

19th April, 2011

Regional Development Composite Index 2008

The Regional Development Composite Index is the joint effect of the regional performance in the three components of development – *competitiveness*, *cohesion* and *environmental quality*. The 2008 results on the *overall index of regional development* show that only three NUTS 3 level regions stood above the national average: Grande Lisboa (in a clear way, having exceeded the national average in the three components of development), Pinhal Litoral (as the result of a performance above the national average in *cohesion* and *environmental quality*) and Minho-Lima (exceeding the national average in *environmental quality* and having a score above 95 in *competitiveness* and *cohesion*); the performance of Baixo Vouga and Beira Interior Sul stood slightly below the national average. Regarding *competitiveness*, the index shows an opposition between coastal regions (more competitive) and Inland regions. As for *cohesion*, the index displays a more balanced country than the one resulting from the *competitiveness* index, with the Mainland centre sub-regions showing more *cohesion* than the Northern and Southern sub-regions and the autonomous regions. In what concerns *environmental quality*, the results suggest a reversed territorial pattern in relation to *competitiveness* – the coast showing, in general, less *environmental quality*.

The Regional Development Composite Index (ISDR) relies on a conceptual framework which benefits from a broad view of development that encompasses *competitiveness*, *cohesion* and *environmental quality*.

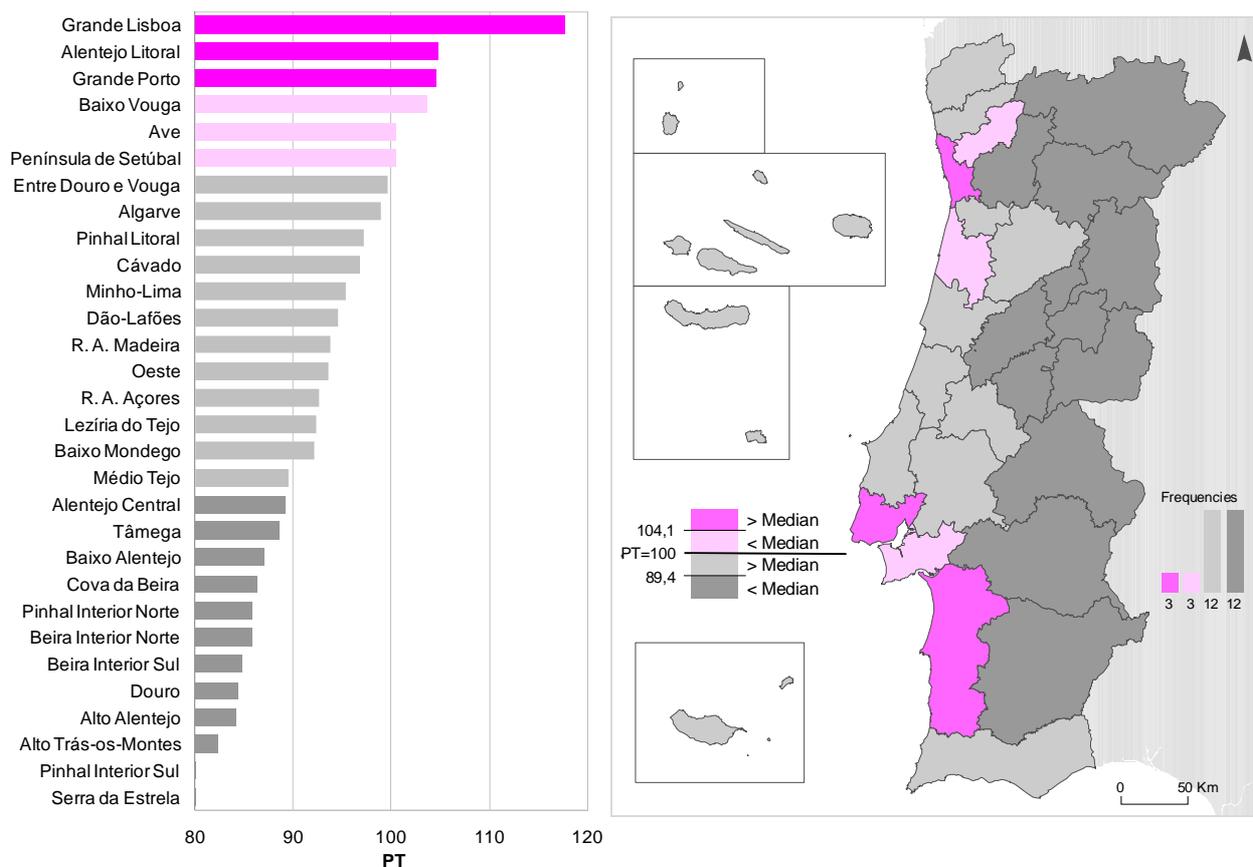
The pertinence of the statistical data guided the selection of the statistical indicators that supported the quantitative match to the concepts underlying the construction of the index, taking into account the 30 Portuguese NUTS 3 level regions. It is, however, worthwhile to stress the diversity of territorial contexts among these regions, of which the autonomous regions and the metropolitan areas' regions are examples, as well the heterogeneity regarding the size of the 30 Portuguese NUTS 3 level regions.

