Regional Development Composite Index
2013

In 2013, according to the results of the *regional development composite index*, four out of the 25 Portuguese NUTS 3 level regions exceeded the national average in terms of the overall regional development – the metropolitan areas of Lisboa and Porto, Alto Minho and Região de Aveiro.

The territorial image of the *competitiveness* index shows that the regions with more favourable performances are concentrated in the mainland coast and especially in the territories centred in the two metropolitan areas. The metropolitan area of Lisboa was the leading region in the *competitiveness* index.

As for *cohesion*, the results display a more balanced country than the one resulting from the *competitiveness* index, since in eight of the 25 level 3 NUTS regions the *cohesion* index stood above the national average. In this dimension of regional development, the 2013 results suggested a more cohesive territory in the mainland centre sub-regions and in coastal Northern regions, especially in the metropolitan area of Lisboa, the territory formed by Região de Coimbra and Região de Leiria and, in the coastal north, Alto Minho and Cávado.

Regarding the *environmental quality* index, the 2013 results highlight the inner mainland and the two autonomous regions given the better *environmental quality*. The national average was exceeded in 14 of the 25 NUTS 3 regions and the territorial disparity was weaker than the one observed for the other components.

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*.

With the release of the 2013 results, Statistics Portugal launches the production cycle of ISDR's version 2. This new series benefits from the release of new information within the scope of the National Statistical System and adopts the new benchmark for the organizations of the level 3 NUTS regions set by the Commission Regulation (EU) No. 868/2014, August 8, which establishes the NUTS 3 as administrative regions, with territorial boundaries matching those of the Intermunicipal Entities, set by Law No. 75/2013, September 12, for the Portuguese mainland. Additionally, ISDR's version 2 also anticipates the release calendar from April of the year n+3 to the first semester of the year n+2. Therefore, data now released are not comparable to the ones previously published and associated with ISDR's version1.

The conceptual and computational methodological options as well as annual result data for the 2011-2013 period are available at www.ine.pt, in accordance with the technical note included in the end of this press release.
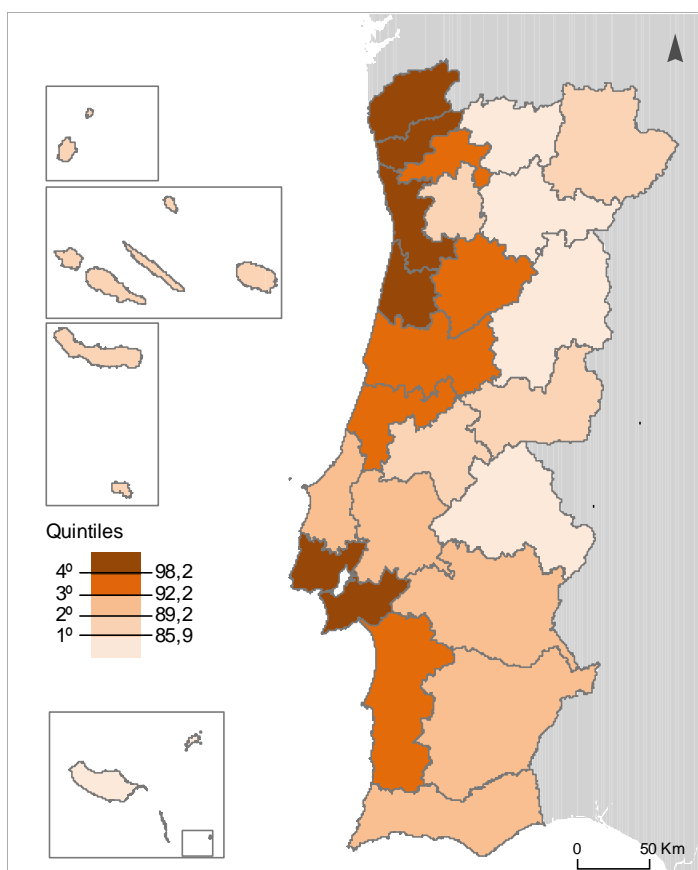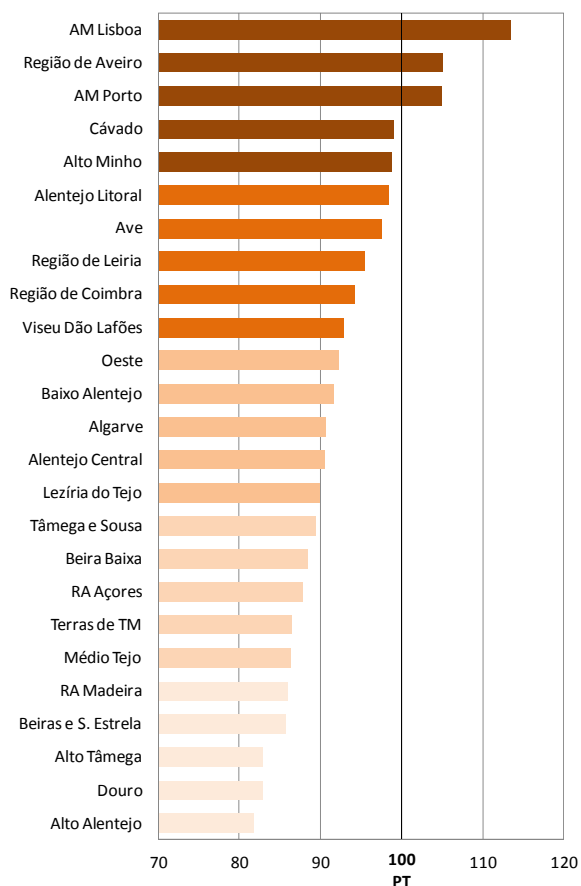
The NUTS 3 performance in 2013: *competitiveness*, *cohesion* and *environmental quality*

