

## Regional Development Composite Index

2015

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### Overall regional development, competitiveness, cohesion and environmental quality

In 2015 according to the results of the *regional development composite index* five out of the 25 Portuguese NUTS 3 level regions stood above the national average in terms of the overall regional development – the metropolitan areas of Lisboa and Porto, Alto Minho, Região de Aveiro and Região de Leiria.

The territorial image of the *competitiveness* index shows that regions with more favourable performances are concentrated in the Portuguese mainland coast. The metropolitan area of Lisboa was the leader in the *competitiveness* index. The Região de Aveiro, the metropolitan area of Porto and, marginally Alentejo Litoral also stood above the national average.

As for *cohesion*, the results illustrate a more balanced country than the one resulting from the *competitiveness* index, since in nine out of the 25 level 3 NUTS regions the *cohesion* index stood above the national average. In this dimension of regional development, the 2015 results suggested a more cohesive territory in the mainland centre sub-regions and in the northern coastal regions, especially in the metropolitan area of Lisboa and Região de Coimbra.

Regarding the *environmental quality* index, the 2015 results highlight the inner mainland and the two autonomous regions. The national average was exceeded in 12 out of the 25 NUTS 3 regions and the territorial disparity was weaker than the one observed for the other components. In 2015, Alto Alentejo was the leader in the *environmental quality* index.

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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*.

With the release of the 2015 results, Statistics Portugal continues the production cycle of ISDR's version 2, comprising a data series for the 2011-2015 period, in line with the organization of the level 3 NUTS regions set by the Commission Regulation (EU) No. 868/2014, August 8 (NUTS-2013).

The conceptual and computational methodological options as well as annual results data for the 2011-2015 period are available at [www.ine.pt](http://www.ine.pt), in accordance with the technical note included in the end of this press release.

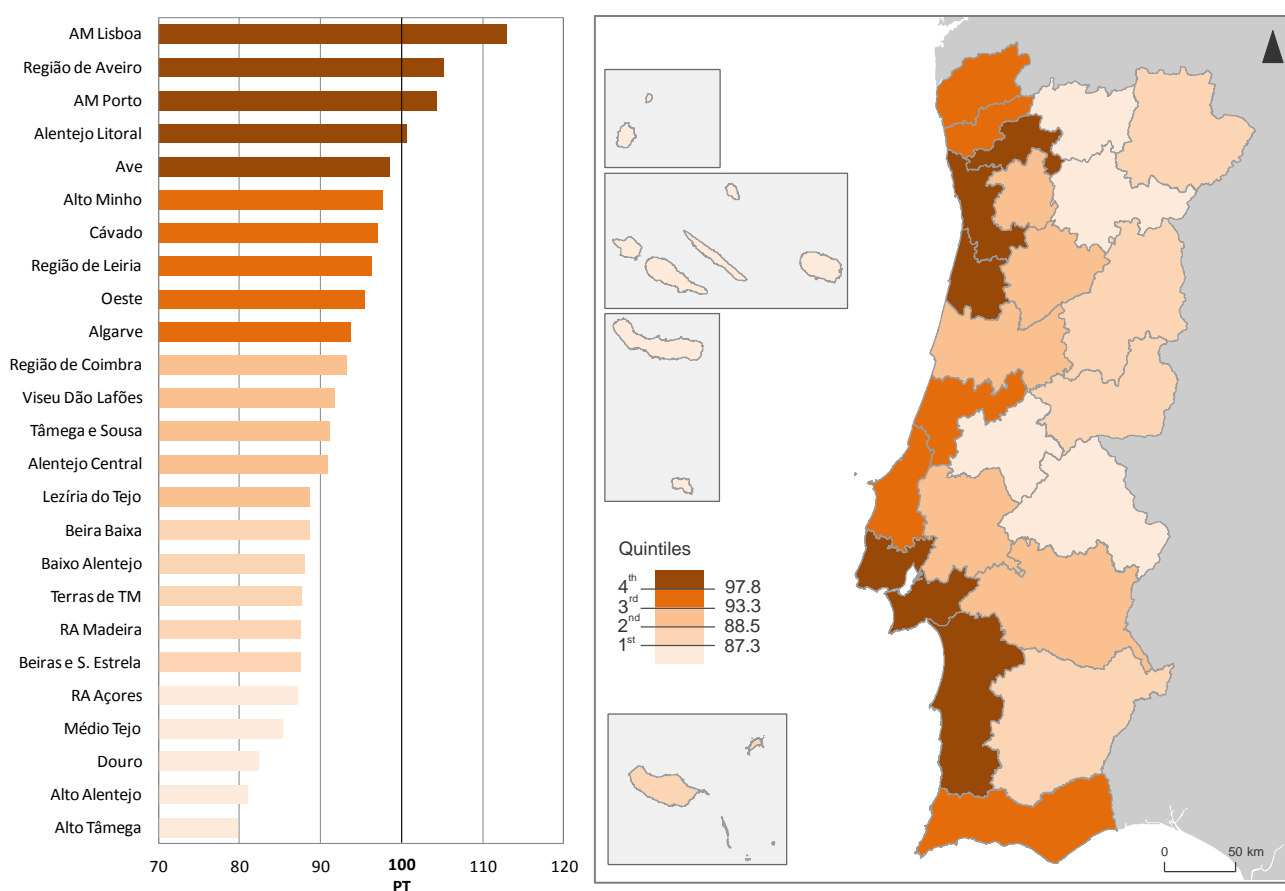
## The NUTS 3 performance in 2015: *competitiveness, cohesion and environmental quality*