ISDR results now published take into account time-series changes that have occurred in the statistical data that support the construction of the composite indicators, namely, the results of the new Regional Accounts series (Base 2006) and the adoption of the Portuguese classification of economic activities, revision. Annual data for the 2004-2008 period as well as conceptual and computational methodological options are available at www.ine.pt.

The performance of the NUTS 3 level regions in 2008: *competitiveness, cohesion and environmental quality*

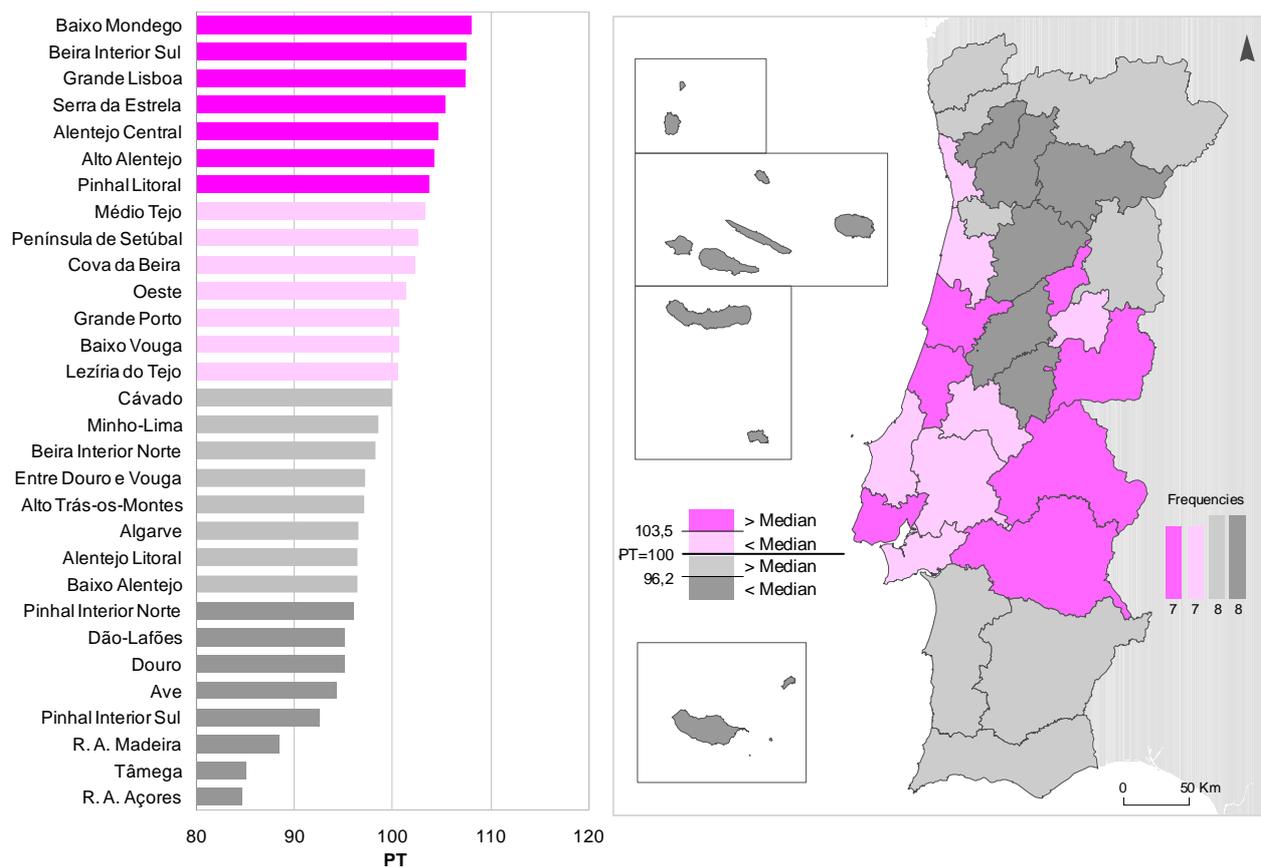
The *competitiveness* index aims to express the regional potential for a good performance (both regarding human resources and physical infra-structures), the efficiency in the path being followed (measured by the educational, professional, entrepreneurial and productive profiles) and, finally, the effectiveness in the generation of wealth and the ability to compete in international markets. The 2008 ISDR results show that only six out of the 30 Portuguese NUTS 3 level regions, located in the Mainland coastal strip, had a performance in *competitiveness* above the national average: in hierarchical order, Grande Lisboa, Alentejo Litoral, Grande Porto, Baixo Vouga, Ave and Península de Setúbal. Taking into account that Entre Douro e Vouga had a score marginally below the national average, the *competitiveness* territorial pattern puts in evidence two contiguous territories, both in the coastal strip, with a higher competitiveness index, contrasting with the rest of the territory and, in particular, with the Mainland Inland.

