which the most important are; Resident Tourism Survey (ETR/Familitur) in the case of national tourism and FRONTUR-EGATUR for inbound tourism. These statistical sources were updated with the INE's assumption of responsibility for them, and provide results from the 2015-16 reference year, with the sufficient level of detail and consistency to adequately support the CSTE estimates.

The framework of origin and destination tables (OD) of the CNE and the aforementioned sources, together with the majority of structural sources for the national statistical panorama, serve as a basis for the estimation of the CSTE supply-demand contract for the reference year 2016. This year is also the reference for the destination origin tables (OD) of this CNE statistical review.

The diffusion scheme adopted, as will be observed in detail in the compilation section, varies between the year that the CNE OD framework is available and the rest of the years. For the reference period where this OD framework is available, the Satellite Account (CST-RM) table series is completed from tables 1 to 7, while when it is not available, only tables 1 to 4 are completed; table 10 is completed independently in all cases.

<sup>&</sup>lt;sup>1</sup> Tourism Satellite Account of Spain Methodology and first estimates. INE 2002 and Tourism Satellite Account of Spain: Methodological note. INE 2004.

<sup>&</sup>lt;sup>2</sup> 2019 statistical review of the INE National Accounting Operations. INE Technical Project 2019.

<sup>&</sup>lt;sup>3</sup> Tourism Satellite Account Recommendations on the conceptual framework, 2008 (CST-RM). OMT, OECD and EUROSTAT. 2010.

The diffusion of tourism aggregates that are offered independently is conditioned by the development of the indicated tables.

For the entire reference period, only the aggregates for total employment in the tourism branches and the tourism-associated GDP are completed. in both cases there are specific estimation procedures for each of these variables based on the CNE series.

The demand aggregates Inland Tourism Expenditure and Inland Tourist Consumption only appear as of the last reference year with the OD framework. The estimate for years following this year is based primarily on demand sources, so even if the OD framework is not available, the presence of these sources allows an adequate procedure for its estimation.

The aggregates linked to supply and supply demand contrast -Gross Value Added of Tourism Industries (GVATI), Gross Value Added Direct Tourism (GVADT) and Gross Domestic Product Direct Tourism (GDPDT)- are closely linked to the presence of the OD framework. They thus limit its dissemination to that year and a projection the following year, based on the information regarding the previous year's offer and balance.

Within this statistical review, the CNE has carried out some review of information from years previous to the OD framework reference year (2016). As such, CSTE has also partially revised the estimates for 2015, with only the results of this review for aggregates of the Gross Domestic Tourism Product and tourism employment being presented.

The completion of Tables 8 and 9 of the scheme (CST-RM), which refer to Gross Formation of Fixed Tourism Capital (FBCFt) and Tourist Collective Consumption, has not been carried out. An estimation was made of both magnitudes in order to obtain the estimate of tourism GDP via demand, but including a detail of them in these tables was not considered necessary.

In the case of the FBCFt, as detailed below, the estimate is based on the CNE Gross Formation (FBCF) matrices, although a specific matrix for the characteristic branches has not been estimated, conceptually for the three categories cited in international methodology as likely to be attributed to tourism; tourism-specific assets, investments by tourism industries in non-tourism-specific fixed assets and Tourism-related infrastructure, only the first two are considered.

The estimate of collective tourist consumption is based on specific information and only identifies a few, very specific budget items -related to tourism marketing and commercialization- for inclusion.

#### 1.1. CLASSIFICATIONS USED

In this new diffusion scheme, the detail of CSTE products and activities has undergone some modification, whose logic is to seek a closer approach to the international methodology and take advantage of the effort in detailing the CNE's statistical review.

In terms of activity branches, detailing at times reaches the CNAE-2009 (group) three-digit level, attempting to come as close as possible to the detail for tourism-related activities. In this detail there has been a correspondence problem below the level of the CNAE-2009 class, however.

In terms of international comparability with the classification included in this methodology, the most relevant differences are that the CSTE includes the totality of real estate rental activity as a characteristic industry, and the inclusion of activity 92 (related to gambling) within the cultural industry and not in the sports and recreational industry. On the other hand, this characterization has always been present in the CSTE series and is due to the possibilities of the sources, and particularly of the CNE framework.

The country-specific tourism industries are not defined and the retail trade for the country's specific tourism-specific goods is not contemplated separately; nor or these goods defined.

Table 1. CNAE-2009 Correspondence of CSTE Activities

	Branches of tourism-related activity	CNAE-2009
1A	Accommodation	55
1B	Real estate activities	68
2	Food and beverage service activities	56
3	Rail transport	49.1
4	Other passenger ground transportation	49.3
5	Water transport	50.1 and 50.3
6	Air and space transport	51.1
7	Vehicle hire services	77.1
8	Travel agency activities	79
9	Cultural industry	90, 91 and 92
10	Sports activities and amusement and recreation activities	93

It should be noted that this update to the CSTE addresses -from the point of view of characteristic activities- passenger transport separately, in all modes and especially in the case of rail and sea transport.

In the case of the characteristic products, the adjustments to the List of Consumer Products grouped by purpose, according to the categorization as characteristic tourism products, will be the same as those observed in the activities, and will be focused on real estate rental services and gambling services.

As in previous for dissemination, the CSTE renounces a detail additional to that of tourism-related products. All other products not denoted as tourism-related are thus grouped under the heading of Other non-tourism related products.

