

11<sup>th</sup> April, 2013

## Regional Development Composite Index 2010

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The results for 2010 regarding the *overall index of regional development* show that five NUTS 3 level regions stood above the national average: Grande Lisboa (Lisboa NUTS 2 region), Cávado (Norte NUTS 2 region), Baixo Vouga (Centro NUTS 2 region), Minho-Lima and Grande Porto (both belonging to the Norte NUTS 2 region). The performance of the NUTS level 3 region 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 scored above the national average: Grande Lisboa, in a clear way, Grande Porto, Baixo Vouga and Ave. 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, Baixo Vouga, Ave, Entre Douro e Vouga and Cávado). As for *cohesion*, the index displays a more balanced country than the one resulting from the *competitiveness* index – nearly half of the regions showing a performance above the national threshold and, at the same time, the regional variability was below the one observed for *competitiveness* – 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 inland Mainland showing, in general, more *environmental quality*. The regional dispersion was lower than for the two other components. Serra da Estrela was the region with the higher *environmental quality*.

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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*.

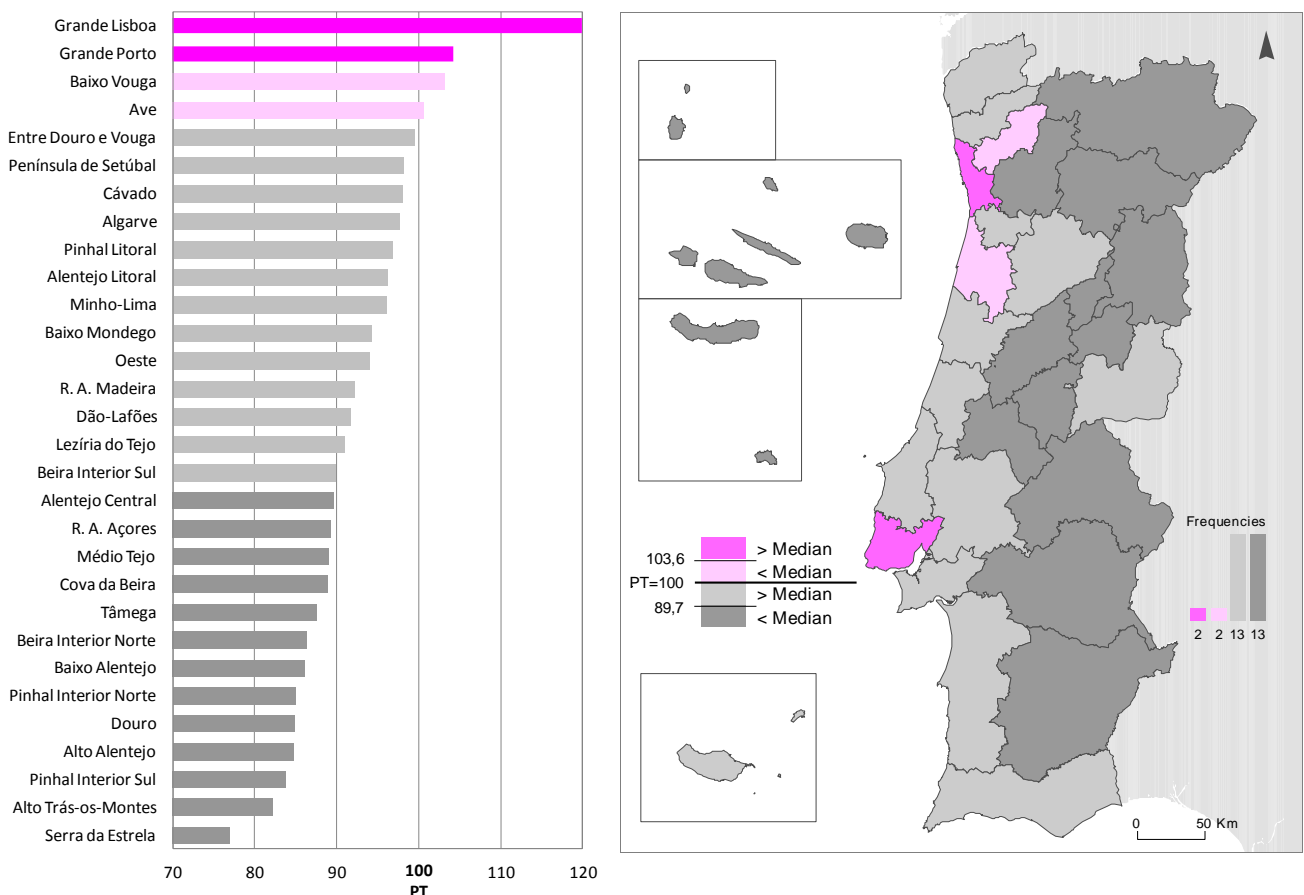
ISDR results now published take into account time-series changes in the 2004-2009 statistical data that support the construction of the composite indicators, namely, the revision of the Integrated Business Accounts System series, the inclusion of the Final Estimates of Resident Population series and the reformulation of the indicator on the quality of water for human consumption. So, the results now published are not comparable with the ones previously released. Annual data for the 2004-2010 period as well as conceptual and computational methodological options are available at [www.ine.pt](http://www.ine.pt).

