

10th April, 2012

Regional Development Composite Index 2009

The results for 2009 regarding the *overall index of regional development* show that only four NUTS 3 level regions stood above the national average: Grande Lisboa (Lisboa NUTS 2 region), Cávado and Entre Douro e Vouga (Norte NUTS 2 region), Baixo Vouga (Centro NUTS 2 region). The performance of Grande Lisboa, clearly more positive than all the others, results from a position above the national average in the three components of development in which the *overall index of regional development* is structured – *competitiveness*, *cohesion* and *environmental quality*.

Regarding *competitiveness*, four regions stood above the national average: Grande Lisboa, in a clear way, Grande Porto, Baixo Vouga and Entre Douro e Vouga. In this index, the more favourable performances belonged to the metropolitan territories centred in Lisbon (Grande Lisboa and Península de Setúbal) and in Porto, spreading, in this last case, to the sub-regional valleys (Grande Porto, Entre Douro e Vouga, Baixo Vouga, Ave e Cávado). As for *cohesion*, the index displays a more balanced country than the one resulting from the *competitiveness* index – half of the regions showing a performance above the national threshold – 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*. Serra da Estrela was the region with the higher *environmental quality*.

In 2009, the most frequent regional profile, in which 11 Portuguese NUTS 3 level regions were (around 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.

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*.

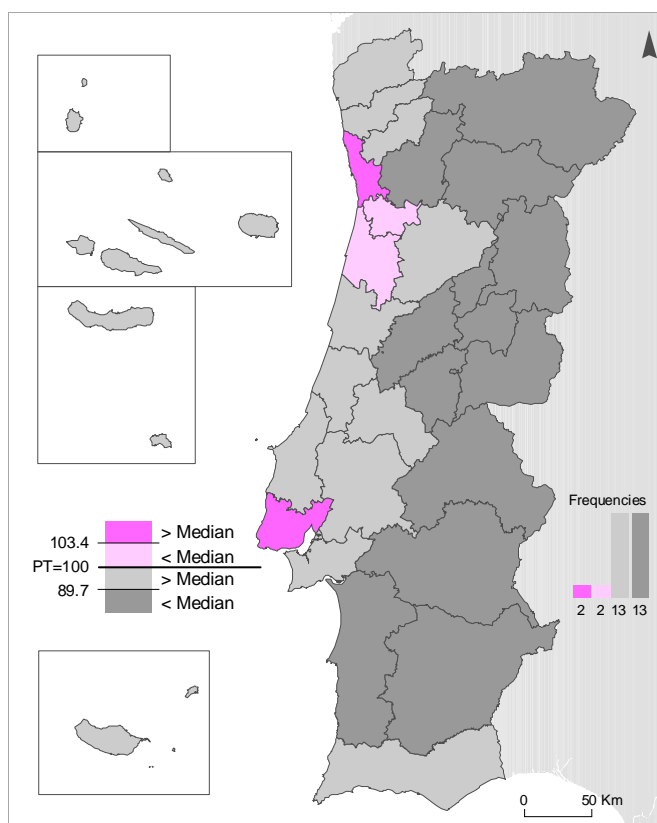
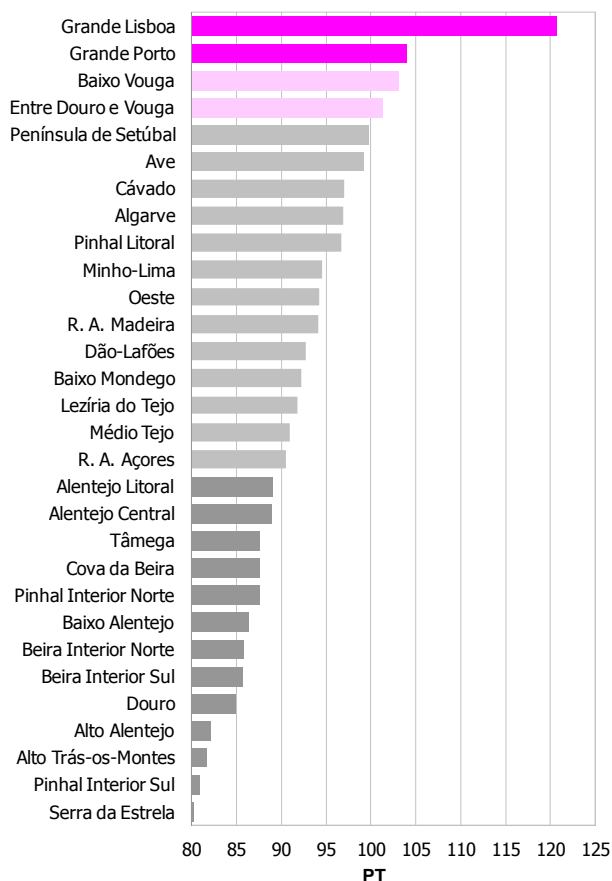
ISDR results now published take into account time-series changes that have occurred in the statistical data that support the construction of the composite indicators, namely, the update of the Regional Accounts 1995-2006 series, the extraordinary revision of the International Trade Statistics 2007 and 2008 data, the revision of the 2004-2008 series on the quality of water for human consumption and on the proportion of classified area for the Autonomous Region of Madeira and the revision of the urban waste data for the 2004-2006 period. Annual data for the 2004-2009 period as well as conceptual and computational methodological options are available at www.ine.pt.