Table 2. CPA-2008 Correspondence of CSTE Products

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	Products concerning tourism	CPA-2008					
1A	Accommodation services	55					
1B	Real estate services	68					
2	Food and beverage service activities	56					
3	Passenger and other railway transport services	49.1					
4	Other types of passenger land transport	49.3					
5	Passenger maritime transport services	50.1, 50.3					
6	Passenger air transport services	51.1					
7	Vehicle hire services	77.1					
	Travel agency services, tour operators and other related	79					
8	services						
9	Cultural Services	90, 91, 92					
10	Sporting, recreational and entertainment services	93					

#### 1.2. PRIMARY CONCEPTS

The primary concepts that are the focus of attention within the CSTE, from the demand perspective, are tourism spending, tourism consumption, gross tourism capital formation and collective tourism capital consumption.

These concepts are defined in the international methodology (CST-RM), from which they are literally extracted

"Tourism expenditure refers to the amount paid for the purchase of consumer goods and services and valuable objects, for personal use or for gifts, prior to and during tourist visits." These include expenses incurred by visitors themselves, as well as expenses paid for or reimbursed by others.

"The formal definition for tourism consumption is the same as for tourism expenditure. However, the concept of tourism consumption used in the tourism satellite account goes beyond the concept of tourism expenditure. In fact, in addition to the amount paid for the purchase of consumer goods and services and valuable objects, for personal use or for gifts, prior to and during tourist trips, which corresponds to monetary transactions (the aim of tourist spending), independently-procured services associated with holiday accommodations, inkind social transfers and other imputed consumption are also included"

"Gross tourism fixed capital formation is defined as the total value of the acquisitions, minus the provisions, of fixed assets made by the producer during the accounting period, plus certain additions to the value of the non-produced assets made by the productive activity of Institutional units.

Tourism-driven investment can be broadly classified into three main categories, namely:

- a) Tourism-specific fixed assets;
- b) Investments by tourism industries in non tourism-specific fixed assets, and
- c) Tourism-related infrastructure."

As with the FBCFt, the international methodology does not indicate strict norms for the estimation of Collective Tourism Consumption, nor a specific detail of products, and thus the CSTE estimates adhere to the National Accounting definitions.

The tables and supply variables focus on the characteristic branches, and the breakdowns by concepts are based on those presented by the CNE.

Tourism employment refers to the employment of tourism industries, according to the breakdowns by concepts detailed by the CNE for this variable.

Consistent with the internal CSTE assessment criteria, an adjustment to the production of services associated with tourist packages must be carried out from the "gross" valuation of the CNE to the "net" valuation of the CSTE. This adjustment, which is based on the CNE OD framework's own information, transfers intermediate demand to final demand for these tourist services and reduces the production and intermediate consumption of tour operator activity (and the system as a whole), by the value of these services. This the only difference that the OD framework implicit in the CSTE has with the general CNE framework.

#### **Elaboration of the CSTE Table**

The CSTE chart scheme follows the international methodology given in CST-RM.

Tables 1 to 44. These tables show the tourist expenditure concepts by product (table 1 to 3) and tourism consumption (table 4). The CSTE presents the unified results of these tables for the total number of visitors, with no division between tourists and outdoor enthusiasts. Table 1 shows the inbound tourism expenditure, table 2 the domestic tourism expenditure and table 3 the outbound tourism expenditure.

Table 2 of the CSTE also includes the part of the domestic tourist expenditure associated with outbound trips because, while not presented in detail, it is made in the reference economy.

Table 4 collects the tourism expenditure information from tables 1 and 2 and, adding the other components of tourism consumption comes to the concept of domestic tourism consumption.

The other components included in this table can be grouped into three general categories:

a) Independently-procured services associated with holiday accommodations.

- b) In-kind social tourism-related transfers, provided by public administrations and private non-profit institutions that serve homes for the benefit of visitors.
- c) Another type of imputed consumption. This category includes all other imputed consumer items that have not been previously considered.

Tables 5 and 6 detail the supply of tourism industries and the supply-demand balance of tourism in the economy.

Table 7 refers to employment in the tourism industries, and table 10 is dedicated to differing types of non-monetary indicators.

## **Main Aggregates**

Consistent with the international methodology reflected in the CST-RM, the aggregates presented by the CSTE would be the following:

Domestic Tourism Expenditure

**Domestic Tourism Consumption** 

Gross Value Added of Tourism Industries (GVATI)

Gross Value Added Direct Tourism (GVADT)

**Gross Domestic Product Direct Tourism (GDPDT)** 

**Gross Domestic Product Tourism** 

The Domestic Tourism Expenditure and the Domestic Tourism Consumption are derived from table 4.

The Gross Value Added of Tourism Industries (GVATI) encompasses the total gross value added of all establishments belonging to tourism industries and tables 5 and 6 appear in the totals.

The Gross Value Added Direct Tourism (GVADT) measures the share of gross value added generated by tourism industries and other industries that directly serve visitors in response to domestic tourism consumption.

Gross Direct Product Domestic Tourism (GDPDT) is the part of GDP directly attributable to domestic tourism consumption, measured as the sum of the part of the gross value added (at basic prices) generated by all industries in response to domestic tourism consumption, plus net taxes on the products and imports included in the value of this expense at acquisition prices.

Gross Domestic Tourism Product. Within the calculation of GDP via demand, identifies the tourism element within the elements that make up this calculation. Some imports associated with each component are thus also estimated. This estimate constitutes the complementary estimate of tourism's influence on GDP, extending its effects in total terms and not only directly, as the GDPDT states.

#### 1.3. ELABORATION SCHEME

The elaboration scheme for the CSTE is that described in its already-indicated specific methodological references, and varies depending on whether the CNE's OD table framework is available.

This scheme is based on the CNE's OD framework, in which the elements relevant to the preparation of the CSTE are identified. At a later stage and through the inclusion of additional information, a relevant expanded OD framework is developed, and finally, based on this framework, the CSTE tables and charts are elaborated, returning to consult additional information sources.