Competitiveness (Portugal = 100), NUTS 3, 2008



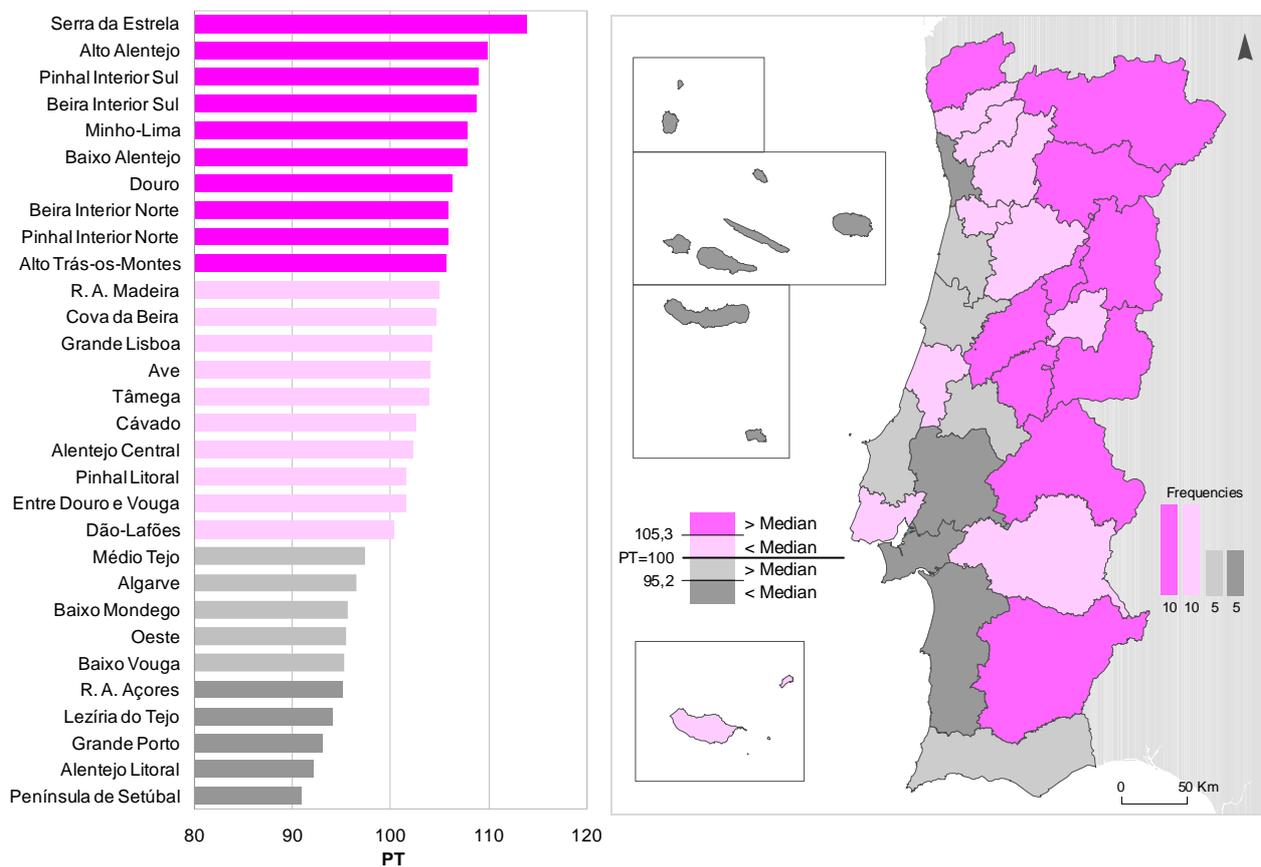
Cohesion regards the population accessibility to quality basic collective equipment and services, the profiles that lead to a greater social inclusion and to the effectiveness of public policies given by an increase in the quality of life and to a decrease in regional disparities. As for this development component, the results suggest a picture of a more balanced country than observed for *competitiveness*, since, in almost half of the regions and more clearly in Baixo Mondego, Beira Interior Sul and Grande Lisboa, the performance exceeded the national one. The territorial pattern opposes the Mainland centre (with more *cohesion*) to both the Northern and Southern Mainland regions and the autonomous regions. The less favourable performances belonged to the two autonomous regions and to a contiguous territory linking Tâmega, Ave and Douro (in the Norte region) and Pinhal Interior Sul, Dão-Lafões and Pinhal Interior Norte (in the Centro region).