The performance of the NUTS 3 level regions in 2009: *competitiveness, cohesion and environmental quality*

The **competitiveness** index aims to express the regional potential (both regarding human resources and physical infra-structures) for a good performance in *competitiveness*, as well as the efficiency in the path being followed (measured by the educational, professional, entrepreneurial and productive profiles) and, also, the effectiveness in the generation of wealth and the ability to compete in international markets.

The 2009 ISDR results show that only four 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, Grande Porto, Baixo Vouga and Entre Douro e Vouga. Taking into account that Península de Setúbal and Ave had scores close to the national average, and that Cávado followed, the *competitiveness* territorial pattern puts in evidence two contiguous territories centred in the metropolitan areas of Lisbon and Porto, with a higher *competitiveness* index, contrasting with the rest of the territory and, in particular, with the Mainland Inland. The lowest results in this index were observed in Serra da Estrela and Pinhal Interior Sul (Centro region), in Alto Trás-os-Montes (Norte region) and in Alto Alentejo (Alentejo region).

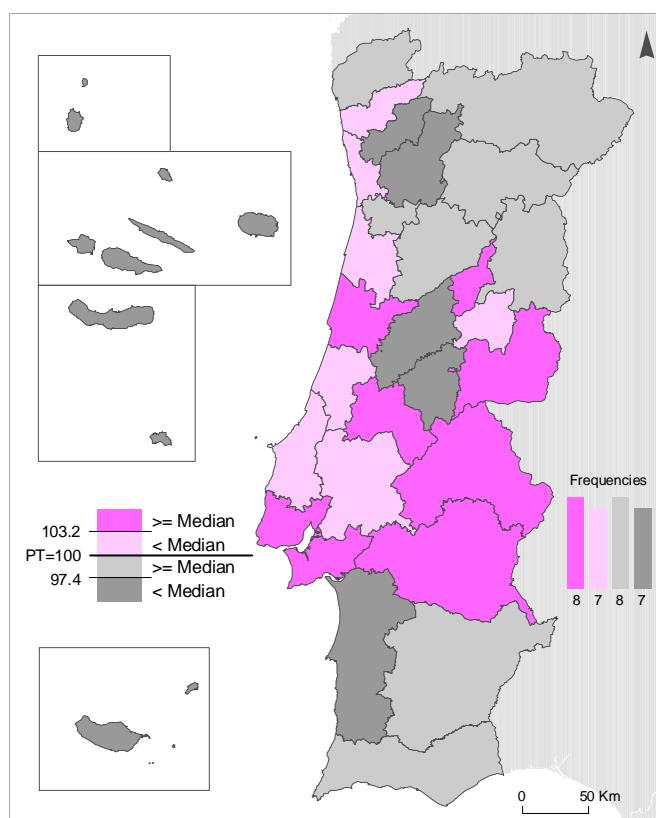
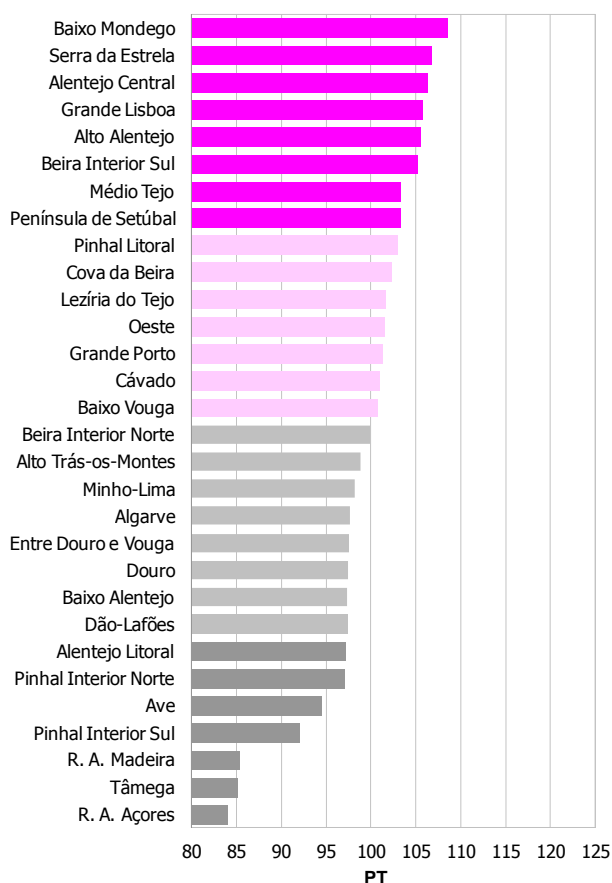
Competitiveness (Portugal = 100), NUTS 3, 2009