In the event that the CNE OD framework is not available, complementary information procedures are established, based primarily on the sources that applied in the previous scheme.

# 2. Compilation of the Satellite Account of Spanish 2019 Statistical Review

#### 2.1. ESTIMATE BASED ON THE CNE ORIGIN AND DESTINATION TABLES

For the years where the CNE origin and destination table framework is available, the complete compilation scheme proposed by the CSTE can be carried out: that is, the supply and demand tables, as well as the demand supply contrast, tables 1 to 6 of the CST-RM, as well as tables 7 and 10, with the latter referring to the employment of tourism industries and non-monetary indicators.

This is based on the identification of an extended origin and destination framework for the compilation, referenced in turn to the general CNE framework, to subsequently proceed to the actual compilation of the above-indicated tables.

#### A. Compilation of extended origin and destination tables

The valuation criteria and the magnitudes detailed in the extended origin and destination tables are the same governing the CNE origin and destination tables, with the only difference being the detail of information regarding branches and products.

The detail of this framework's branches and products is that of the products and branches consistent with what will later be reflected in the CSTE tables, and which is based on international methodology with the compatibility problems detected.

# **Expanded Source Table**

The industries Real estate rental, Cultural and recreational activities, Travel agencies, Accommodation and Catering are obtained directly from the table of general origin, both in terms of industry and its most characteristic product. This framework provides the production detail for both the specific product of each of these activities, and other products of these industries not considered tourism-specific, which are considered within an aggregate of non-tourist products. The production totals for the characteristic product and the rest of the supply quantities of that product are likewise obtained directly.

For the rest of the tourism industry and products, specific procedures for estimating the framework of the extended origin table must be implemented.

#### Passenger transport by rail

The CNE framework offers this activity at the level of the railway as a whole, and as such, it is necessary to determine the detail between goods and travellers. The main production for this product in the characteristic branch is obtained from the Survey of Services (ES), while secondary production is identified in the Public Administrations (AAPP) branch, which is assigned to the traveller section along with the ES information.

Once total production of this product is estimated, its imports are identified based on the OD framework and the Balance of Payments (BP) information, and net taxes on the products are calculated based on CNE structural information for this product, following which, total product resources are obtained.

# Passenger transport by road

This activity appears explicitly as a branch of activity within the CNE framework, but not in the case of the specific product thereof. To the extent that information for the specific tourism industry is available, this information is merged into the extended table of origin. For the specification of the product results, it is assumed that this branch does not have a significant volume of product 49.5, and the entire production of the branch in the joint product can thus be assigned to the passenger side. The estimate of the row for the product in question is based on information from the service survey and on the relationship between the main productions of the passenger branch and that of freight and other.

Once the total production is obtained, the net taxes on the products are estimated based on CNE structural information relevant to this product, and lastly, the total resources are obtained for this product.

# Air and space transport

The freight transport segment on this route is quite small compared to that of travellers and said part of goods is relatively well covered by the services survey. The total production for this activity is thus obtained by subtracting an estimate of the merchandise activity obtained from the ES from the branch of the origin table. All secondary productions for this activity are attributed to passenger transport and the estimation of the transport of minor goods in the main product, and it is

assumed that it does not occur in any other activity branch. To complete the offer, imports of the product of passengers are estimated using the information of the OD framework and the Balance of Payments.

### Passenger transport by water

The estimation procedure is similar to what has been carried out for the transport of passengers by air, although in the case of the water it cannot be indicated that the freight transport act is residual in the activity of the total transport by this route.

Depending on the detail between travellers and merchandise presented by the ES, a total is estimated for the production of the passenger activity branch. Secondary non-tourist productions in this branch are not taken into account. Productions of characteristic products in this branch are identified in the CNE's table of origin that are attributed entirely to travellers (catering and cultural services). The main production for this branch is then obtained by difference.

No secondary productions of this product are contemplated and some imports of the passenger product are estimated, through the information of the OD framework and the Balance of Payments, net taxes on products are obtained based on the proportion of the production of the passenger product estimated and the total of the source table.

# Rental of transport equipment

The estimation of this product appears explicitly in the OD framework, while the branch of activity is based on the ES. In addition, a secondary production of road passenger transport is identified in this branch. As the vehicle rental product is explicitly identified in the CNE framework for this specific product, this information can be directly entered into the extended table of origin.

#### **Expanded Destination Table**

The detail of the destination table of the Real Estate Rental, Accommodation, Catering, Other passenger land transport, Travel agencies, Cultural activities and Sports activities activities is extracted directly from the CNE destination table, so it does not involve problems in its compilation, the characteristic services of these branches in cases where they are not grouped, are also extracted from that table so they do not pose problems in such cases either.

For the rest of the industry and products characteristic of tourism, specific procedures for estimating this table of the same type must be implemented to those carried out in the estimation of the extended table of origin.

#### Passenger transport by rail

The services of this product have been estimated in their total jobs = total resources via offer, once this total is obtained, the estimate of the final consumption expenditure of households and the final consumption expenditure of the AAPP in this product is estimated via Structural coefficients of the CNE that represent the weight of this distribution of demand in total jobs, the total

intermediate demand is estimated by difference. The productive structure of this branch of activity is estimated based on the general structure of rail transport.

# Passenger transport by road

Although at the branch of activity level the estimation does not pose problems, in the case of the specific product of travellers an additional estimate has to be carried out, since the CNE treats it jointly with the goods. The total jobs of these services are deducted from the balance with the total resources estimated by offer, once this total is available, the total final consumption expenditure is obtained from the survey of products in the service sector of activity 4931 and 4939, carrying out assumptions about the production destinations of the various types of transportation of this activity, the detail of which is as follows for the breakdown of turnover according to the activities carried out:

Ground transportation of passengers (Classes 4931, 4939 CNAE-2009):.

