



# **Serbian Environmental Protection Agency**

**yesterday : today : tomorrow**

Dejan Lekic  
assistant director



# Integrated?

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Water

Air

**MONITORING**

Soil

Waste

Emissions



# Comprehensive?

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Indicators      Data  
**INFORMATION      SYSTEM**  
Knowledge      Reporting

Water      Air  
**MONITORING**  
Soil      Waste      Emissions



# Scaled?

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Indicators      Data  
**INFORMATION SYSTEM**  
Knowledge      Reporting

Local      State

**WORLD**

Water

Air

Region

Europe

**MONITORING**

Soil

Waste

Emissions

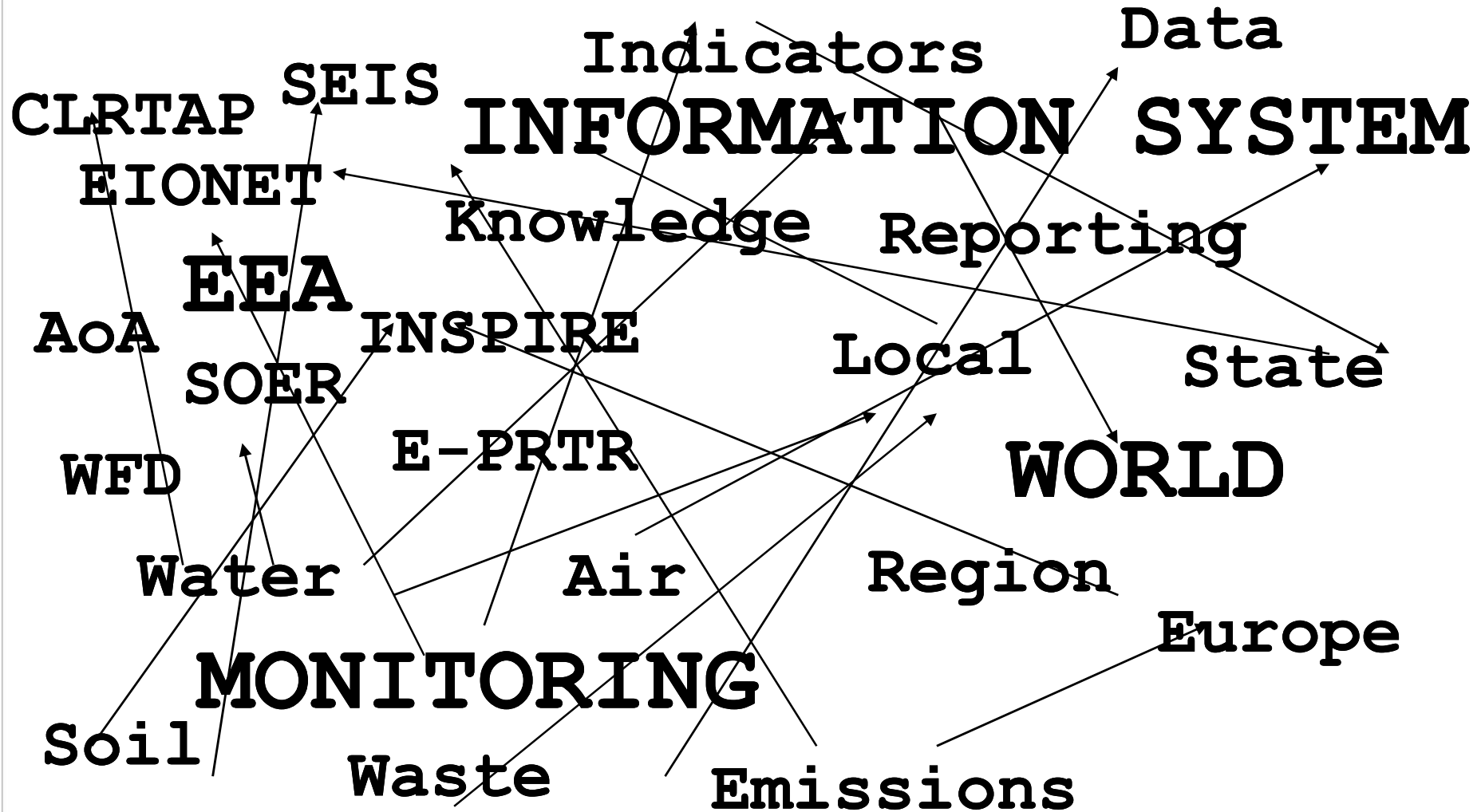


# Streamlined?

**CLRTAP** **SEIS** **Indicators** **Data**  
**INFORMATION SYSTEM**  
**EIONET** **Knowledge Reporting**  
**AoA** **EEA** **INSPIRE** **Local State**  
**SOER**  
**WFD** **E-PRTR** **WORLD**  
**Water** **Air** **Region** **Europe**  
**MONITORING**  
**Soil** **Waste** **Emissions**

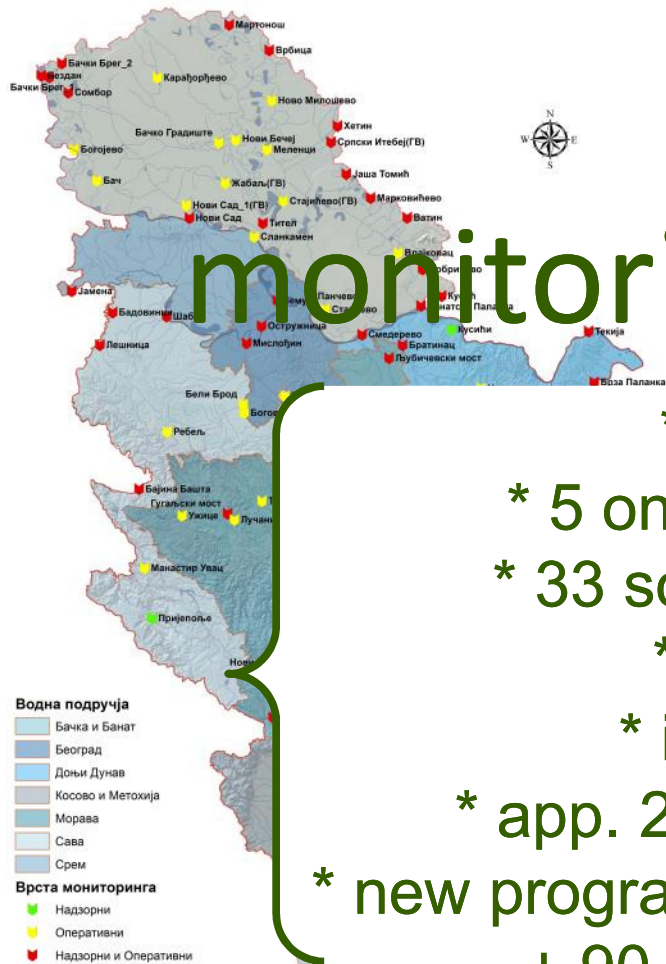


# Ordered?





# SEPA – how we do it?



## water monitoring

water

- \* 91 profiles on rivers
- \* 5 on artificial and natural lakes
- \* 33 sources and 68 piezometers
- \* 30 sediment profiles
- \* in total 10000 samples
- \* app. 250.000 parameters per year
- \* new programme: 49 stations for surveillance  
+ 90 for operational monitoring