### 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 2015 results, the NUTS 3 regions with higher scores in the *competitiveness* index are concentrated in the Portuguese mainland coast and especially, in the south, in the metropolitan area of Lisboa and the Alentejo Litoral and, in the north, comprising a continuous territory formed by Ave, the metropolitan area of Porto and Região de Aveiro. Among the 25 NUTS 3 regions, only four scored above the national average – the two metropolitan areas, Região de Aveiro and Alentejo Litoral. The metropolitan area of Lisboa was the leading region in the *competitiveness* ranking. The inner mainland 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 stronger territorial disparity according to the coefficient of variation.

### Competitiveness (Portugal = 100), NUTS 3, 2015



## Cohesion index

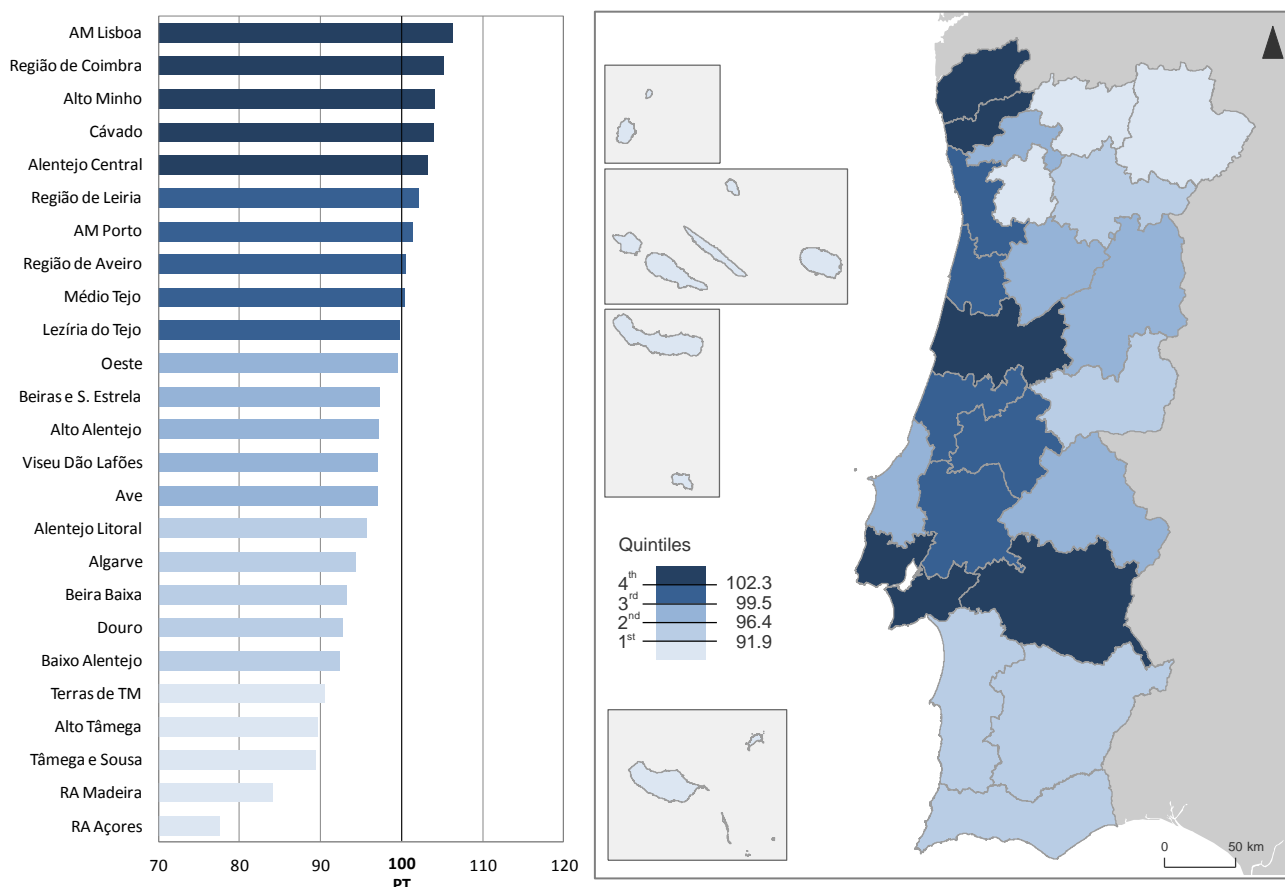
The *cohesion* composite indicator regards the population accessibility to quality basic collective equipment and services, as well as the profiles that lead to a greater social inclusion and the effectiveness of public policies given by an increase in the quality of life and by a decrease in territorial disparities.