Cohesion's composite indicator 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 half of the regions and more clearly in Baixo Mondego, Serra da Estrela and Alentejo Litoral, 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 (with less *cohesion*). The less favourable performances belonged to two Northern regions – Tâmega and Ave –, to the two autonomous regions, to two Centro regions – Pinhal Interior Sul and Pinhal Interior Norte – and also to Alentejo Litoral.

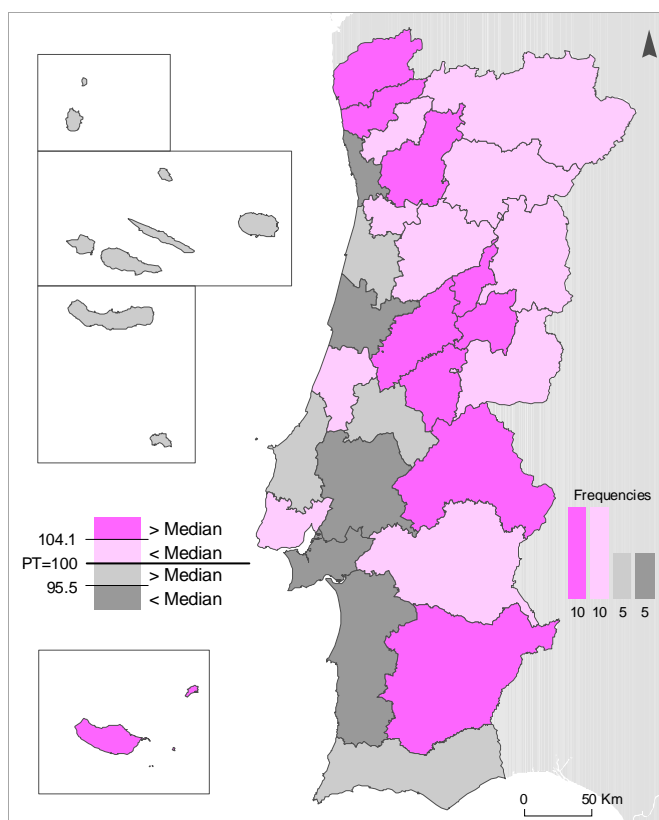
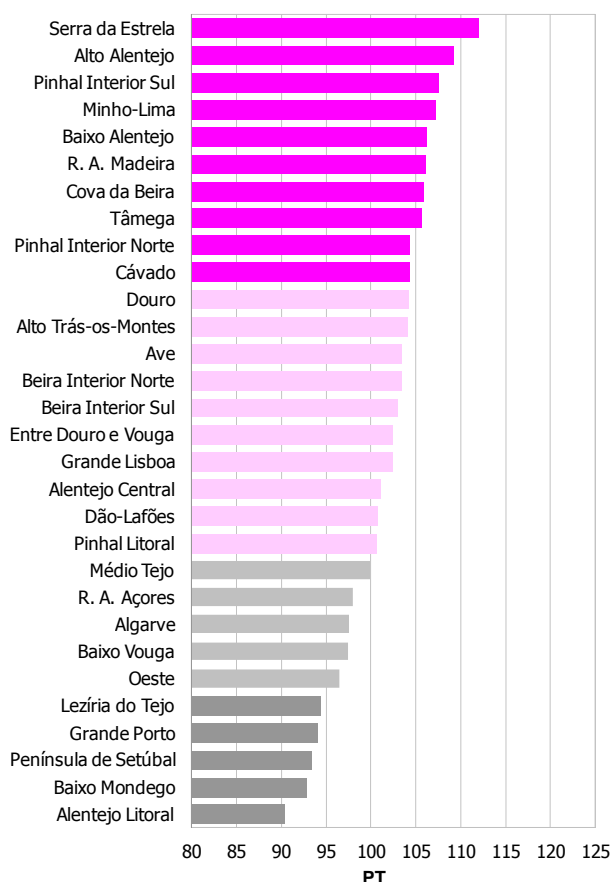
Cohesion (Portugal = 100), NUTS 3, 2009