**The performance of the NUTS 3 level regions in 2010: *competitiveness, cohesion and environmental quality***

The **competitiveness** index aims to express the regional potential (both regarding human resources and physical infra-structures) for the 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 2010 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 Ave. Taking into account that Entre Douro e Vouga, Península de Setúbal and Cávado scored close to the national average, 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 inland Mainland. The lowest results in this index were observed in Serra da Estrela, Pinhal Interior Sul and Pinhal Interior Norte (Centro region), in Alto Trás-os-Montes and Douro (Norte region) and in Alto Alentejo (Alentejo region).

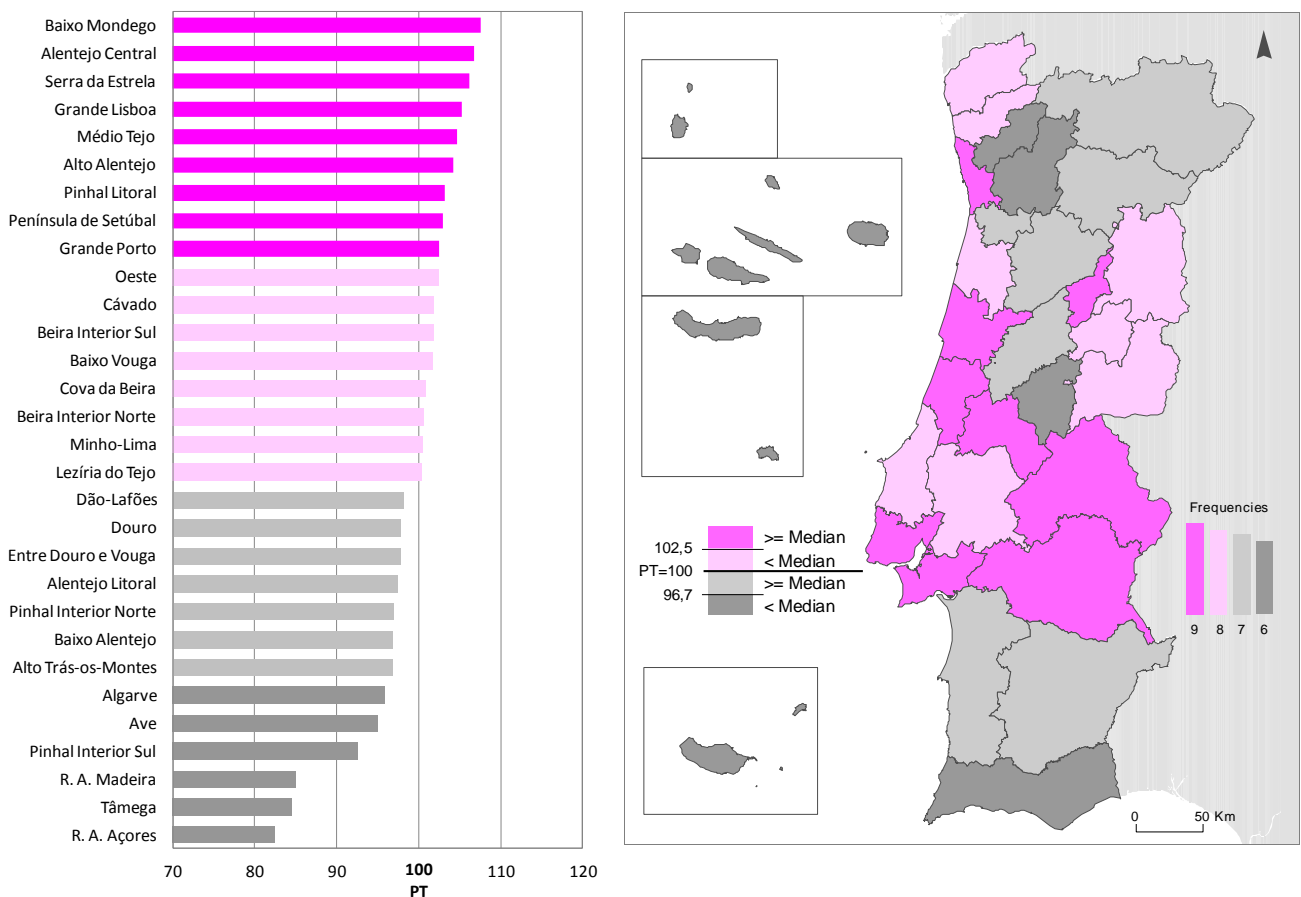
**Competitiveness (Portugal = 100), NUTS 3, 2010**