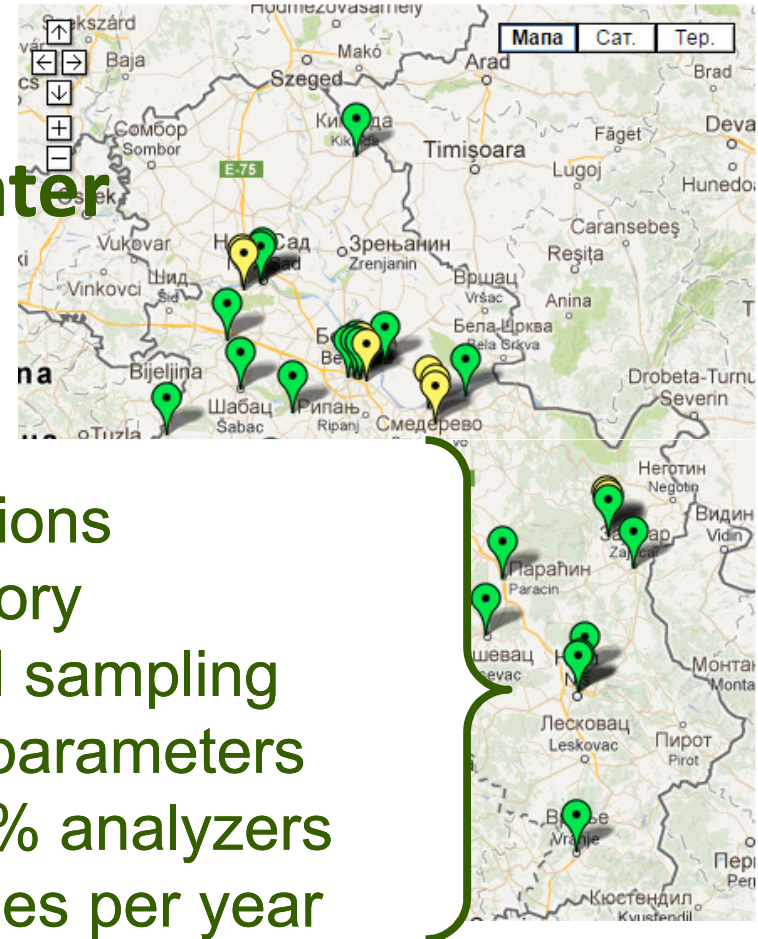


# SEPA – how we do it?

air

monitoring

water



- \* 40 automatic stations
- \* 1 mobile laboratory
- \* 5 locations with manual sampling
- \* 158 analyzers + meteo parameters
- \* 90% data reliability at 51% analyzers
- \* 1.245.000 individual values per year