- For urban transport
- For regular transport
- For school transport
- For work transport
- For discretionary transport
- For mail activities
- For freight transport
- For commercial activities
- For other activities

The final consumption expenditure of the AAPP is obtained assuming it mostly to the passenger product. The final consumption expenditure of households is obtained by detracting the estimated part of merchandise via a survey of products in the services sector, finally the intermediate demand is estimated from the difference between total jobs and final consumption expenditure.

The productive structure of the branch of activity of these services does not pose problems when it appears explicitly in the CNE.

## Passenger transport services by water

The total jobs of these services are deducted from the balance with the total resources estimated by offer. The total expenditure on final consumption of the product is assumed. Maritime transport services and inland waterways as passengers. The intermediate demand of this product is estimated based on the weight of the total estimated jobs for the passenger product with respect to the total jobs of the whole maritime product, finally exports of this product are deducted by difference from the estimated demand quantities with respect to Total jobs

The productive structure of this activity takes as a model the general CNE for the branch of maritime transport and inland waterways

#### Passenger air transport services

The total jobs of these services are deducted from the balance with the total resources estimated by offer. The intermediate demand for these services is estimated by calculating a part of services associated with freight transport through the ES, which are reduced from the total product of the CNE air transport services, exports are estimated by information on BP and the OD framework itself. The total final consumption expenditure of the AAPP of the CNE of the Air Transport Services product is assumed to be entirely attributable to passengers. The final consumption expenditure of households is estimated by difference from the previous variables.

The productive structure of this activity takes as a model the general CNE for the branch of air transport.

# Rental of transport equipment

The total jobs of these services appear explicitly within the framework of the CNE, so they do not pose problems when identifying as a product.

In the case of the branch of activity, the productive structure of this activity is based on the one presented by the whole of the rental activity in the IO framework of the CNE and the one that is explicitly detailed for activity 771 the ES.

# B. Tour package adjustment.

Consistent with the valuation asymmetry of the tourist packages within the methodology of the CST and that of the CNE expressed in the corresponding SEC2010 manual, a modification of the production and intermediate consumption of the system is carried out.

The modification is specified in the transfer to final demand of the intermediate demand associated with the intermediate consumptions used in the elaboration of the tourist packages, in parallel the production of the travel agencies is reduced in this same amount. Similarly, this reduction in the production of travel agencies occurs in the destinations of final demand, while in those items the products that have led to the development of tourist packages are increased, so that the total value of demand end remains invariant.

For the elaboration of this adjustment it is considered that the totality of the products of the tourist services that include the packages and that appear in the structure of the travel agencies have as purpose the elaboration of said packages. Once these services have been identified and quantified, they are transferred to the final consumption expenditure of the households, the final consumption expenditure of the Public Administrations or the exports depending on the detail that these Statistics provide about the Products Statistics in the services sector and the own information from the IMSERSO reports on social tourism.

#### C. Compilation of the CSTE Tables

The logic of the creation of the tables of the CSTE scheme is twofold, on the one hand it is due to the completion of the design by products posed by the CST-RM,

and on the other hand it estimates for each of them the elements that subsequently allow the GDP calculation associated with tourism via demand, which is included in the CSTE's own methodological manual. In this last task, the detail of the imported products that is associated with each table and magnitude and that is taken into account in a specific way in the calculation by the demand of the GDP associated with tourism is of particular interest

## Table 1. Inbound tourist expenditure by products

There are two clearly differentiated elements that constitute this expense, which is derived from the consumption of non-residents in the economic territory (CNR) and exports of tourist services.

In the case of the CNR there is an explicit estimate of it within the framework of the CNE, this estimate is completed with an additional adjustment of the expenditure of the other receiving travellers not considered visitors that is provided by a specific EGATUR operation. The product detail of this estimate is carried out through this specific exploitation of EGATUR adjusted to the concepts of the CSTE. In it, the expenses of tourists and hikers were grouped and treated differentially depending on whether the expense is subject to payment at destination and / or origin.

The detail for the tourist expenses provided by EGATUR is as follows:

Expenditure on package holiday

Expenditure on accommodation

International transport expense not included in the package

Spending on public transport at destination

Transportation expenses for car rental

Spending on fuel and tolls

Expenditure on activities and purchases

- \* Activity expenditure
- \* Expenditure on purchases

Maintenance Expense

- \* Expenditure on groceries
- \* Expenditure on restaurants

Extraordinary expenses

Spending, other

Total expenditure

According to the type of accommodation, it is possible to detail the expenditure on accommodation depending on whether it refers to collective accommodation or rented housing, there is also a detail for minor expenses associated with the property home.

In the case of outdoor entusiasts, the detail is as follows:

Expenditure on package holiday

Expenditure on international transport
Expenditure on public transport
Expenditure on gasoline and tolls
Expenditure on meals
Expenditure on purchases
Spending, other
Total expenditure

To break down the expenditure on activities between recreational and cultural activities, the structure of expenditure provided by the Family Budget Survey (EPF) in these activities was used.

The contrast of the application of this structure to the level of expenditure of the heading of CNE of expenditure of non-residents in the economic territory, is the one that finally provides the detail by products for table 1.

Exports of tourism services have been estimated in the breakdown of the OD framework extended to tourism products, using the CNE OD framework information and BP information, so the values reflected in that framework can be transferred directly to the products in table 1.

There are also exports considered tourist within non-characteristic products, this is the case of transport annexes, whose exports are considered entirely tourism except for their associated imports.

