

# **ATTRACTIVE DANUBE WP4 - DANUBE ATTRACTIVENESS**

A. 4.1 Upgrading attractiveness indicators and databases for the entire Danube region Metadata template for attractiveness indicators and indicator database

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# **INTRODUCTION**

# **1.1.** Scope

The following document present the metadata information for the common attractiveness indicators and indicator database (at national level), as part of the *Activity 4.1 Upgrading attractiveness indicators and databases for the entire Danube region*.

The common attractiveness indicators are represented by the 22 indicators defined through the ATTRACT – SEE project, as follows:

#### **COMMON ATTRACTIVENESS INDICATORS:**

NO.	DESCRIPTION
1.	Air pollution: Ozone concentration
2.	Population connected to urban waste water treatment with at least secondary
	treatment
3.	Electricity generated from renewable sources
4.	Consumption of water per capita
5.	% of terrestrial area protected (total and by ecological region)
6.	Population (or households) with accessibility to high-speed broadband
	(1 Mbit/second up and down)
7.	European cultural sites on the UNESCO World Heritage List, 2010
8.	Life expectancy at birth by sex (Europe 2020 indicator)
9.	Gross disposable household income
10.	People at risk of poverty or social exclusion (Europe 2020 indicator)
11.	Population aged 25-64 with tertiary education
12.	Research & Experimental Development expenditure as % of Gross Domestic Product
	(Europe 2020 indicator)
13.	Employment rate 20-64 years by sex [%] (Europe 2020 indicator)
14.	Youth unemployment rate
15.	Share of employment by sector
16.	Number of overnight stays of tourists per capita per year
17.	Share of tourism related employment in total employment
18.	% of GDP of foreign direct investment stock
19.	Population growth rate
20.	% of population in age 20-64 years
21.	Ageing index
22.	Number of foreign students



#### 1.2. Data sources

The following key data sources are used for the collection of the indicators at transnational level:

NO.	ORGANISATION	ACRONYM
1.	Executive Environment Agency (Bulgaria)	ExEA
2.	Eurostat	
3.	Eurostat	
4.	National Statistical Institute (Bulgaria)	NSI
5.	National Statistical Institute (Bulgaria)	NSI
6.	National Statistical Institute (Bulgaria)	NSI
7.	National Statistical Institute (Bulgaria)	NSI
8.	Eurostat	
9.	Eurostat	
10.	Eurostat	
11.	National Statistical Institute (Bulgaria)	NSI
12.	National Statistical Institute (Bulgaria)	NSI
13.	Eurostat	
14.	Eurostat	
15.	National Statistical Institute (Bulgaria)	NSI
16.	National Statistical Institute (Bulgaria)	NSI
17.	National Statistical Institute (Bulgaria)	NSI
18.	National Statistical Institute (Bulgaria)	NSI
19.	National Statistical Institute (Bulgaria)	NSI
20.	National Statistical Institute (Bulgaria)	NSI
21.	National Statistical Institute (Bulgaria)	NSI
22.	National Statistical Institute (Bulgaria)	NSI

# 2. INDICATORS FOR TERRITORIAL ATTRACTIVENESS AT A NATIONAL LEVEL

# **2.1.** Air pollution: Ozone concentration (number of days/Year; yg/m3)

**Description:** Indicator defined as the number of days with ground level concentration exceedances of more than 120 yg/m3. Attractive regions of high ecological values and strong territorial capital.



The indicator tries measuring the degree of reductions in emissions for healthier natural living environments. Territorial distribution of the annual average of exceeding of the concentration limit established by law.

Type of indicator	Transnational and National
Annual range	2008/2021
Data source for indicator	European Environmental Agency, Executive Environment Agency
Key statistical data used	OPTIONAL: if for the indicator data several data sources were used
Spatial level	National
Data completeness	-
Policy/goals	Environment
Contact person if	
available	
Conditions of use	Indicators available for view

Interesting facts about specific indicator: -

# 2.2. Population connected to urban waste water treatment with at least secondary treatment

**Description:** This indicator is defined as the percentage of the population connected to waste water treatment systems with at least secondary treatment. Thereby, urban waste water is treated by a process generally involving biological treatment with a secondary settlement or other process, resulting in a biochemical oxygen demand (BOD) removal of at least 70% and a chemical oxygen demand (COD) removal of at least 75%. % of equivalent population.