As for *cohesion*, the results display a more balanced country than the one resulting from the *competitiveness* index, since in nine out of the 25 NUTS level 3 regions the *cohesion* index stood above the national average.

In this dimension of regional development, the 2015 results suggested a more cohesive territory with lower disparities than the one evidenced by the *competitiveness* component – specifically, the highest *cohesion* scores belong to the metropolitan area of Lisboa and Região de Coimbra but also, in the northern coast, to the territory formed by Alto Minho and Cávado and, in the south, to Alentejo Central.

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 lower in the *cohesion* index.

### Cohesion (Portugal = 100), NUTS 3, 2015



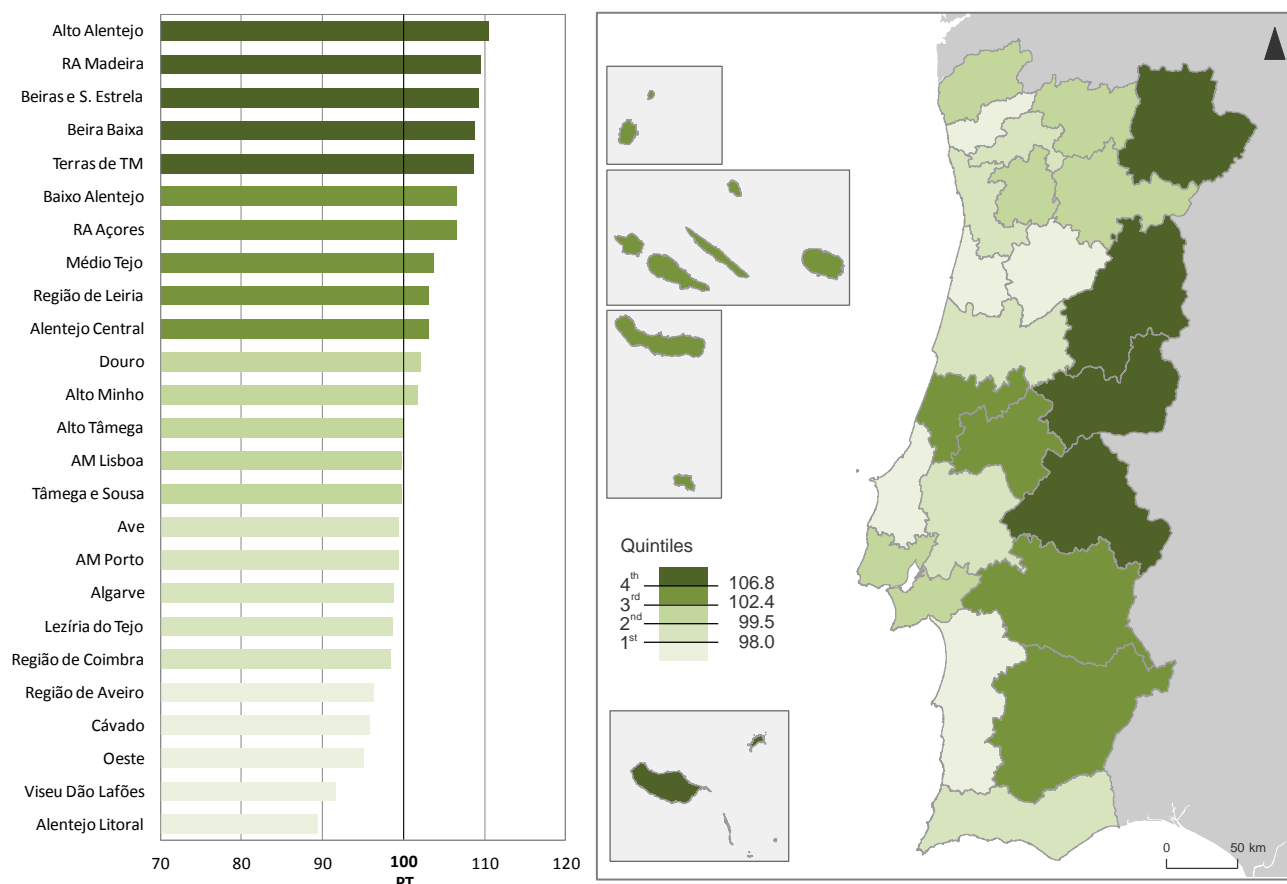
## Environmental quality index

The **environmental quality** index combines the pressure put on the environment by economic activity and social behaviour (extended to territorial qualification and planning), but also the corresponding effects on environment and the economic and social responses (both regarding individual behaviour and public policies).

The 2015 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 *environmental quality* progressively increases from the coast towards the inner mainland. Nevertheless, Alto Minho and Região de Leiria, in the Atlantic strip, scored above the national average.

The national average in this dimension was exceeded in 12 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 eight out of the 10 more competitive regions – Cávado, Ave, metropolitan area of Porto, Região de Aveiro, Oeste, the metropolitan area of Lisboa, Alentejo Litoral and Algarve. In 2015, Alto Alentejo was the leading region in the *environmental quality* index.