Within the exports there are tourist package services, these exports are assigned to tourist products of this table 1 according to a structure of unpacking of tourist packages obtained for this purpose.

As an additional estimate in the context of this table, an estimate is made of the quantity of products that are satisfied by an imported origin, this information is relevant when calculating the total GDP associated with tourism via demand.

# Table 2. Domestic tourism expenditure by products

The general framework for estimating this table is that derived from the expanded framework of origin and destination tables, specifically three elements would be added; the intermediate demand attributable to tourism, which would collect the main part of business tourism, the final consumption expenditure of domestic households attributable to tourism and due to the valuation asymmetry between the CST and the CNE unpacking by products of the tour packages associated with the latter. These valuations taken from the CNE should be reduced according to the imports associated with the outbound tourism expenditure, since these expenses are not part of the domestic tourism expenditure but are present in the CNE concepts mentioned above, the expenses incurred in the internal economy and associated to the issuer, although they are not subject to a separate estimate or presentation in this table.

Separate estimates of the previous elements have to be broken down by the products detailed in the table and consequently with this process in many cases a specific estimation process for this task has to be implemented.

#### Intermediate Demand

Hotels and similar establishments The totality of this product is attributed to tourism within the intermediate demand, it is only reduced based on the adjustment for the net valuation of the tourist packages, where all the intermediate consumption of this product consumed by the travel agencies is passed on demand final.

Real estate rental services. These types of services are not taken into account in the intermediate demand associated with tourism.

Food and beverage provision services. A tourist proportion similar to that resulting from this product is applied in the final consumption expenditure of households.

Rail passenger transport services A tourist proportion similar to that resulting from this product is applied in the final consumption expenditure of households.

Road passenger transport services A tourist proportion similar to that resulting from this product is applied in the final consumption expenditure of households.

Water passenger transport services. The totality of this product is attributed to tourism within the intermediate demand, it is only reduced based on the adjustment for the net valuation of the tourist packages, where all the intermediate consumption of this product consumed by the travel agencies is passed on demand final.

Passenger air transport services The totality of this product is attributed to tourism within the intermediate demand, it is only reduced based on the adjustment for the net valuation of the tourist packages, where all the intermediate consumption of this product consumed by the travel agencies is passed on demand final.

Rental services for transport equipment. These types of services are not taken into account in the intermediate demand associated with tourism.

Travel agencies and other reservation services. The totality of this product is attributed to tourism within the intermediate demand

Cultural Services. A tourist proportion similar to that resulting from this product is applied in the final consumption expenditure of households.

Sports and recreational services. A tourist proportion similar to that resulting from this product is applied in the final consumption expenditure of households.

Household final consumption expenditure

Hotels and similar establishments. Based on the estimation of this product, it is adjusted taking into account the adjustment of the tourist package and the estimates of the inbound tourism and those guests staying in these establishments not considered visitors. Operationally, the value of this product in the final consumption

expenditure in internal terms of the extended OD framework is reduced from the estimation of table 1 of this product and from the estimates indicated above.

Real estate rental services. It includes the estimate that for the expenditure in the heading of accommodation of tourists staying in rented housing that derives from the exploitation of the results of the ETR.

Food and beverage provision services. Based on the estimate contained in the ETR for this expense, it rises based on the divergence of the estimates of the basic sources of this product (ETR, EPF and EGATUR), and the value of the final consumption expenditure of the households of the CNE

Rail passenger transport services Within the EPF, the proportion of products associated with tourism (long-distance trips), within the set of these services that appear in this source, are identified. This proportion is applied to the estimated final consumption expenditure of the extended OD framework reduced by the value of this product in Table 1.

Road passenger transport services. The proportion of tourism in the basic sources (estimate of transport expenditure on bus trips in the ETR over the total EPF of these road transport services) is applied to the value of this product in the final consumption expenditure of the extended OD framework.

Water passenger transport services. The total estimated product in the expanded OD framework is attributed to tourism, so that for this estimate the estimate of the final consumption expenditure of this product in that framework is reduced by the value of the product in Table 1, taking into account the tour package setting.

Passenger air transport services. The total estimated product in the expanded OD framework is attributed to tourism, so that for this estimate the estimate of the final consumption expenditure of this product in that framework is reduced by the value of the product in Table 1, taking into account The tour package setting.

Rental services for transport equipment. An estimate of this expense based on the ETR is included.

Travel agencies and other reservation services. Since all of these services are considered tourist, the estimated value in this case is obtained directly from the extended OD framework, taking into account the adjustment of the tourist package.

Cultural Services. In estimating these services, the cost values for the set of activities carried out by the visitors provided by the ETR are available, the final detail of the distribution between cultural and sports services is carried out with the information of the expenditure structure which contains the EPF.

Sports and recreational services. In estimating these services, the cost values for the set of activities carried out by the visitors provided by the ETR are available, the final detail of the distribution between cultural and sports services is carried out with the information of the expenditure structure which contains the EPF. Other non-characteristic products. For the estimation of an expense associated with these products, the expenditure information presented by the ETR is used for those items that have not been associated with any of the tourism characteristic products.

#### Unpacking of the tour package

The different valuation of the tourism package between the National Accounts and the CST-RM of the CST requires the valuation of intermediate consumption associated with the tourist packages and their relocation as elements of final demand, in terms of the total results of this table there is a relocation of intermediate consumption associated with tourist packages that pass, in this table, intermediate demand as intermediate consumption of travel agencies to final demand as expenditure on final consumption of households.

While there are also packages that are made available to households by the AAPP at reduced prices and are also subject to exports, not all relocation of intermediate consumption occurs within the context of Table 2 but some of these packages will appear within Table 4 contained within the other components of the tour package as well as in Table 1.