Type of indicator	Transnational and National
Annual range	2008/2021
Data source for indicator	EUROSTAT
Key statistical data used	OPTIONAL: if for the indicator data several data sources were used
Spatial level	National
Data completeness	-
Policy/goals	Environment
Contact person if	
available	
Conditions of use	indicators available for download

Interesting facts about specific indicator: -

#### 2.3. Electricity generated from renewable sources

**Description:** This indicator is the ratio between the electricity produced from renewable energy sources and the gross national electricity consumption for a given calendar year. It measures the contribution of electricity produced from renewable energy sources to the national electricity consumption. Electricity produced from renewable energy sources comprises the electricity generation from hydro plants (excluding pumping), wind, solar, geothermal and electricity from biomass/wastes. Gross national electricity consumption



comprises the total gross national electricity generation from all fuels (including auto production), plus electricity imports, minus exports.

Type of indicator	Transnational and National
Annual range	2008/2021
Data source for indicator	Eurostat
Key statistical data used	OPTIONAL: if for the indicator data several data sources were used
Spatial level	National
Data completeness	-
Policy/goals	Natural resources and energy
Contact person if	
available	
Conditions of use	indicators available for download

Interesting facts about specific indicator: -

#### 2.4. Consumption of water per capita

**Description:** This indicator measures how much water does the average person use per day/year. To monitor freshwater issues in order to provide recommendations, develop case studies, enhance assessment capacity at a national level and inform the decision-making process.

Type of indicator	Transnational and National
Annual range	2008/2021
Data source for indicator	European Environmental Agency, United Nations, National Statistical Institute
Key statistical data used	OPTIONAL: if for the indicator data several data sources were used
Spatial level	National
Data completeness	-
Policy/goals	Natural resources and energy
Contact person if	
available	
Conditions of use	indicators available for view

Interesting facts about specific indicator: -

#### 2.5. % of terrestrial area protected (total and by ecological region)

**Description:** The indicator is defined as the share of terrestrial area that has been reserved by law or other effective means to protect part or all of the enclosed environment. It can be calculated separately for different terrestrial ecological regions. The indicator may also be disaggregated by management category of the protected areas. The indicator represents the extent to which areas important for conserving biodiversity, cultural heritage, scientific research (including baseline monitoring), recreation, natural resource maintenance, and other values, are protected from incompatible uses. It shows how much of each major ecosystem is dedicated to maintaining its diversity and integrity. Protected areas are



essential for maintaining ecosystem diversity in countries and ecological regions, in conjunction with management of human impacts on the environment.

Type of indicator	Transnational and National
Annual range	2008/2021
Data source for indicator	United Nations, European Environmental Agency, EUROSTAT, National Statistical Institute
Key statistical data used	OPTIONAL: if for the indicator data several data sources were used
Spatial level	National
Data completeness	-
Policy/goals	Landscape quality
Contact person if	
available	
Conditions of use	indicators available for view

Interesting facts about specific indicator: -

# 2.6. Population (or households) with accessibility to high-speed broadband

**Description:** This indicator is a share of population (households) with broadband access. Ensure an increase in the innovation capacity of each region which in turn will result in increases in employment and economic activities.