Cohesion (Portugal = 100), NUTS 3, 2008



The *environmental quality* index combines the pressure put on the environment by economic activity and social behaviour (extended to territorial qualification and planning), the corresponding effects on environment and the economic and social responses (both regarding individual behaviour and public policies). The 2008 results suggest a reversed territorial pattern in comparison with *competitiveness*. In 10 NUTS 3 level regions, the *environmental quality* score was below the national average – this was more evident in Península de Setúbal, Alentejo Litoral and Grande Porto (it is worth to note that these were among the more competitive regions in this year). Serra da Estrela, Alto Alentejo and Pinhal Interior Sul, which belong to less competitive set of regions, had the higher *environmental quality* scores.

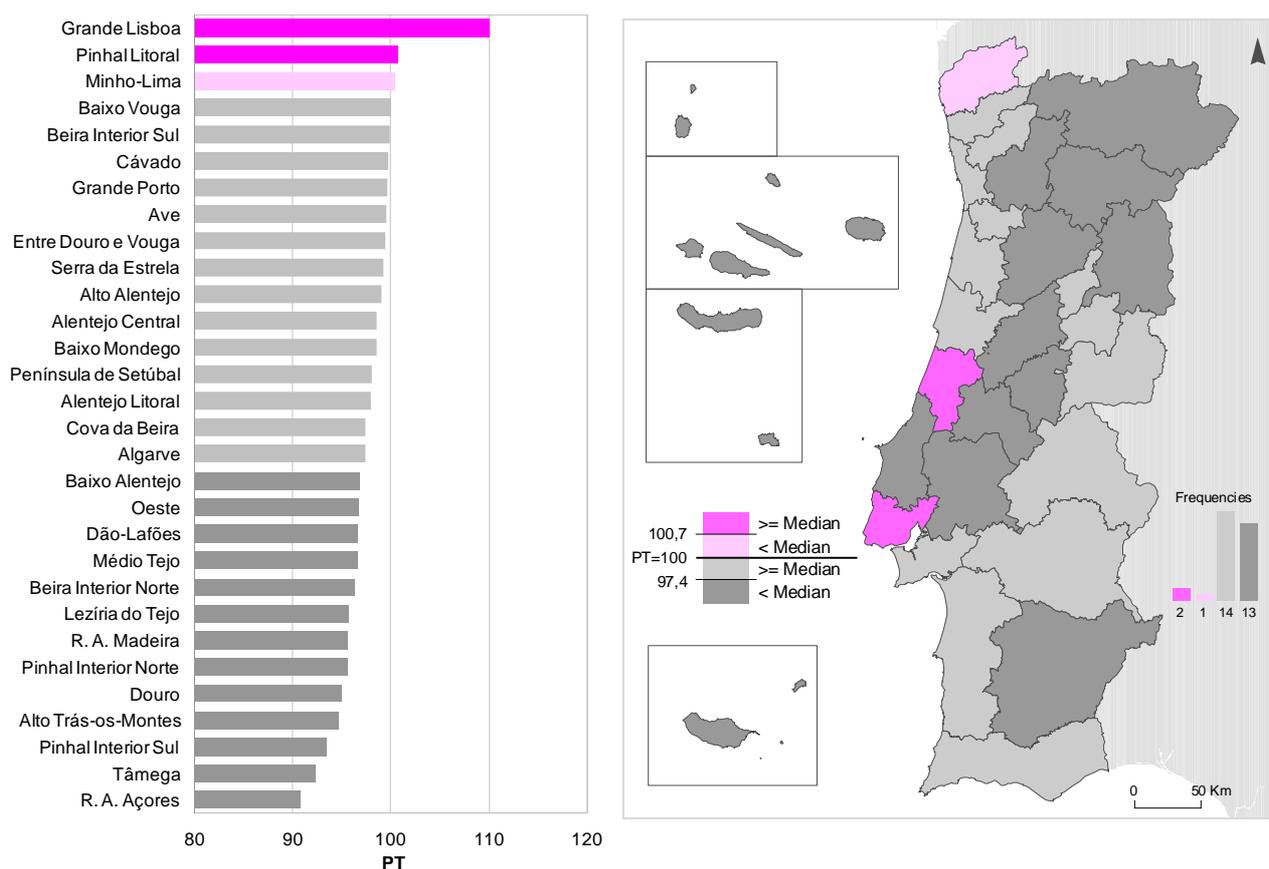
Environmental quality (Portugal = 100), NUTS 3, 2008