# Imports associated with domestic tourism expenditure

To the extent that the previous calculations based on the extended OD framework, took into account the total values of the same (satisfied both by domestic production and by imports), it makes sense to estimate some imports associated with this table for its concretion in subsequent tables of the development of the CST and the implications when calculating the total weight of tourism in GDP via demand.

There are a number of imports of tourist services identified within the expanded OD framework, which must be contemplated within outbound tourism and therefore detracted from the calculation of domestic tourism expenditure, in analogy with the treatment of exports in inbound tourism. (These imports are also present in table 6 of supply-demand balance, although not satisfying domestic demand, they are not associated with the tourism part).

On the other hand, there is also a part of imports, mainly goods, that satisfy domestic tourism demand, and that in detail by products are outside the characteristic products, the estimation of these associated imports was carried out with the same ratio of Imports presented by inbound tourism for these products, this estimate is subsequently reflected in Table 6 and is taken into account in the calculation of total tourism GDP via demand.

#### Table 3. Outbound tourism expenditure, by products

The issuing tourist expenditure presents a clear analogy with the recipient, being the counterpart of this because it represents the expenditure made outside the economic territory by residents in Spain. Thus, in terms of calculation, it would have two CNE elements that collect these expenses; purchases of residents outside the economic territory and imports of products related to tourism services.

The CNE framework offers a value for purchases of residents outside the economic territory, while the breakdown by product of the same is carried out with the expenditure structure offered by the ETR for tourist spending abroad.

Total expenditure

Expenditure on package holiday

Expenditure on accommodation

Expenditure on transport

Expenditure in bars and restaurants

Expenditure in activities

Expenditure on durable goods

Other expenditures

The structure of previous expenditure does not allow a direct transfer to the products in the table, so additional exploitation of the information of the ETR was carried out in order to obtain estimates of the transport expense broken down by products and of the expenses in activities detailing between Recreational and cultural. For the first case, the cost was exploited according to the main means of transport used and in the second case, the expense detail of the EPF was used.

The imports of tourist services that are included in the issuing consumption are those of hospitality, passenger transport, travel agencies and services attached to transport.

Table 4. Domestic tourism expenditure by products

The first columns of this table collect the information in tables 1 and 2, so it is the other components of tourism consumption that are now incorporated into this table.

These other components, consistent with the CST-RM methodology, would consist of three elements; services associated with self-employed holiday accommodation, tourist social transfers in kind, and other imputed consumption.

Of the three elements mentioned, only the first two are presented in detail by products in this table.

The services associated with self-employed holiday accommodation are subject to a specific estimate based on the use of free housing, both by residents and non-residents. An estimate has been made, in the basic statistics (EGATUR and ETR), of the use in terms of overnight stays of this type of accommodation on an annual basis by destination CCAA, attributing a use price similar to the real rental accommodation in each destination, in the case of not having a representative sample for that accommodation in that destination, the market accommodation was used.

Tourism social transfers in kind derive from the expanded OD framework, including the final consumption expenditure of public administrations (GCFAAPP) and private non-profit institutions (GCFISFL) in tourism-related services, namely hospitality and transportation of travellers, for the transport of travellers the expense in this concept of air and sea transport services is assumed in full, while

in the rest of the services the tourist ratios derived from the final consumption expenditure of households are used. The unpacking of the tourist package for travel agency services also applies.

As indicated there is no explicit estimate for the other elements that could be included in the other imputed consumption, however this fact does not indicate their absence from this succession of tables but rather depending on the estimation procedures of each product they are present in the detail of table 2, although not explicitly.

Table 5. Production accounts of tourism and other industries (at basic prices)

Since the expanded CNE OD framework is constructed, in terms of branches of activity and products, consistent with the needs of these tables, the supply part of these activities that is included in this table is an automatic translation of this framework, where the branches of activity linked to tourism appear explicitly and the rest of the economy in aggregate form.

In this table the valuation criteria are consistent with the CST-RM and therefore the tourist packages are valued net, so that the production and intermediate consumption of this table do not match those presented by the CNE.

The adjustment for the net valuation of the tourist packages translates into a translation of the intermediate consumption associated with the tourist packages from the intermediate demand (specifically in the activity of travel agencies) to the final demand, specifically three components of the final demand, to the final consumption expenditure of households, to the final consumption expenditure of the AAPP and exports. Within these components the total magnitude thereof does not vary, since the travel agency product is reduced in the value of the products transferred from intermediate demand to final demand. This transfer has the consequences indicated above when the demand tables of this scheme are constructed (tables 1 to 4), where the modified final demand components provide in each case the information of the associated tourist services.

In the supply part and therefore in table 5 the total intermediate consumption of the travel agencies is affected, and therefore the total economy and the value of the production of that branch and consequently the total of the economy in the same amount, therefore the added value is invariant.

Table 6. Internal supply and domestic tourism consumption, by products (at acquisition prices)

This is the core of the entire satellite account scheme and the table that according to the international methodology derived from the CST-RM framework, provides the aggregates of VABDIT and PIBDT.

This table has its origin in the offer set out in table 5, based on the information in this table, the design of table 6 divides each production cell (Industry / product), in two, the production that would be destined to satisfy the tourist demand and the rest.

The supply that is collected from table 5 is completed with the part of tourism demand that comes from the total internal consumption of table 4, so that the contrast of supply and demand provides the importance of tourism in the economy.

Since the demand in table 4 is valued at acquisition prices and the supply in table 4 at basic prices, it is necessary to introduce the adjustment columns that guarantee the same valuation, specifically a column of net taxes on products and another one of margins of commerce and transport, in the same way to obtain the total supply of the economy another column of imports must be introduced. All these columns obey the logic of measuring tourism, breaking down into a tourist and a non-tourist part. Table 6 of the CSTE jointly presents the margins, net taxes on products and imports

Once this design is configured, the balance of the total supply with the tourist demand must be adjusted, assigned to each cell its part that satisfies the tourist demand and that which satisfies the rest of the demand.