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 2009 results suggest a more balance but reversed territorial pattern in comparison with *competitiveness*, with the coastal regions showing, in general, less *environmental quality*. Among the NUTS 3 level regions with lower *environmental quality*, there were some of the more competitive ones as Península de Setúbal and Grande Porto but also Alentejo Litoral, Baixo Mondego and Lezíria do Tejo. Serra da Estrela was, in 2009, the region with the higher *environmental quality*.

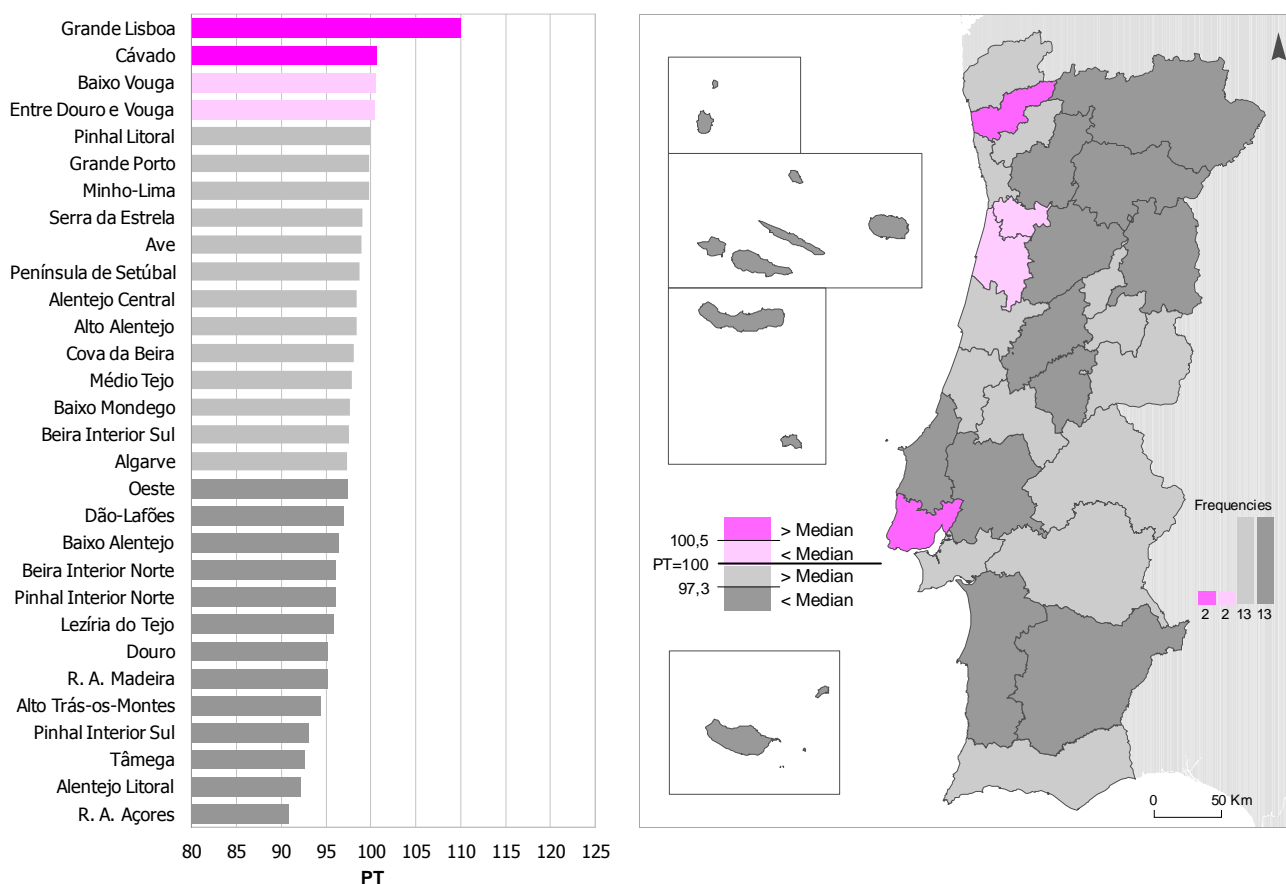
Environmental quality (Portugal = 100), NUTS 3, 2009