The joint analysis of regional development in 2008

The *overall index of regional development* is the result of the joint performance in *competitiveness*, *cohesion* and *environmental quality* performances. Although in not such a clear way as for *competitiveness*, the coastal regions show, in general, better performances. According to the 2008 ISDR results, only three out of the 30 Portuguese NUTS 3 level regions exceeded the national average: Grande Lisboa (in a clear way, having exceeded the national average in the three components of development), Pinhal Litoral (as the result of a performance above the national average in *cohesion* and *environmental quality*) and Minho-Lima (exceeding the national average in *environmental quality* and having a score above 95 in *competitiveness* and *cohesion*). Baixo Vouga and Beira Interior Sul stood slightly below the national average.

Overall index of regional development (Portugal = 100), NUTS 3, 2008



In 2008, the *competitiveness* and *cohesion* components showed a positive correlation with overall development (0,6 and 0,7, respectively) while, as for *environmental quality*, there was no relevant correlation with overall development (0,1), thus showing the absence of a positive relationship between the performance of the 30 NUTS 3 regions in *environmental quality* and in the *overall index of regional development*. At the same time, there was a negative correlation between *competitiveness* and *environmental quality* in the context of the 30 Portuguese NUTS 3 level regions.

Correlation matrix, 2008

	Overall index	Competitiveness	Cohesion	Environmental quality
Overall index	-			
Competitiveness	0,6	-		
Cohesion	0,7	0,1	-	
Environmental quality	0,1	-0,6	0,0	-

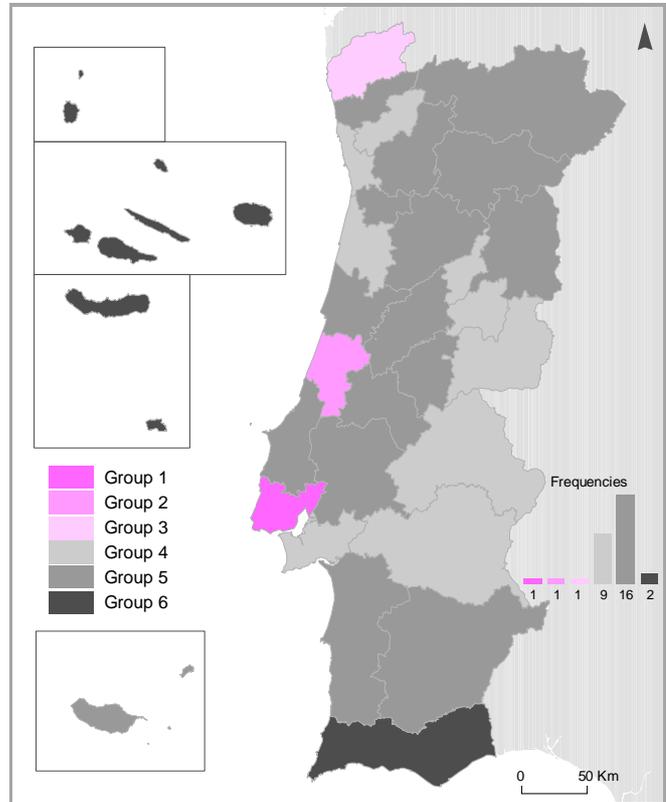
The complexity of regional development, in the light of the multidimensional perspective that ISDR intends to reflect, leads to heterogeneous regional profiles. Grande Lisboa was the only region with a performance above the national average in 2008, in all four composite indicators; the Algarve and the Região Autónoma dos Açores were in the opposite situation, with performances below the national value in the four composite indicators.