Competitiveness index

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 creating wealth and the ability to compete in international markets.

According to the 2013 results, the NUTS 3 regions with higher scores in the *competitiveness* index are concentrated in the mainland coast and especially in the territories centred in the two metropolitan areas – in the south, covering the metropolitan area of Lisboa; in the north, comprising a continuous territory formed by Alto Minho, Cávado, the metropolitan area of Porto and Região de Aveiro. Among the 25 NUTS 3 regions, only three scored above the national average – the two metropolitan areas and Região de Aveiro. The metropolitan area of Lisboa was the leading region in the *competitiveness* ranking. The inner mainland, especially in the Norte and Centro NUTS 2 regions, and the two autonomous regions reached lower *competitiveness* scores as compared to coastal mainland. Within the three dimensions of development, the results for *competitiveness* revealed the stronger territorial disparity according to the coefficient of variation.

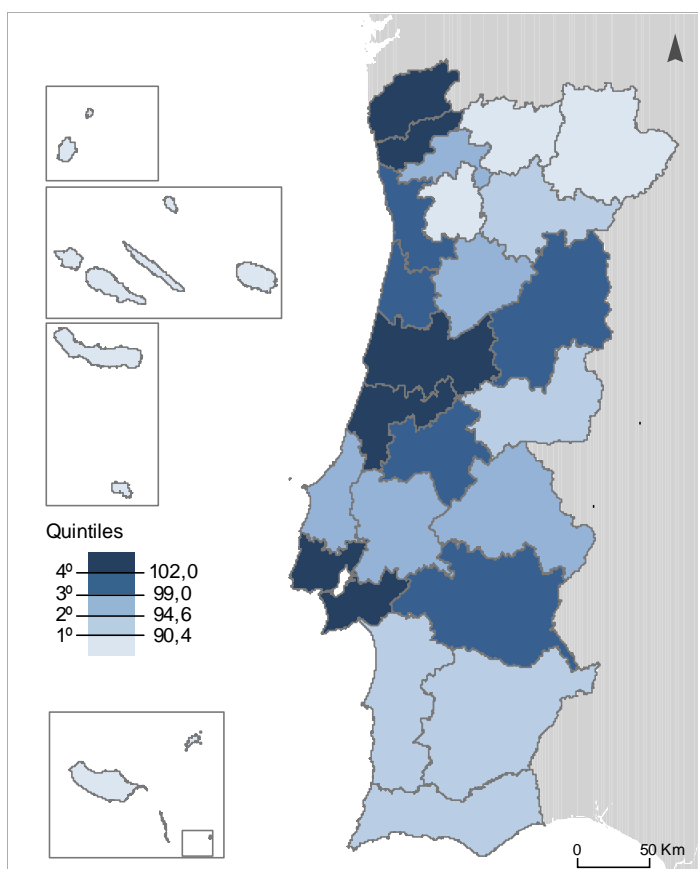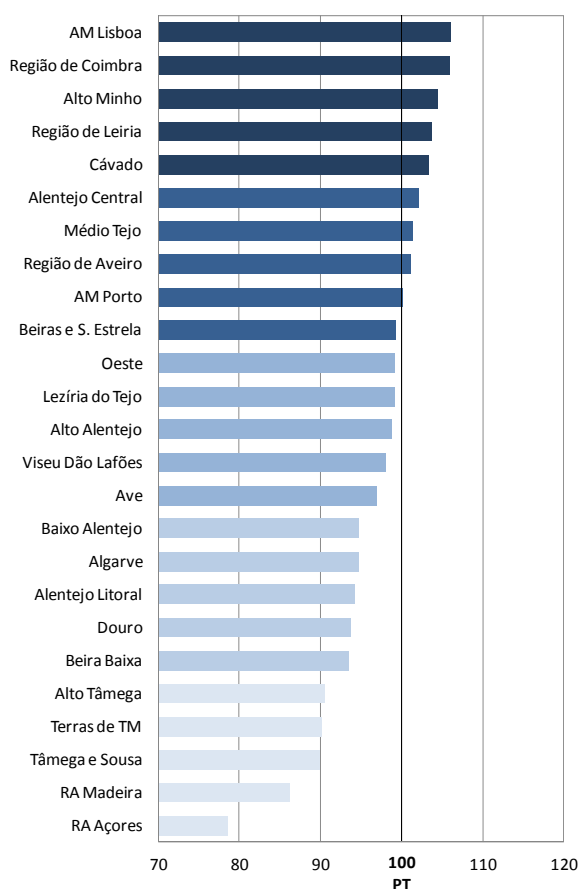**Competitiveness (Portugal = 100), NUTS 3, 2013**