### Environmental quality (Portugal = 100), NUTS 3, 2015



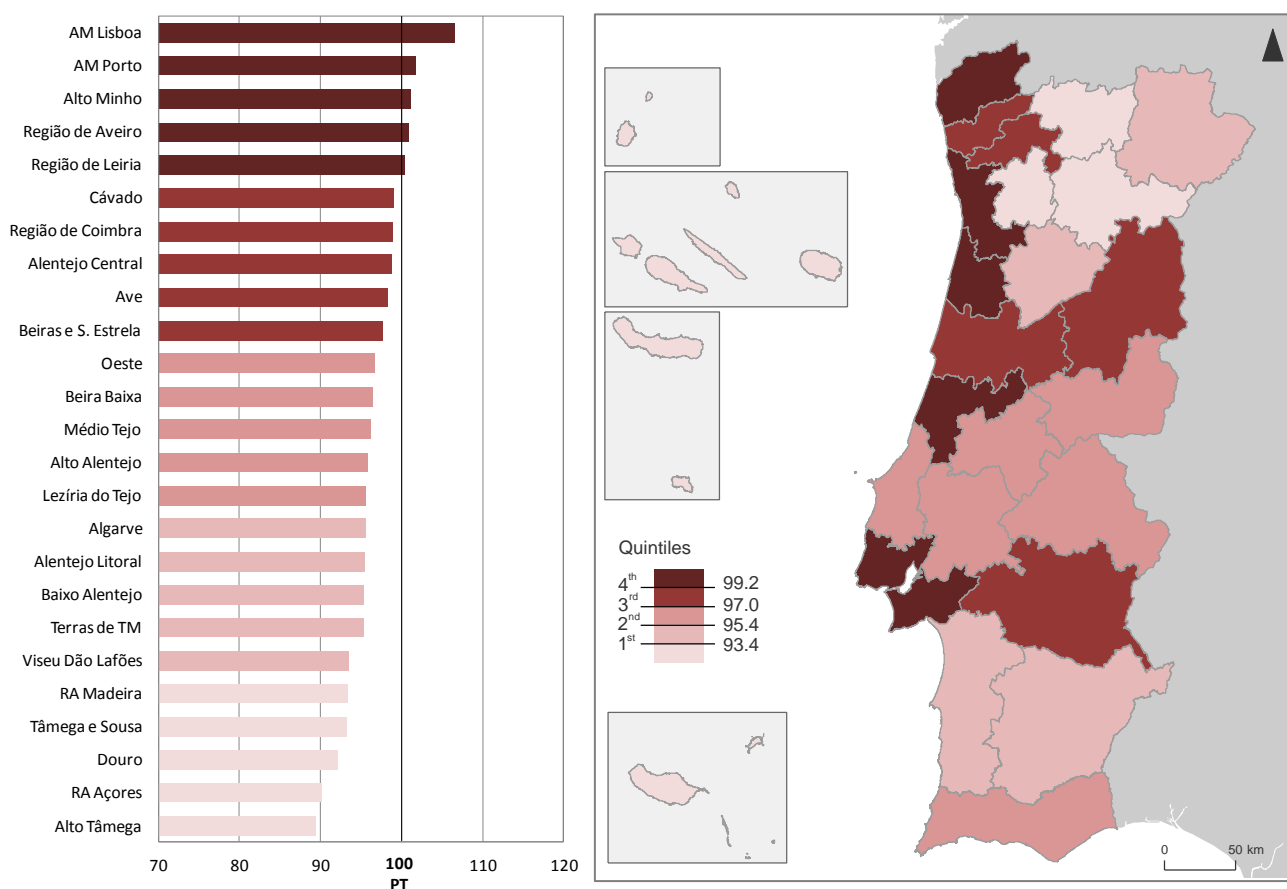
## The joint analysis of regional development in 2015

### 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 2015 ISDR results, five out of the 25 Portuguese NUTS 3 level regions scored above the national average – the metropolitan areas of Lisboa and Porto, Alto Minho, Região de Aveiro and Região de Leiria.

**Overall index of regional development (Portugal = 100), NUTS 3, 2015**



In 2015, the *competitiveness* and *cohesion* indexes showed a positive correlation with the *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*. At the component level, there is a positive association between the *competitiveness* index and the *cohesion* index and a negative correlation between the *competitiveness* component and the *environmental quality* component.

**Correlation matrix, 2015**

	Overall index	Competitiveness	Cohesion	Environmental quality
Overall index	-			
Competitiveness	0,8	-		
Cohesion	0,8	0,5	-	
Environmental quality	-0,1	-0,5	-0,4	-