Type of indicator	Transnational and National
Annual range	2008/2021
Data source for indicator	OECD, EU Digital Scoreboard, National Statistical Institute
Key statistical data used	OPTIONAL: if for the indicator data several data sources were used
Spatial level	National, regional and counties level
Data completeness	-
Policy/goals	Infrastructures
Contact person if	
available	
Conditions of use	indicators available for view

Interesting facts about specific indicator: -

# 2.7. European cultural sites on the UNESCO World Heritage List

**Description:** Listed by the UNESCO as of special cultural or physical significance.

Type of indicator	Transnational and National
Annual range	2008/2021
Data source for indicator	UNESCO, National Statistical Institute
Key statistical data used	OPTIONAL: if for the indicator data several data sources were used
Data availability	National
Data completeness	-



Policy/goals	Culture
Contact person if	
available	

Interesting facts about specific indicator: -

#### 2.8. Life expectancy at birth by sex

**Description:** Simple indicator expressing the average life expectancy at birth for both women and men in years. This indicator represents a proxy for the overall quality of the health-care system in a region. It tells us about healthiness of living environment and together with ageing index it allows to assess social policies projections and risk of exclusion.

Type of indicator	Transnational and National
Annual range	2008/2021
Data source for indicator	EUROSTAT
Key statistical data used	OPTIONAL: if for the indicator data several data sources were used
Spatial level	National
Data completeness	-
Policy/goals	Quality of life
Contact person if	
available	
Conditions of use	indicators available for download

Interesting facts about specific indicator: -

#### 2.9. Gross disposable household income

**Description:** The indicator (GDHI) is the amount of money that individuals (i.e. the household) have available for spending or saving. This is money left after expenditure associated with income, e.g. taxes and social contributions, property ownership and provision for future pension income. It is calculated gross of any deductions for capital consumption.

Type of indicator	Transnational and National
Annual range	2008/2021
Data source for indicator	OECD, EUROSTAT
Key statistical data used	OPTIONAL: if for the indicator data several data sources were used
Spatial level	National
Data completeness	2015
Policy/goals	Quality of life
Contact person if	_
available	
Conditions of use	indicators available for download

Interesting facts about specific indicator: -

#### 2.10. People at risk of poverty or social exclusion



**Description:** This indicator is the share of people with an equivalised disposable income (after social transfer) below the at-risk-of-poverty threshold, which is set at 60 % of the national median equivalised disposable income after social transfers. It's a union of the three sub-indicators below:

- People living in households with very low work intensity: People living in households with very low work intensity are people aged 0-59 living in households where the adults work less than 20% of their total work potential during the past year.
- Severe material deprivation rate
- At-risk-of poverty rate: The persons with an equivalised disposable income below the risk-of-poverty threshold, which is set at 60% of the national median equivalised disposable income.

This indicator does not measure wealth or poverty, but low income in comparison to other residents in that country, which does not necessarily imply a low standard of living.

Type of indicator	Transnational and National
Annual range	2008/2021
Data source for indicator	EUROSTAT
Key statistical data used	OPTIONAL: if for the indicator data several data sources were used
Spatial level	National
Data completeness	-
Policy/goals	Quality of life
Contact person if	
available	
Conditions of use	indicators available for download

Interesting facts about specific indicator: -

#### 2.11. Population aged 25-64 with tertiary education

**Description:** Indicator is defined as population aged 25-64 with tertiary education as percentage of all population aged 25-64. This indicator measures the highly-qualified labor force as basis for future R&D activities. Human capital is an essential factor for innovation potential.

Type of indicator	Transnational and National
Annual range	2008/2021
Data source for indicator	EUROSTAT, National Statistical Institute
Key statistical data used	OPTIONAL: if for the indicator data several data sources were used
Spatial level	National and regional level
Data completeness	-
Policy/goals	Knowledge & Innovation
Contact person if	
available	
Conditions of use	indicators available for view

Interesting facts about specific indicator: -



# 2.12. Research & Experimental Development expenditure as % of Gross Domestic Product

**Description:** This indicator is total gross domestic expenditure on research and experimental development (GERD) as a percentage of gross domestic product (GDP). R&D expenditure represents one of the major drivers of economic growth in a knowledge- based economy. As such, trends in the R&D expenditure indicator provide key indications of the future competitiveness and wealth of the EU. GERD includes expenditure from business enterprise, higher education, government and private non-profit expenditure on R&D. The indicator measures the key R&D investments that support future competitiveness and result in higher GDP.