Cohesion index

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 the effectiveness of public policies given by an increase in the quality of life and to a decrease in territorial disparities.

As for *cohesion*, the results display a more balanced country than the one resulting from the *competitiveness* index, since in eight of the 25 NUTS level 3 regions the *cohesion* index stood above the national average. In the dimension of regional development, the 2013 results suggested a more cohesive territory in the mainland centre sub-regions and in coastal Northern regions – specifically, the higher scores belong to the metropolitan area of Lisboa, the territory formed by Região de Coimbra and by Região de Leiria and, in the northern coast, Alto Minho and Cávado. The metropolitan area of Lisboa and Região de Coimbra displayed the higher *cohesion* scores.

The autonomous regions of Açores and Madeira, the inner north territory, formed by Terras de Trás-os-Montes and Alto Tâmega, and also Tâmega e Sousa scored poorer on the *cohesion* index.

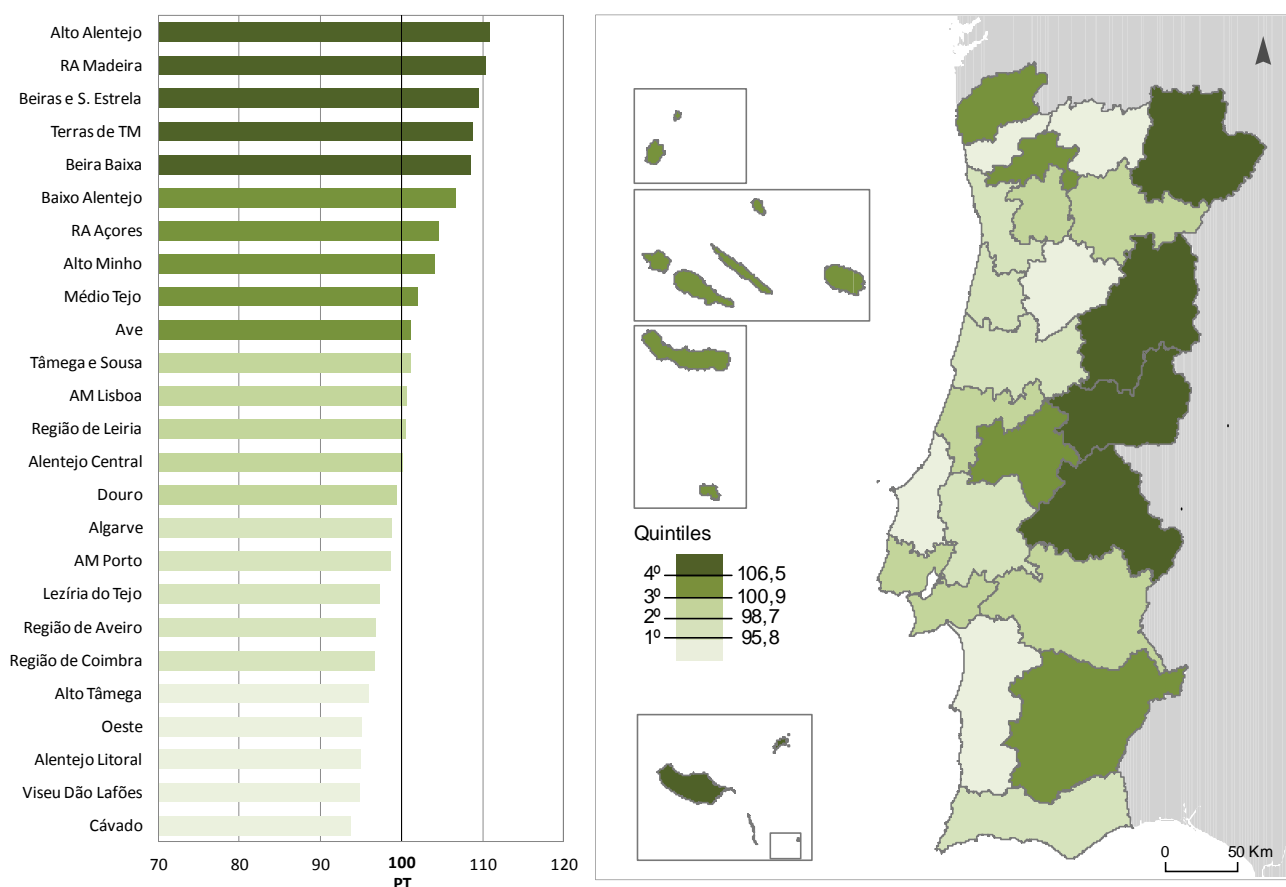### Cohesion (Portugal = 100), NUTS 3, 2013

Environmental quality index

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 2013 results reveal a reversed territorial pattern in relation to *competitiveness* as the inner mainland and the two autonomous regions showed, in general, better *environmental quality* with the territorial pattern of the results suggesting that the *environmental quality* progressively increases from the coast toward the inner mainland. Nevertheless, Alto Minho, Área Metropolitana de Lisboa and Região de Leiria, in the Atlantic strip, scored above the national average. The national average in this dimension was exceeded in 14 out of the 25 NUTS 3 regions and the territorial disparities were weaker than the ones observed for the other components.

Among the regions with an *environmental quality* below the national average, there were six out the 10 more competitive regions – Cávado, Viseu Dão-Lafões, Alentejo Litoral, Região de Coimbra, Região de Aveiro and the metropolitan area of Porto. Alto Alentejo and Região Autónoma da Madeira were the leading regions with regard to the *environmental quality* index.