**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 territorial disparities.

As for this development component, the results suggest a picture of a more balanced country than the one observed for *competitiveness*, since in 17 of the 30 regions, and more clearly in Baixo Mondego, Alentejo Central and Serra da Estrela, the performance exceeded the national one and, at the same time, the regional variability was below the one observed for *competitiveness*. The territorial pattern opposes the Mainland centre (with more *cohesion*) to both the Northern Mainland and Southern regions and the autonomous regions (with less *cohesion*). The less favourable performances belonged to the two autonomous regions, to two Northern regions – Tâmega and Ave –, one Centro region – Pinhal Interior Sul – and also to the Algarve.

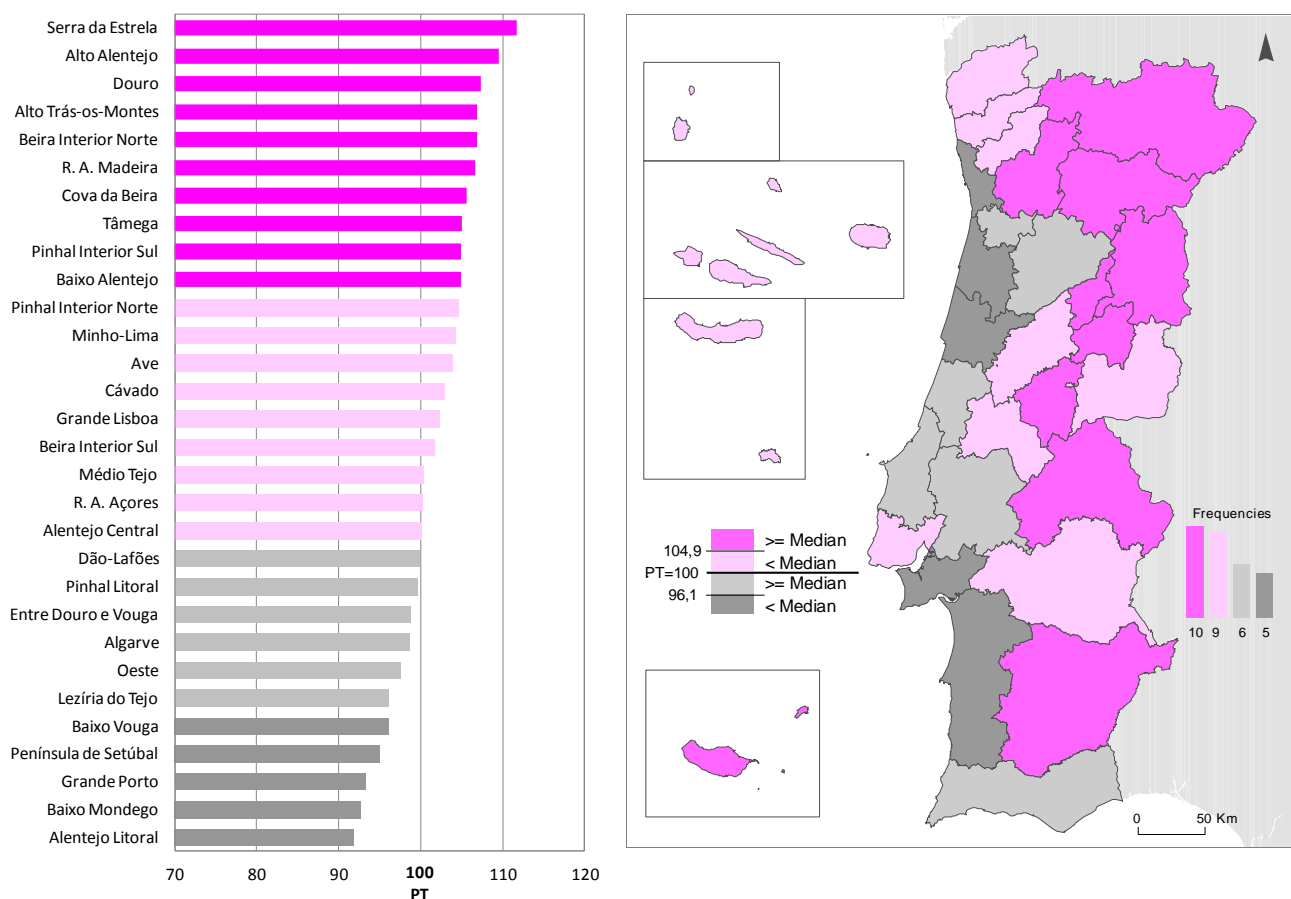
**Cohesion (Portugal = 100), NUTS 3, 2010**