Type of indicator	Transnational and National
Annual range	2008/2021
Data source for indicator	EUROSTAT, National Statistical Institute
Key statistical data used	OPTIONAL: if for the indicator data several data sources were used
Spatial level	National and regional level
Data completeness	-
Policy/goals	Knowledge & Innovation
Contact person if	
available	
Conditions of use	indicators available for view

#### 2.13. Employment rate 20-64 years by sex

**Description:** The employment rate is calculated by dividing the number of persons aged 20 to 64 (by sex) in employment by the total population of the same age group. The employment rate, in other words the proportion of the working age population in employment, is considered as a key social indicator for analytical purposes when studying developments within labor markets.

Type of indicator	Transnational and National
Annual range	2008/2021
Data source for indicator	EUROSTAT,
Key statistical data used	OPTIONAL: if for the indicator data several data sources were used
Spatial level	National
Data completeness	-
Policy/goals	Employment
Contact person if	
available	
Conditions of use	indicators available for download

Interesting facts about specific indicator: -



# 2.14. Research & Experimental Development expenditure as % of Gross Domestic Product

**Description:** This indicator refers to the share of the labour force ages 15-24 without work but available for and seeking employment. High youth unemployment rates do reflect the difficulties faced by young people in finding jobs. However, this does not necessarily mean that the group of unemployed persons aged between 15 and 24 is large because many young people are studying full-time and are therefore neither working nor looking for a job (so they are not part of the labour force which is used as the denominator for calculating the unemployment rate).

Type of indicator	Transnational and National
Annual range	2008/2021
Data source for indicator	WORLD BANK, EUROSTAT
Key statistical data used	OPTIONAL: if for the indicator data several data sources were used
Spatial level	National
Data completeness	-
Policy/goals	Employment
Contact person if	
available	
Conditions of use	indicators available for download

Interesting facts about specific indicator: -

#### 2.15. Share of employment by sector

**Description:** This indicator refers to the share of the employment in different sector. I Agriculture;

II. Industry and construction: Mining and quarrying; Manufacturing, electricity, gas, steam and air conditioning supply; Water supply, sewerage and waste management; Construction III. Services: Market services: Wholesale and retail trade; Accommodation and food service activities; Communication; Financial and insurance activities; Real estate activities; Professional scientific and technical activities; Administrative and support service activities. Mainly non market services: Public administration; Education; Health; Arts, entertainment and recreation; Other services activities; Activities of households as employers; Activities of extraterritorial organisations.

Type of indicator	Transnational and National
Annual range	2008/2021
Data source for indicator	EUROSTAT, National Statistical Institute
Key statistical data used	OPTIONAL: if for the indicator data several data sources were used
Spatial level	National, regional and counties level
Data completeness	2015
Policy/goals	Economic
Contact person if	-



available	
Conditions of use	indicators available for view

# Interesting facts about specific indicator: -

### 2.16. Number of overnight stays of tourists per capita per year

**Description:** This indicator is a ratio of yearly tourist stays by total resident population. This indicator defines land use change and pressure.

Type of indicator	Transnational and National
Annual range	2008/2021
Data source for indicator	National Statistical Institute
Key statistical data used	OPTIONAL: if for the indicator data several data sources were used
Spatial level	National, regional and counties level
Data completeness	-
Policy/goals	Tourism
Contact person if	
available	
Conditions of use	indicators available for view

Interesting facts about specific indicator: -

#### 2.17. Share of tourism related employment in total employment

**Description:** This indicator refers to the share of employees working in tourism related employment to total employment.