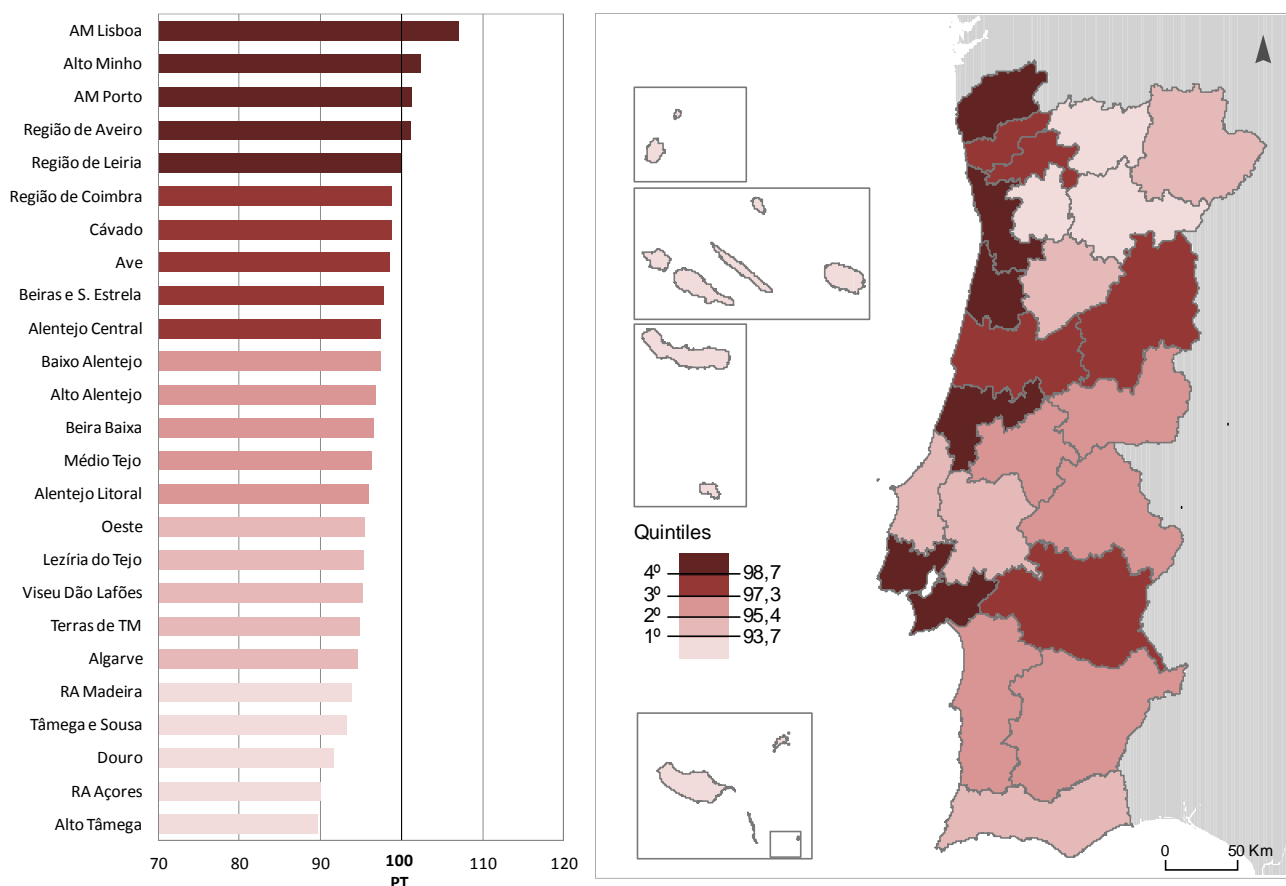**Environmental quality (Portugal = 100), NUTS 3, 2013**

The joint analysis of regional development in 2013

Overall index of regional development

The *overall index of regional development* is the result of the joint performance in *competitiveness*, *cohesion* and *environmental quality*.

According to the 2013 ISDR results, four out of the 25 Portuguese NUTS 3 level regions scored above the national average – the metropolitan areas of Lisboa and Porto, Alto Minho and Região de Aveiro. Região de Leiria completed the set of the five regions with the best performance in the *overall index of regional development*.

Overall index of regional development (Portugal = 100), NUTS 3, 2013

In 2013, the *competitiveness* and *cohesion* indexes showed a positive correlation with *overall development* (0.8, 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 joint performance of the Portuguese NUTS 3 regions in *environmental quality* and in the *overall index of regional development*. The negative association between *environmental quality* and the other two dimensions of regional development should also be noted.

Correlation matrix, 2013

	Overall index	Competitiveness	Cohesion	Environmental quality
Overall index	-			
Competitiveness	0.8	-		
Cohesion	0.8	0.5	-	
Environmental quality	0.0	-0.4	-0.3	-