In terms of calculation, a differentiation of the treatment of net taxes on products and margins between the tourist and non-tourist part of each product is not established, so that based on the demand at acquisition prices and through the structural information of the Table of origin of the national economy is obtained the total production of the system that has tourist purpose for each product.

The next step is the allocation by product of the imports to its tourist and non-tourist part. In this case it should be noted that within the OD framework a part of the outbound tourism, not contemplated within the expenditure of residents outside economic territory is collected within the importation of tourist services, however on demand such services are no longer contemplated that the outbound tourism listed in table 2 is not incorporated into the total domestic tourism consumption shown in table 4, it is for this reason that these imports of tourism products are computed in this table 6 in the demand supply adjustment, as imported supply that does not satisfy tourism (domestic tourism consumption).

In the allocation of each of the productions of the tourist products that come from table 5, they must be broken down between tourism and non-tourism, in table 6 there are some general criteria:

In some cases, the demand estimate itself is already counted on with a clear allocation to the product and branch that supplies it, so the allocation of the tourism part is based on sources of demand clearly.

In other cases, the demand supply contrast holds a tourist percentage of the product that, according to the sources of information or the nature of the product, does not indicate that I varied between the branches of activity that supply it, so it remains constant throughout them.

In some cases the nature of the branch in which the service is produced may indicate the tourist propensity of the product, depending on other products that are supplied by that branch or by having additional information, in general this criterion makes more sense to apply it to productions secondary of a given industry.

In addition to these general criteria, in other cases to allocate the tourist part of each product there is additional information or the allocation procedure is a synthesis of the above criteria.

With these premises, the allocation of the tourist part by branch of activity / product is carried out.

Hotels and similar establishments In determining the demand for this product, an estimate of the non-tourism part was already carried out through information from the population census and sources of demand.

Real estate rental services. Production with a tourist destination outside the characteristic branch of this product is not considered, so the other productions in other branches are considered non-tourist.

Food and beverage provision services. The restoration production of the transport branches is considered in its entirety tourism, in the accommodation branch the proportion considered is a synthesis of the tourist proportion of the lodging product and the restoration product, in the rest of the branches of activity the tourist proportion is the general of the supply - demand contrast, adjusting the total tourism production in the catering branch.

Rail passenger transport services. There are no differences in the tourist proportion between the production housed in the characteristic branch and the rest, so the proportion used is the same in both cases.

Road passenger transport services. There are no differences in the tourist proportion between the production housed in the characteristic branch and the rest, so the proportion used is the same in both cases.

Water passenger transport services. All production is considered tourist.

Passenger air transport services. All production is considered tourist.

Rental services for transport equipment. The productions of this product outside the characteristic branch (passenger transport), are considered non-tourist and the totality of tourism production is assigned to the characteristic industry.

Travel agencies and other reservation services. All production is considered tourist.

Cultural Services. The secondary productions of this product detected in characteristic branches other than the branch of cultural services (maritime passenger transport) are assigned entirely to tourism, in the main production of these services the general ratio of the supply-demand contrast and the The rest of the tourist production is adjusted in the production of non-characteristic branches.

Sports and recreational services. The secondary productions of these services in the accommodation and catering branches, have the tourist proportion of the main products of those branches, same case occurs in the branch of cultural services, for the bulk of the production in the characteristic branch the Contrast supply demand ratio and in the non-characteristic branches the total tourism production is adjusted.

Other non-characteristic products. Within these products, the goods are identified, which can only generate effects on the GVA in terms of retail margins, so the rest of the value of the goods is deducted from the total generated by these effects. Subsequently, the allocation by industry of the tourism part of these products is carried out in most cases depending on the tourist proportion of the characteristic product of each branch or the combination of the products produced by that branch.

Once the tourism part is assigned to all the products of the system, some percentages of tourism orientation are derived by branch of activity, consequently the tourist part of all the products produced in a branch is added and divided from the production set of said branch.

Table 6 results in the calculation of the Direct Gross Value Added of tourism (VABDT), which is the product of the tourist percentage obtained from each branch for the added value of the same, this procedure is also carried out in all branches of non-tourist activity.

Adding to the VABDT the net taxes on the products attributed to tourism obtained in table 6, the tourist direct GDP (PIBDT) is obtained.

Table 7. Employment in tourism industries

The employment of the tourism industries is obtained as a general rule directly from the information of the CNE and / or the use of the basic source of employment the EPA Active Population Survey and the sources of supply (ES).

The employment information of the real estate rental, cultural and recreational activities, travel agencies, accommodation, catering and other passenger land transport industries are directly obtained information from the CNE.

Additional estimates are established for the rest of the industries.

Passenger transport by rail. The jobs of the ES are assumed and the rest of the variables are derived based on the weight of that variable in the total CNE of Rail transport.

Maritime and inland waterway passenger transport. The proportion of the production of this activity in the total maritime transport production of the CNE is applied to the CNE employment variables of that branch.

Air and space passenger transport. The proportion of the production of this activity in the total air transport production of the CNE is applied to the CNE employment variables of that branch.

Transport vehicle rental activities. The jobs of the ES are assumed and the rest of the variables are derived based on the weight of that variable in the total CNE of Machinery rental activities.

#### D. Estimate of total GDP associated with tourism.

For each of the elements of the final demand, the part of the GDP associated with tourism is estimated, estimated in each case associated imports to carry out the calculation in internal terms.