Type of indicator	Transnational and National
Annual range	2008/2021
Data source for indicator	OECD, National Statistical Institute
Key statistical data used	OPTIONAL: if for the indicator data several data sources were used
Spatial level	National, regional and counties level
Data completeness	-
Policy/goals	Tourism, Economic
Contact person if	
available	
Conditions of use	Indicators available for view

Interesting facts about specific indicator: -

# 2.18. % of GDP of foreign direct investment stock

**Description:** This indicator refers to the share of foreign direct investment (stock) in GDP. Foreign direct investment (FDI) is defined as an investment involving a long-term relationship and reflecting a lasting interest in and control by a resident entity in one economy (foreign direct investor or parent enterprise) of an enterprise resident in a different economy (FDI enterprise or affiliate enterprise or foreign affiliate). Such investment



involves both the initial transaction between the two entities and all subsequent transactions between them and among foreign affiliates.

Type of indicator	Transnational and National
Annual range	2008/2021
Data source for indicator	UNCTAD, Division on Investment and Enterprise, National Statistical Institute
Key statistical data used	OPTIONAL: if for the indicator data several data sources were used
Spatial level	National, regional and counties level
Data completeness	2008, 2009, 2010
Policy/goals	Investment Promotion
Contact person if	
available	
Conditions of use	indicators available for view

Interesting facts about specific indicator: -

#### 2.19. Population growth rate

**Description:** The indicator corresponds to the number of births and deaths during the certain period and the number of people migrating to (immigration) and from (emigration) a country. Population growth rate is a measure of change of population of a certain area. The rate of population growth is identified by Agenda 21 of the United Nations as one of the crucial factors affecting long-term sustainability of natural resources. Rapid population growth can impose limitations on a country's capacity for handling a wide range of economic, social, and environmental issues, particularly when rapid population growth occurs in connection with poverty and lack of access to natural resources.

Type of indicator	Transnational and National
Annual range	2008/2021
Data source for indicator	OECD, EUROSTAT, National Statistical Institute
Key statistical data used	OPTIONAL: if for the indicator data several data sources were used
Spatial level	National, regional and counties level
Data completeness	-
Policy/goals	Population, Economic/
Contact person if	
available	
Conditions of use	indicators available for view

**Interesting facts about specific indicator:** According to NSI's explanations, the comparatively high negative population growth in 2011 is due to the unfavourable external migration in previous years, which was established with the census conducted in 2011.

#### 2.20. % of population in age 20-64 years

**Description:** This indicator refers to the share of persons aged 20-64 to total population. The indicator measures working age persons out of total population. With employment rate is



the best measure of labour market conditions. Europe 2020 headline target is that 75 % of population aged 20-64 should be employed by 2020.

Type of indicator	Transnational and National
Annual range	2008/2021
Data source for indicator	EUROSTAT, OECD, National Statistical Institute
Key statistical data used	OPTIONAL: if for the indicator data several data sources were used
Spatial level	National, regional and counties level
Data completeness	-
Policy/goals	Population, Economic/
Contact person if	
available	
Conditions of use	indicators available for view

Interesting facts about specific indicator:-

# 2.21. Ageing index

**Description:** Indicator is defined as the ratio of the population aged 64 and above divided by population of 15 years and below. This indicator measures the balance of the age structure of the society.

Type of indicator	Transnational and National
Annual range	2008/2021
Data source for indicator	EUROSTAT, OECD, National Statistical Institute
Key statistical data used	OPTIONAL: if for the indicator data several data sources were used
Spatial level	National, regional and counties level
Data completeness	-
Policy/goals	Population, Economic
Contact person if	
available	
Conditions of use	indicators available for view

Interesting facts about specific indicator: -

# 2.22. Number of foreign students

**Description:** The indicator refers to a number of international students and/or professors enrolled in tertiary education. International strategies at universities are much more than simply the numbers of international faculty and students, but these serve as strong measures of institutions with advanced strategies in this area.

Type of indicator	Transnational and National
Annual range	2008/2021
Data source for indicator	OECD, National Statistical Institute
Key statistical data used	OPTIONAL: if for the indicator data several data sources were used
Spatial level	National
Data completeness	-



Policy/goals	International relations
Contact person if	
available	
Conditions of use	indicators available for view

Interesting facts about specific indicator: -