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 2010 results suggest a more balance but reversed territorial pattern in comparison with *competitiveness*, with the inland Mainland regions showing, in general, more *environmental quality*. Among the NUTS 3 level regions with lower *environmental quality*, there were some of the more competitive ones as Grande Porto, Península de Setúbal and Baixo Vouga but also Alentejo Litoral and Baixo Mondego. The regional dispersion was lower than for the two other components. Serra da Estrela was, in 2010, the region with the higher *environmental quality*.

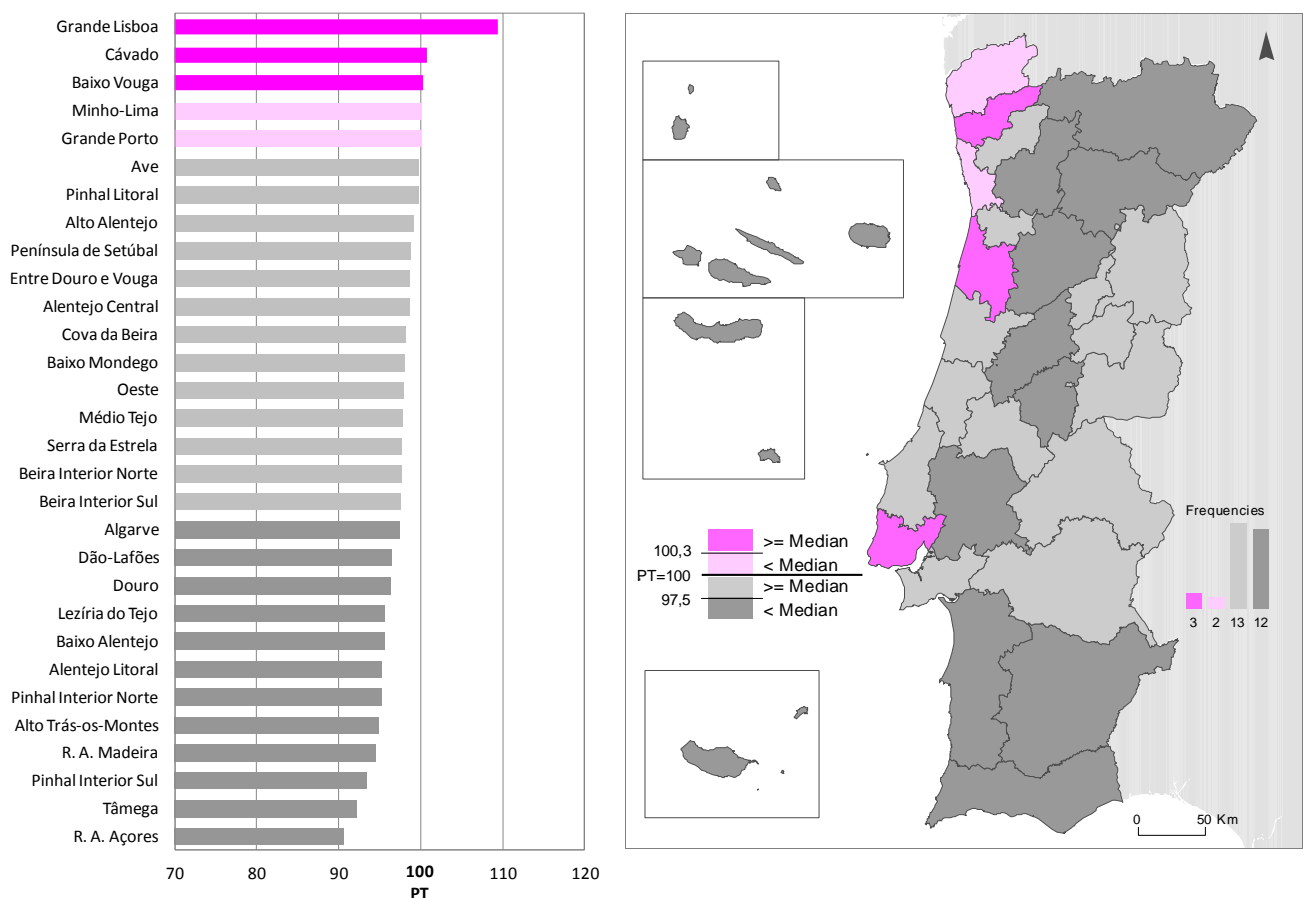
**Environmental quality (Portugal = 100), NUTS 3, 2010**



