

# Hotel Occupancy Survey

## Methodological changes for 2006

In order to improve the estimates presented in the Tourist Accommodation Occupancy Survey, the operation has updated the directories that compose the survey's framework, obtained from the Tourism Departments of the different Autonomous Communities, and has undertaken a modification of the system for collecting data, extending the time scope for the collection of information to every day in the reference month.

Since January 2005, a questionnaire was included for top hotels (3, 4, 5 gold stars), which requested monthly information on the total number of travellers and overnight stays, as well as the number of days the establishment was open during said month.

The estimates of the variables: travellers, overnight stays, average stay, number of establishments open and estimated number of vacancies according to the survey, level of occupancy by vacancies and by rooms and employed personnel will be obtained from this monthly information, as well as from the data that appears in the traditional questionnaire referred to a specific week.

Consequently, data published as of January 2006 cannot be directly compared to those published until December 2005 and in order to make this comparison easier, link coefficients have been created to allow users to compare data from different years.

### Link coefficients

Since these series are strongly affected by their seasonal nature, different link coefficients have been established for each month, thus maintaining the series' interannual variation rates although the same does not apply to the inter-monthly rates.

For each month the link coefficient for a variable  $X$  is obtained as the quotient between the estimated value of said variable in the month in question in 2005, considering all available information (monthly and weekly questionnaire), and the estimated value in the same month obtained solely from the weekly questionnaire. Definitive data has been used to calculate these coefficients.

$$CX_{i,05} = \frac{X_{i,05}^{month}}{X_{i,05}^{week}}$$

where:

$$i = 1... 12 \text{ months}$$

$X_{i,05}^{month}$  = Estimated value of the variable  $X$  in the month  $i$  of the year 2005 using information from the weekly and monthly questionnaire.

$X_{i,05}^{weekly}$  = Estimated value of the variable  $X$  in the month  $i$  of the year 2005 only using information from the weekly questionnaire.

### Linked series

Linked series that can be compared with the data published as of January 2006 are calculated by multiplying the series published (before that date) by the link coefficient for the corresponding month.

$$X_{i,t}^{linked} = X_{i,t}^{pub} \times CX_{i,05}$$

where:

$i = 1 \dots 12$  months

$X_{i,t}^{pub}$  = published estimated value of the variable  $X$  in the month  $i$  of the year  $t$  ( $t \leq 05$ ) calculated using only the weekly information.

$CX_{i,05}$  = Link coefficient for the variable  $X$  in the month  $i$

Since link coefficients have been calculated independently for each geographical breakdown, category and nationality, linked series from before January 2006 will lose their additive nature.