Inbound tourism expenditure. In CNE terms, this consumption would be part of the detail of exports and consumption of non-residents in the economic territory (expenditure on final consumption of households). To quantify the part of final demand that is associated with tourism in the calculation of GDP, the total consumption reflected in table 1 can be assumed. The imports associated with this consumption are associated with the imported goods that these visitors buy and have to be specifically estimated with a calculation associated with this table, said calculation is based on the proportion of imports in consumer goods that the CNE reflects.

Domestic tourism expenditure by products. This consumption expenditure is part of the CNE Final Household Expenditure (GCFH), but it also has a part of intermediate demand, therefore the total that appears in table 2 of the intermediate demand also explicitly associated must be reduced for that table. In the same way as in the case of the recipient, there is an estimate of imports associated with goods purchased by visitors that is calculated in the same way as in the previous table.

Other components of tourism consumption. In terms of CNE, these components estimated in the CSTE would be within the GCFH (imputed rent) or the GCFAAPP and GCFISFL (services produced by the AAPP and other non-profit institutions made available to households), in both cases they would be components of final domestic demand so the total of this estimate is associated with tourism GDP.

Expenditure on public tourist consumption of the AAPP. A specific estimate is made for this variable based on the general state budgets, it has no associated imports.

FBCF The tourist ratios obtained by industries in table 6 are applied to the matrix of gross capital formation by industries of the CNE, industry to industry depending on the aggregation allowed by this matrix, a tourist FBCF is also estimated in the non-tourist branches based on the ratio of these industries in table 6. Imports are associated according to the ratio of imports by investment products obtained from the framework of OD tables of the CNE.

The estimation of intermediate consumption imported into the characteristic branches of tourism is also carried out using the ratio of intermediate consumption imported from these branches.

The temporary delay of the OD framework determines the estimation of the CSTE based on it, since this is only available for the reference year of t-3, however the CSTE has always proposed obtaining indicators of the importance of tourism with a smaller delay, therefore a complementary estimation procedure is established for those years when the information in this framework is not available.

This procedure is based on the use of available information and the projection of information that is not yet available through different techniques and indicators.

<sup>2.2</sup> ESTIMATE IN THE CONTEXT OF ABSENCE OF THE FRAMEWORK OF ORIGIN AND DESTINATION TABLES OF THE CNE

However, these estimation methods do not allow the preparation of the complete framework that will only be available for years where it can be based on the OD framework.

In this way, estimates of tables 1 to 4 are presented provisionally and progressively, as regards the development of tables, the available battery of aggregates for the study of tourism is limited.

# 3. Differences of the CSTE statistical review 2019 with the accounting series 2010-17

The classifications of products and activities used in this latest review of the CSTE have experienced some variation with respect to the previous series.

In the case of the activities, the branches of activity of the transport of passengers by rail, sea and air are presented independently of the transport of goods, which consequently are now found in the other branches not characteristic of tourism.

Table 3. CNAE-2009 correspondence of the activities of the CSTE, 2010-17 series and statistical review 2019

		2010-17	Statistical
CSTE	Characteristic activity branches	Series	Review 19
1A	Accommodation	55	55
1B	Real estate activities	68	68
2	Food and beverage service activities	56	56
3	Rail transport	49.1, 49.2	49.1
4	Other passenger ground transportation	49.3	49.3
5	Water transport	50	50.1, 50.3
6	Air and space transport	51	51.1
7	Vehicle hire services	77.1	77.1
8	Travel agency activities	79	79
9	Cultural industry	90, 91, 92	90, 91, 92
10	Sports activities and amusement and recreation activities	93	93

This update of the classification of the characteristic industries has implications at the time of delimitation of the variables of supply of these activities, in the gross tourist formation and in the employment of these industries.

In the case of products, there are no differences between the two CSTE series, although in the 2019 statistical review, there is no mention of the non-market tourist services of the AAPP, which are treated in the same terms as in the previous series.

The calculation of the share of GDP associated with tourism, in total terms via demand, is carried out using the same methodology as in previous series, although the calculation procedures are updated based on the available sources, especially in the case of the calculation of the imports associated with each of the

components and more specifically those of intermediate demand of the branches of activity characteristic of tourism.

The aggregate of the PIBDT obtained coherently with the international methodology is presented.

The concept of Inland Tourism Consumption is now framed in the development of tables of the series of tables of the CST-RM, so it can be broken down into the addition of tourism expenditure and the other components that compose it, in previous versions of the The concept of internal tourism consumption was achieved by CSTE by associating each of the CNE elements of which it is composed, that is, the sum of final consumption expenditure received, final consumption expenditure of resident households, intermediate tourist consumption and Tourism consumption expenditure of the AAPP.

The Gross Formation of Fixed Capital in all versions of the CSTE, has been estimated by means of the FBCF matrices of the CNE, this perspective is sensitive to the delimitation of the characteristic branches so it is affected by the updating of activities of the statistical review As indicated above, this form of estimation conceptually includes both categories of tourism-specific fixed assets and investments by tourism industries in non-tourism-specific fixed assets, although the calculation procedure, depending on the flexibility of the methodology International when making its measurement, it is based on the tourist ratios of the supply demand balance.

The tourist supply tables, and the supply and demand contrast tables increase their level of detail in the 2019 statistical review, these tables are also influenced by the delimitation of the tourism industries in terms of branches of activity - CNAE-2009.

This update of the CSTE presents a series of tourism aggregates consistent with the recommendations of the CST-RM methodology and suppresses the calculation of direct and indirect effects of tourism on the economy through the Input methodology - Output

Table 10 referring to non-monetary indicators expands its coverage, including apart from the indicators associated with the number of companies and premises, others related to tourist flows and the offer of accommodation.