## 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 2010 ISDR results, five out of the 30 Portuguese NUTS 3 level regions scored above the national average: Grande Lisboa (in a clear way), Cávado, Baixo Vouga, Minho-Lima and Grande Porto. Ave and Pinhal Litoral were slightly below the national average.

**Overall index of regional development (Portugal = 100), NUTS 3, 2010**



In 2010, the *competitiveness* and *cohesion* components showed a positive correlation with overall development (0.7, in both cases) while, as for *environmental quality*, there was no relevant correlation with the 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*.

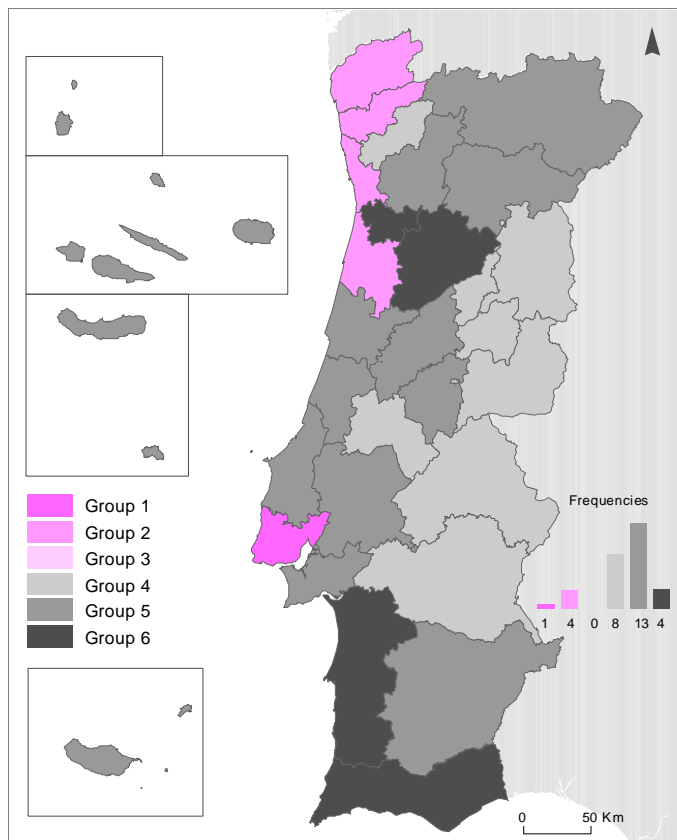
### Correlation matrix, 2010

	Overall index	Competitiveness	Cohesion	Environmental quality
Overall index	-			
Competitiveness	0.7	-		
Cohesion	0.7	0.2	-	
Environmental quality	-0.1	0.6	-0.2	-

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 2010, in all four composite indicators; Alentejo Litoral, the Algarve, Entre Douro e Vouga and Dão-Lafões were in the opposite situation, with performances below the national value in the four composite indicators. Four 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 and Grande Porto, in *environmental quality*; Cávado and Minho-Lima, in *competitiveness*.

**Overall index of regional development, competitiveness, cohesion and environmental quality: performance in relation to the national average (Portugal = 100), NUTS 3, 2010**

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



**Note:** The acronym **IG** refers to *Overall index of regional development*, **COMP** to the *Competitiveness index*, **COES** to the *Cohesion index* and **AMB** to the *Environmental quality index*.



## 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 span 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 level 3 regions indexes 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 1.3, INE* (available at [www.ine.pt](http://www.ine.pt), in Metadata, Metadata System, Methodological documentation). The need to review this methodological document regarding the 1.2 version relies on the changes in the 2004-2009 statistical data that support the construction of the composite indicators: namely, the revision of the Integrated Business Accounts System series, the inclusion of the Final Estimates of Resident Population series and the reformulation of the indicator on the quality of water for human consumption in order to render it more consistent with the safe water indicator that the Water and Waste Services Regulation Authority (ERSAR) includes since 2010 in the Water and Waste Sector Annual Report. Annual data for the 2004-2010 period, in accordance with the 1.3 version of the methodological document, are available at [www.ine.pt](http://www.ine.pt), in Statistical information, Statistical data, Database.