

Methodological note

GUIDANCE ON COMPILING TOURISM STATISTICS IN THE CONTEXT OF THE COVID-19 CRISIS

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Background

The COVID-19 pandemic affects tourism and measurement of tourism in a significant way that we have not seen before. The impact is different in each country, depending on the importance of the tourism sector and depending of the intensity of the pandemic. Nevertheless, the consequences for the statistical system are similar across all countries, albeit in different degrees.

Eurostat and the tourism statistics compilers in the national statistical institutes (NSIs) have been working together to identify and address the main COVID-19 specific challenges encountered.

Given that all countries faced to some extent closed borders, closed accommodation establishments (or establishments transformed into medical facilities or hostels for medical staff), limitations of movements, business or household surveys being temporarily put on hold, Eurostat launched a written consultation in April 2020 to jointly explore methodological solutions and to exchange best practices. The consultation focused on four questions:

- What methodological procedures do you consider to maintain the monthly data series (estimation/calibration of the data received via the traditional channels)?
- What other data sources have you got access to, or do you consider to access as auxiliary information for (better) estimating the monthly data series (MNO data, payment card data, traffic monitoring data, etc.
- Do you have models/procedures in place for flash estimates or now-casting (given the near-real-time user needs)?
- Are there current definitions or guidelines from the methodological manual that need additional clarification or temporary re-interpretation in the context of the current situation because of corona?

As a follow-up to the consultation, Eurostat organised on 2 July 2020 a virtual meeting with national compilers to discuss the outcomes and to prepare the guidelines for tourism statistics with pan-European relevance. At the meeting, a proposal was for increased cooperation in terms of exchanging partner data beyond the requirements of Regulation (EU) 692/2011 concerning European statistics on tourism, namely monthly accommodation data by origin of the guest to be transmitted on a voluntary basis.

This note has the objective to give additional guidance complementing the guidelines included in the [Methodological Manual for tourism statistics](#). All basic concepts and definitions of European tourism statistics can be found in the manual and are not repeated in this note.

Scope, concepts and definitions

SCOPE OF TOURIST ACCOMMODATION ESTABLISHMENTS

Regarding the treatment of accommodation establishments that are/were used for temporary lodging medical workers (or patients) it is recommended to exclude, where possible, such alternative and temporary activity from accommodation statistics.

Rationale: The Methodological Manual covers the example of student accommodation (NACE 55.9, i.e. out of scope of the Regulation). Such establishments can temporarily offer accommodation for tourists during the summer seasons (when students move out) and become an in-scope “kind-of-activity unit” (see para 2.2.1.4.2. on page 61). The current issue is the opposite situation; with hotels that would normally be in NACE 55.1 now being in NACE 55.9 (this class includes short-stay accommodation for non-tourism purposes (non-visitors)).

Methods: During the full lockdown, some countries considered all establishments as closed to tourists (and de facto only accommodating non-tourists that are out-of-scope). Other countries contacted all or a sample of the establishments or included ad-hoc questions in the monthly accommodation survey.

SCOPE OF TOURISTS

From a supply side point of view (in particular accommodation statistics), it is recommended to exclude the services provided to non-tourists such as healthcare workers, patients temporarily treated outside hospitals (because of priority to COVID patients), truck drivers, police, homeless, etc.

Special cases for occupancy data:

- Guests at accommodation establishments due to quarantine measures: it is recommended to exclude the services provided to those guests that were accommodated in the context of a quarantine immediately after the arrival to the country visited or after the return following a stay in a foreign country or at-risk region. However, guests that were already staying at a hotel but prolonged their stay due to quarantine measures can be considered as tourists for the entire duration of their stay.

Method: It was acknowledged by the task force that it can be difficult to distinguish between quarantine and other reasons for staying at a hotel. Information can possibly be obtained by considering whether the nights were paid by the guest or by the authorities, or by asking ad-hoc questions allowing separating tourists from non-tourists.

- Treatment of no-shows: it is recommended to exclude no-shows from the occupancy data, regardless of whether these pre-booked nights that were finally not spent at the hotel by the guest were entirely, partially or not refundable.

Method: In many countries, the occupancy data is linked to the check-in not to the booking system, meaning no-shows would be excluded anyway. Else, differences in VAT treatment of ad-hoc questions can give indications of the level of no-shows.

From a demand side point of view (tourism demand surveys), it is recommended to exclude ‘trips’ or ‘stays’ that can be solely linked to COVID-19, e.g. healthcare workers, volunteers, patients, quarantined travellers, etc. staying outside their geographical usual environment. Note that the methodological manual has a more strict delineation than e.g. IRTS and does not consider stays at a hospital as part of the tourism trip purpose ‘health related trips’ (see para 3.4.4. on page 128). In practice, however, it can be difficult to separate such trips reported by respondents.

Notwithstanding the above recommendation, it needs to be pointed out that some countries traditionally include in tourism statistics volunteers travelling for personal purpose and health care workers travelling for professional purpose (Italy mentioned the example of other crises periods such as earthquakes), or quarantined travellers or patients (with medical prescription).

IMPACT OF COVID-19 ON OCCUPANCY RATES

The temporary closures of establishments (or parts of establishments), combined with occupancy of the remaining capacity, could have the perverse effect of an increase in occupancy rates, for instance where a modest number of nights spent is divided by a relatively sharper decreased capacity in the denominator.