In 2008, the most frequent regional profile, in which 11 Portuguese NUTS 3 level regions were (more than a third of the total), was of less *competitive* and *cohesive* territories than the national average but with more *environmental quality* than the national average, leading to an overall regional development below the national average. In a set of other nine regions, the performance exceeded the national average in two of three components at stake without surpassing the national average of the overall index of development.



Overall index of regional development (IG), competitiveness (COMP), cohesion (COES) and environmental quality (AMB): performance in relation to the national average (Portugal = 100), NUTS 3, 2008

	IG > 100	IG < 100	
COMP > 100 COES > 100 AMB > 100	Grande Lisboa		
COMP > 100 COES > 100 AMB < 100		Baixo Vouga Grande Porto Península de Setúbal	
COMP > 100 COES < 100 AMB > 100		Ave	
COMP < 100 COES > 100 AMB > 100	Pinhal Litoral	Alentejo Central Alto Alentejo Beira I. Sul	Cova da Beira Serra da Estrela
COMP > 100 COES < 100 AMB < 100		Alentejo Litoral	
COMP < 100 COES > 100 AMB < 100		Baixo Mondego Lezíria do Tejo	Médio Tejo Oeste
COMP < 100 COES < 100 AMB > 100	Minho-Lima	Alto T. Montes Baixo Alentejo Beira I. Norte Cávado Dão-Lafões Douro	Entre D. Vouga Pinhal I. Norte Pinhal I. Sul R. A. Madeira Tâmega
COMP < 100 COES < 100 AMB < 100		Algarve R. A. Açores	



Technical note

The Regional Development Composite Index (ISDR) is a statistical study of annual frequency and national coverage. The observed statistical unit is the NUTS 3 level region, data collection is indirect and the variables used to compute the composite index result from administrative procedures and from statistical operations within the National Statistical System.

On the basis of a 65 statistical indicators matrix, for the 30 Portuguese NUTS 3 level regions, properly normalized (statistical standardization and *minmax* rescaling, with the minimum and maximum reference values extracted from the set of 65 standardized indicators for the time period available), distributed by three components – *competitiveness*, *cohesion* and *environmental quality* – subsequently aggregated by a non-weighted average, for the components level as well as from the components level to the overall index level, four composite indicators are produced – *competitiveness*, *cohesion*, *environmental quality* and *overall index of regional development*. The four composite indicators are referenced to the national value (Portugal = 100), with the national value estimated by the NUTS 3 level regions average, weighted by the resident population, and not directly obtained from the model which is exclusively applied to the NUTS 3 level regions. In the same way, the values for the NUTS 2 level regions are estimated by the corresponding NUTS 3 level regions average, weighted by the resident population, as a way to ensure that national values computed from each of the two geographical levels are the same.

The methodological options that support ISDR conception and computing are presented in the methodological document *Índice Sintético de Desenvolvimento Regional, código 127 / versão 1.1, INE* (available at www.ine.pt, in Metadata, Methodological Documents). The need to review this methodological document regarding the 1.0 version relies on the changes that have occurred in the statistical data that support the construction of the composite indicators: the release of the new Regional Accounts series (Base 2006), the inclusion of the Portuguese classification of economic activities, revision 3 in the Integrated Business Accounts System, the change of the scope of the hotel establishments indicator and the change in the source of urban waste data. Given these changes, the results now published are not comparable to those previously released. Annual data for the 2004-2008 period, in accordance with the 1.1 version of the methodological note, are available at www.ine.pt, in Statistical information, Statistical data, Database.