The complexity of regional development, considering the multidimensional perspective that ISDR intends to reflect, leads to heterogeneous regional profiles.
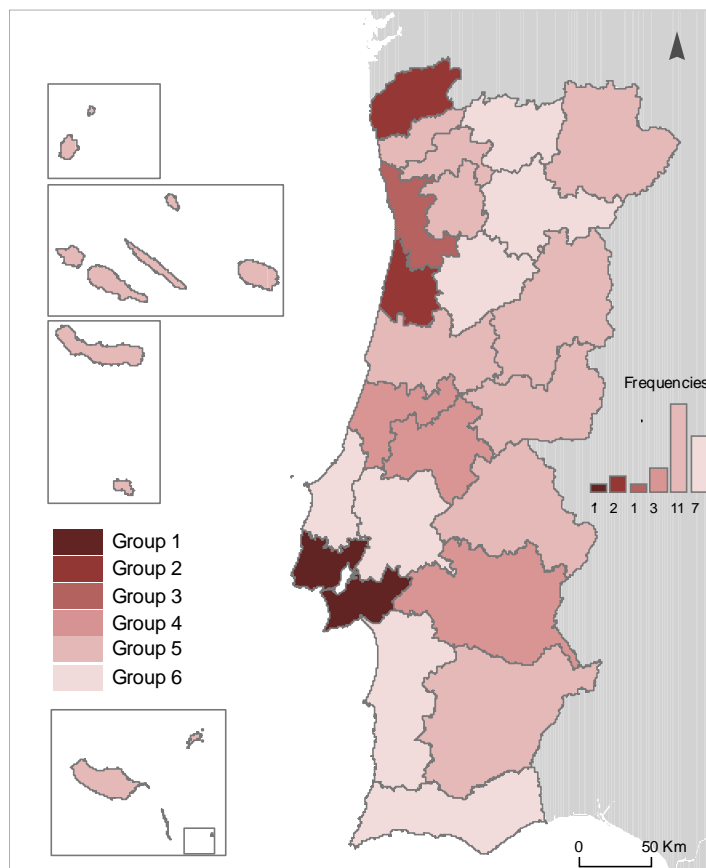
In 2013, the metropolitan area of Lisboa was the only region which scored above the national average in both the *overall index of regional development* and the three partial indexes. In the metropolitan area of Porto, the *overall index of regional development* exceeded the national average as a result of a score above that threshold in *competitiveness*. The other two regions exceeding the national average in the *overall index of regional development* share the property of scoring above that threshold in two of the three partial indexes: Região de Aveiro, in *competitiveness* and *cohesion* and Alto Minho, in *cohesion* and *environmental quality*.

On the other hand, the NUTS 3 regions with performances below the national average in the four indexes were Algarve, Alentejo Litoral, Alto Tâmega, Douro, Lezíria do Tejo, Oeste and Viseu Dão-Lafões.

The most common regional profile, covering nine regions, consisted in an *environmental quality* above the national average and *competitiveness* and *cohesion* indexes below the national level.