The joint analysis of regional development in 2009

The **overall index of regional development** is the result of the joint performance in *competitiveness*, *cohesion* and *environmental quality* performances. According to the 2009 ISDR results, only four out of the 30 Portuguese NUTS 3 level regions exceeded the national average: Grande Lisboa (in a clear way), Cávado, Baixo Vouga and Entre Douro e Vouga. Pinhal Litoral, Grande Porto and Minho-Lima stood slightly below the national average.

Overall index of regional development (Portugal = 100), NUTS 3, 2009



In 2009, the *competitiveness* and *cohesion* components showed a positive correlation with overall development (0.7 and 0.6, respectively) while, as for *environmental quality*, there was no relevant correlation with overall development, thus showing the absence of a relationship between the performance of the 30 NUTS 3 regions in *environmental quality* and in the *overall index of regional development*.

Correlation matrix, 2009

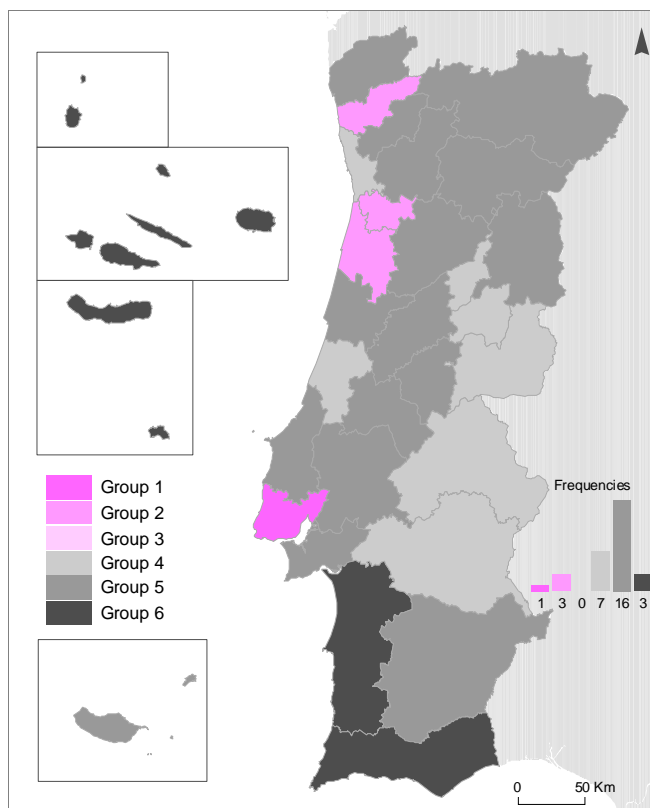
	Overall index	Competitiveness	Cohesion	Environmental quality
Overall index	-			
Competitiveness	0.7	-		
Cohesion	0.6	0.1	-	
Environmental quality	0.1	-0.4	-0.1	-

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 2009, in all four composite indicators; Alentejo Litoral, the Algarve and the Região Autónoma dos Açores were in the opposite situation, with performances below the national value in the four composite indicators. Three regions shared a position above the national average in the overall index of regional development but a performance below that threshold in one of the three components of development: Baixo Vouga, in *environmental quality*; Entre Douro e Vouga, in *cohesion*, and Cávado, in *competitiveness*.

In 2009, the most frequent regional profile, in which 11 Portuguese NUTS 3 level regions were (around 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.

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, 2009

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

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– *competitiveness*, *cohesion* and *environmental quality* –, 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.

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 1.2, INE* (available at www.ine.pt, in Metadata, Methodological Documents). The need to review this methodological document regarding the 1.1 version relies on the changes that have occurred in the statistical data that support the construction of the composite indicators: namely, the update of the Regional Accounts 1995-2006 series, the extraordinary revision of the International Trade Statistics 2007 and 2008 data, the revision of the 2004-2008 series on the quality of water for human consumption and on the proportion of classified area for the Autonomous Region of Madeira and the revision of the urban waste data for the 2004-2006 period. Annual data for the 2004-2009 period, in accordance with the 1.2 version of the methodological document, are available at www.ine.pt, in Statistical information, Statistical data, Database.