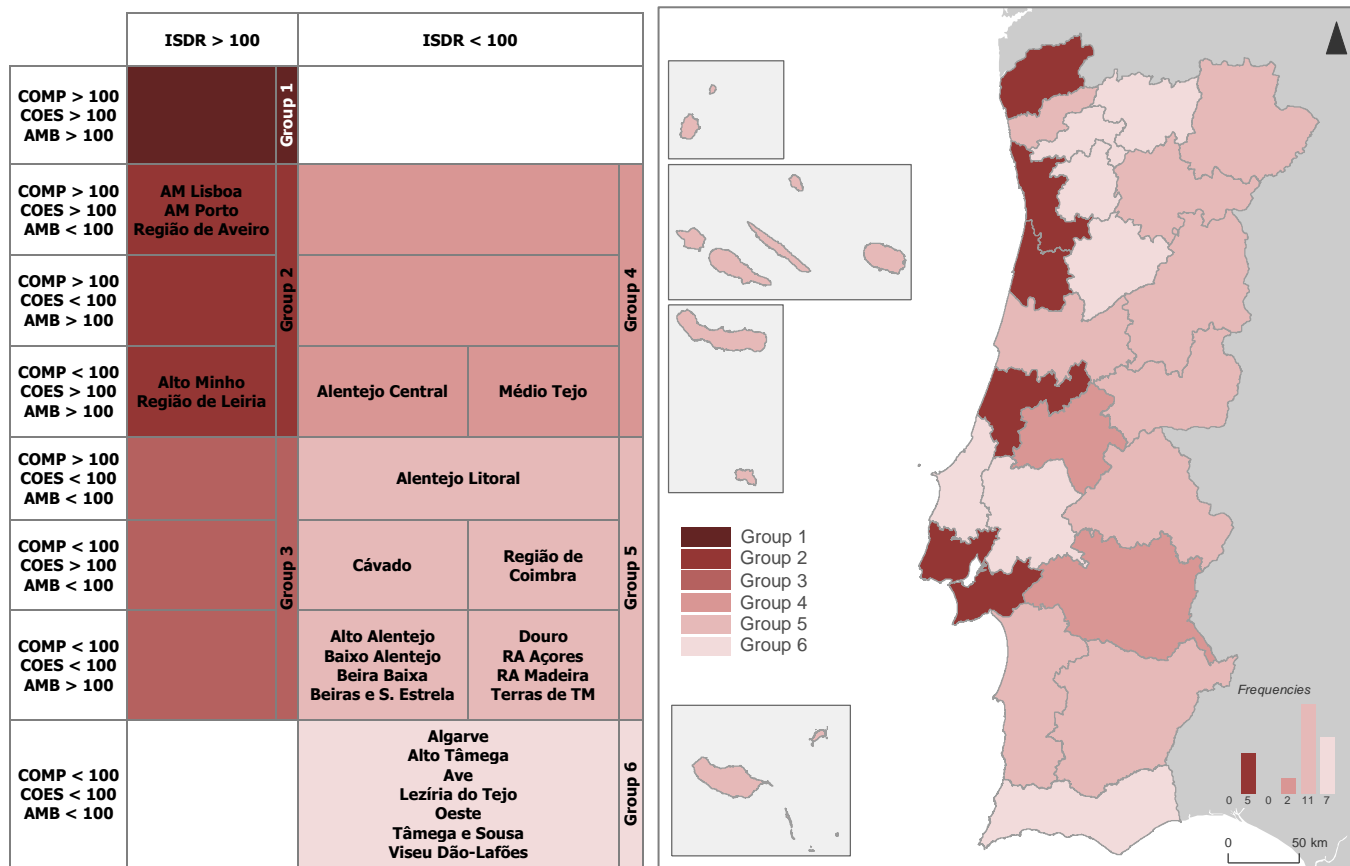
The complexity of regional development, considering the multidimensional perspective that ISDR aims to reflect, leads to heterogeneous regional profiles.

In 2015, the five regions performing above the national average in the *overall index of regional development* shared the feature of staying behind the national threshold in a single partial index: on the one hand, Região de Aveiro and the metropolitan areas of Lisboa and Porto did not exceed the national average in the *environmental quality* index; on the other hand, Alto Minho and Região de Leiria were below the national reference in *competitiveness*.

Additionally, the NUTS 3 regions performing below the national average in the four indexes were Alto Tâmega, Ave, Tâmega e Sousa, Viseu Dão-Lafões, Oeste, Lezíria do Tejo and Algarve.

The most common regional profile, covering eight regions, consisted in an *environmental quality* index 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, 2015**



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.

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.

Comparing with the results released in 2016 for the 2011-2014 period, the minimum and maximum reference values do not change, matching the same region and the same individual indicator – the minimum value corresponds to the *final energy intensity* observed in 2014 in Alentejo Litoral and the maximum corresponds to the *lodging capacity in hotel establishments with 3 or more stars per 1 000 inhabitants* observed in 2014 in Algarve.

This ISDR edition includes, for 2015, the new data series from the Integrated Business Accounts System (SCIE) that derives from the implementation of ESA 2010 in the National Accounts, resulting, among others, in changes in the classification of the institutional sector of the entities, affecting the delimitation of the business sector (more information is available in [Enterprises in Portugal - 2015](#)). This information allowed the computation of 13 indicators of the *competitiveness* component.

At the same time, this ISDR edition did not benefit yet from the updating of the *physicians employed at official clinics per 1 000 inhabitants*, since the Official Clinics survey was suspended and its replacement by the use of administrated data has not been accomplished.

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](http://www.ine.pt), in Metadata, Metadata System, Methodological documentation).

Annual figures for the 2011-2015 period, in accordance with the 2.0 version of the methodological document, are available at [www.ine.pt](http://www.ine.pt), in Statistical information, Statistical data, Database.