Overall index of regional development, competitiveness, cohesion and environmental quality: performance in relation to the national average (Portugal = 100), NUTS 3, 2013

	ISDR > 100		ISDR < 100		
COMP > 100 COES > 100 AMB > 100	AM Lisboa	Group 1			
COMP > 100 COES > 100 AMB < 100	Região de Aveiro	Group 2			Group 4
COMP > 100 COES < 100 AMB > 100		Group 2			Group 4
COMP < 100 COES > 100 AMB > 100	Alto Minho		Alentejo Central	Médio Tejo Região de Leiria	Group 4
COMP > 100 COES < 100 AMB < 100	AM Porto	Group 3			Group 5
COMP < 100 COES > 100 AMB < 100		Group 3	Cávado	Região de Coimbra	Group 5
COMP < 100 COES < 100 AMB > 100		Group 3	Alto Alentejo Ave Baixo Alentejo Beira Baixa Beiras e S. Estrela	RA Açores RA Madeira Tâmega e Sousa Terras de TM	Group 5
COMP < 100 COES < 100 AMB < 100			Algarve Alentejo Litoral Alto Tâmega Douro Lezíria do Tejo Oeste Viseu Dão-Lafões		Group 6

Frequencies

Group 1
Group 2
Group 3
Group 4
Group 5
Group 6

1 2 1 11 7

0   50 Km

Note: The acronym ISDR refers to the *overall index of regional development*, COMP to the *competitiveness index*, COES to the *cohesion index* and AMB to the *environmental quality index*.
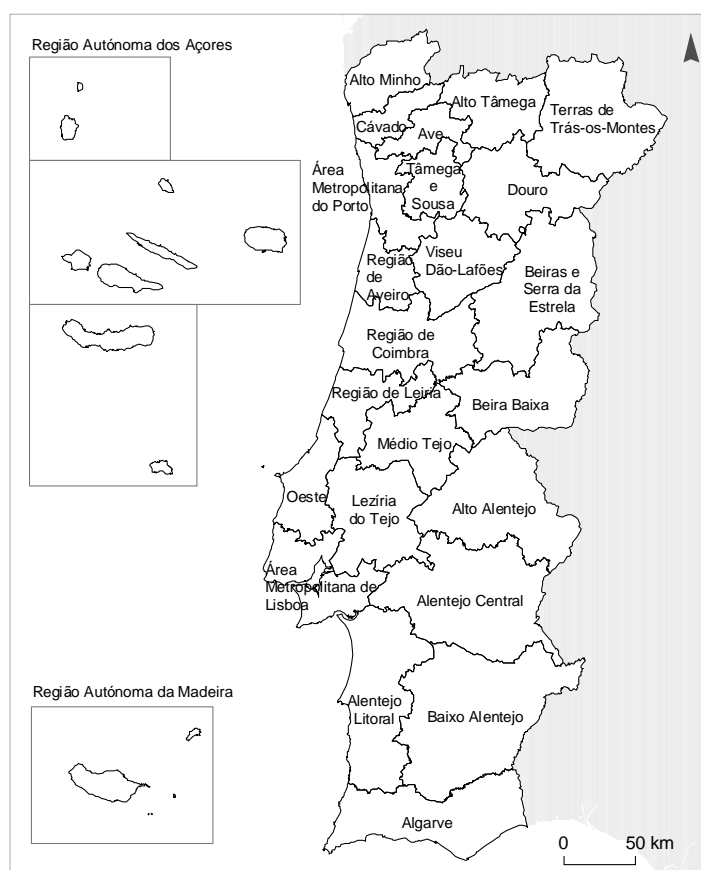
Technical note