Following the discussions in the task force, it is recommended to disseminate the occupancy rates, but with the necessary explanatory notes to alert the user and/or jointly with the monthly capacity data to put the occupancy rate in perspective (note that Eurostat does not receive/disseminate monthly capacity data).

Dealing with unit and item non-response

Generally, no significant problems were reported regarding the treatment of non-response. The usual methods to deal with non-response were applied. However, some NSIs conducted additional follow-up contacts with the establishments to detect exceptional closures due to the lockdown (to separate non-respondents from non-active establishments), others relied on webscraping or ad-hoc questions in a modified monthly accommodation survey.

It is obvious that the reduced tourism activity can affect the response rates and the observed levels of tourism. This can have an impact on data reliability and availability due to sample size limitations.

Use of auxiliary sources

While the COVID-19 crisis pushed NSIs and private or public entities holding data to explore the relevance and feasibility of using innovative data sources for producing tourism statistics, the focus remained mainly on carrying out the business as usual and producing the traditional statistics. As mentioned above (“Dealing with unit and item non-response”), there was in

general no urgent need for auxiliary information to impute the regular data series.

Notwithstanding this general observation, the following alternative sources were mentioned by NSIs, mainly used to detect trends:

- Traffic counters
- Payment card data
- Mobile network operator data
- Scraped data
- Tax declarations, electronic invoices (enterprises with activities in NACE55)
- Social security statements (employment), unemployment registers, administrative data on partial unemployment
- Temporary relief packages to the accommodation sector granted by government agencies (as an indicator to estimate how many establishments were closed)
- Airports data
- Business register: information on temporary closure, allowing to reduce the number of imputations to be made
- Administrative data, linked to registration obligations for active accommodation establishments

Not only as auxiliary information but also to maintain internal consistency and coherence within official statistics, it is strongly recommended to coordinate with other statistical domains such as BOP travel, short-term business statistics, labour market statistics, etc.

Within tourism statistics, partner data from other NSIs, in particular monthly accommodation statistics by origin of the guest, can play a significant role (see the section “Voluntary exchange of partner data based on accommodation statistics”).

Flash estimates, now-casting, predictions

The focus for the NSIs was/is the timely production of high-quality monthly accommodation data. Flash estimates or now-casting was considered only of secondary importance. In general, the punctuality of the accommodation data (less than two months after the reference period) is perceived as good by users.

Sources used for flash estimates (quicker data) include:

- Webscraping
- Payment cards data
- Administrative data such as VAT declarations or (un)employment data

However, flash estimates are most often based on incomplete data (e.g. the first x% respondents or the replies received in the first y days).

While predictions are deemed very relevant by users, the current exogenous shock jeopardises predictive modelling, as models are generally based on time series. Notwithstanding this, expert

panels (e.g. businesses, sector federations) of confidence indices for tourism-relevant sectors can give insights in the expected tourism activity during the next months or quarters.

Voluntary exchange of partner data based on accommodation statistics

Initiated by the discussion held during the online meetings of the Travel Workshop¹ and considering the relevance of accommodation data by origin of the guest for balance of payments but also for inbound and outbound tourism statistics, Eurostat proposed launching a voluntary exchange of partner data based on accommodation statistics: monthly data for 2019 and 2020 on the nights spent at tourist accommodation establishments (total for NACE55.1+55.2+55.3), broken down by country or geographical area of residence of the guests (as used in the annual occupancy data).

The data will be submitted on a voluntary basis following a common template. It is expected that the reported data can be shared by Eurostat with the NSIs via CIRCABC (registered access only) starting in September 2020.

Dissemination and documentation

Most NSIs (as well as Eurostat) maintained the regular dissemination program, albeit it with some reduction in granularity of the data where the sample sizes did not allow guaranteeing the reliability.

In response to user needs linked to the impact of COVID-19 on the tourism sector, many NSIs reported having published special ad-hoc publications or news releases.

Regarding documentation, it is strongly recommend reporting to users all methodological deviations that can influence the completeness or comparability of the data; via metadata, footnotes, explanatory documentation or database flagging.

Further links

EUROSTAT

The Eurostat website now contains a methodological corner bringing together all the new guidelines and methodological notes published by Eurostat, it will be regularly updated as new guidelines are developed.

- [COVID-19: SUPPORT FOR STATISTICIANS](#)

¹ See also the [Methodological note “Guidance on the compilation of balance of payments statistics in the context of the COVID-19 crisis”](#).

JRC

The Joint Research Centre (JRC) of the European Commission launched a website gathering the travel restrictions in each country. This information can be useful impact for estimated the expected intra-European tourism flows in the coming months, as tourists will include such information in their tourism decision-making.

- <https://reopen.europa.eu>

The JRC also made geographical disaggregation of official tourism statistics to improve data availability at NUTS 3 regional level. See for instance this presentation toe Committee of the Regions:

- <https://cor.europa.eu/en/events/Documents/ECON/2020.06.18%20Presentation%20Rai%20noldi%20JRC.pdf>

OECD

The OECD convened ad-hoc meetings of the Tourism Committee to discuss the impact of the pandemic on the tourism industry. A concrete output of the meetings and of the OECD secretariat is the regularly updated document *Tourism Policy Responses to the coronavirus (COVID-19)*.

- <https://www.oecd.org/coronavirus/policy-responses/tourism-policy-responses-to-the-coronavirus-covid-19-6466aa20/>