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 25 Portuguese NUTS 3 level regions (NUTS-2013). It is, however, worthwhile to stress the diversity of territorial contexts among these regions, of which the autonomous regions and the metropolitan areas are examples, as well as the heterogeneity regarding the size of the 25 Portuguese NUTS 3 level regions.

NUTS 3 amendment (NUTS-2013)

NUTS 1	NUTS 2	NUTS 3	Population (Census 2011)	No. of municipalities	Changes regarding the previous version Territorial boundaries	Name
Continente	Norte	Alto Minho	244 836	10	No	Yes
		Cávado	410 169	6	No	No
		Ave	425 411	8	Yes	No
		Área Metropolitana do Porto	1 759 524	17	Yes	Yes
		Alto Tâmega	94 143	6	Yes	Yes
		Tâmega e Sousa	432 915	11	Yes	Yes
		Douro	205 157	19	Yes	No
		Terras de Trás-os-Montes	117 527	9	Yes	Yes
	Centro	Região de Aveiro	370 394	11	Yes	Yes
		Região de Coimbra	460 139	19	Yes	Yes
		Região de Leiria	294 632	10	Yes	Yes
		Viseu Dão Lafões	267 633	14	Yes	Yes
		Beiras e Serra da Estrela	236 023	15	Yes	Yes
		Beira Baixa	89 063	6	Yes	Yes
		Oeste	362 540	12	No	No
		Médio Tejo	247 331	13	Yes	No
		Área Metropolitana de Lisboa	2 821 876	18	Yes	Yes
	Alentejo	Alentejo Litoral	97 925	5	No	No
		Alto Alentejo	118 506	15	Yes	No
		Alentejo Central	166 726	14	Yes	No
		Baixo Alentejo	126 692	13	No	No
		Lezíria do Tejo	247 453	11	No	No
	Algarve	Algarve	451 006	16	No	No
		Região Autónoma dos Açores	246 772	19	No	No
		Região Autónoma da Madeira	267 785	11	No	No

NUTS 3 boundaries (NUTS-2013)

On the basis of a 65 statistical indicators matrix, for the 25 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 dimensions – *competitiveness*, *cohesion* and *environmental quality* – subsequently aggregated by a non-weighted average, for the dimensions level as well as from the dimensions 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 conceptual and computational methodological options are presented in the methodological document *Índice Sintético de Desenvolvimento Regional, código 127 / versão 2.0, INE* (available at www.ine.pt, in Metadata, Metadata System, Methodological documentation). The need to review this methodological document regarding the 1.4 version relies on (1) the adoption of the Portuguese NUTS-2013 (Commission Regulation (EU) No. 868/2014, August 8,) in which the regions became administrative units with the same boundaries as the mainland Intermunicipal Entities (Law No. 75/2013, September 12), decreasing from 30 to 25 NUTS level 3 three regions; (2) adjustments in the information that supports ISDR's computation, given the current statistical availability and the conceptual framework that underlies the European programming cycle for the 2014-2020 period (Portugal 2020); and (3) the anticipations of the release calendar from April of the year n+3 to the first semester of the year n+2.

Therefore, the data now released are not comparable with previously published results. Annual figures for the 2004-2011 period, in accordance with the 2.0 version of the methodological document, are available at www.ine.pt, in Statistical information, Statistical data, Database.