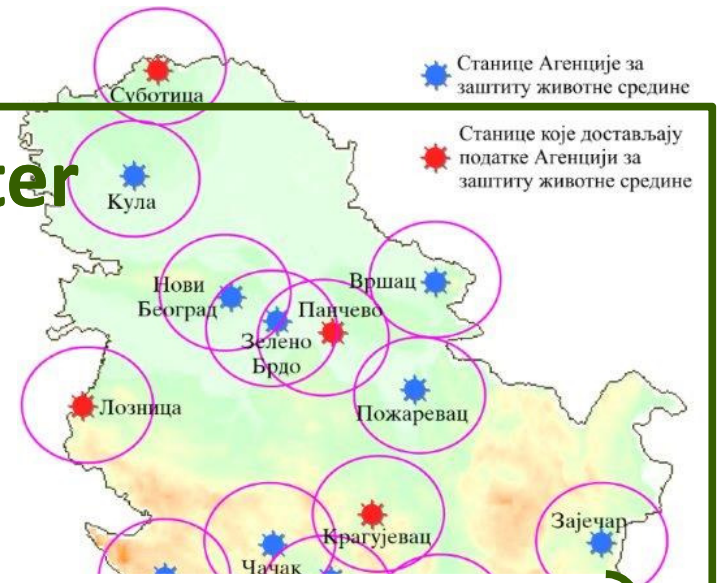




# SEPA – how we do it?

air pollen  
monitoring

water



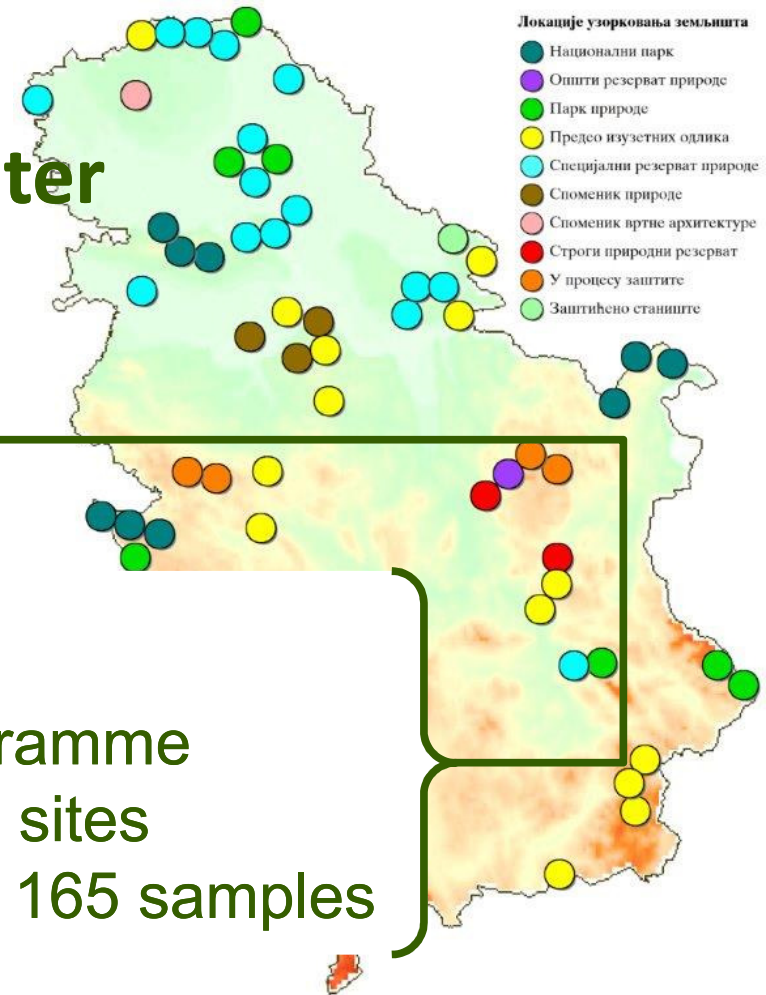
- \* 14 stations operated by SEPA
- \* 8 new in last 4 years
- \* total of 17 in the system
- \* 24 allergens
- \* 44 weeks of data collection per year



# SEPA – how we do it?

air pollen  
soil  
**monitoring**

water



- \* legislation in place
- \* systematic monitoring programme
- \* inventory of contaminated sites
- \* initial/pilot sampling at 143 sites – 165 samples



# SEPA – how we do it?

\* 221 PRTR facilities report to the national Register

\* in total 5300 companies delivered 14000 reports

\* waste generation 901 operators

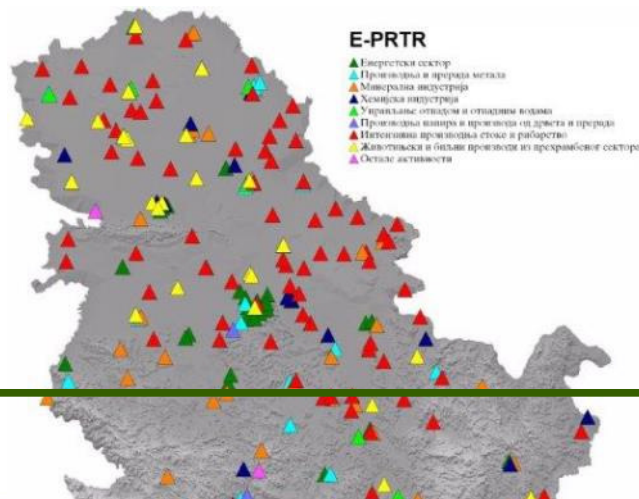
\* packaging waste 1467 operators

S

emissions

pressures

waste





# SEPA – how we do it?

## laboratory

air

pollen

water

so

- \* physical and chemical air and water parameters
- \* toxicological parameters ICP/MS, GC/MS, LC/MS
  - \* biological elements of water quality
- \* physical, chemical and toxicological parameters in sediment
- \* quality management system ISO17025:2006
- \* calibration of automatic air quality stations

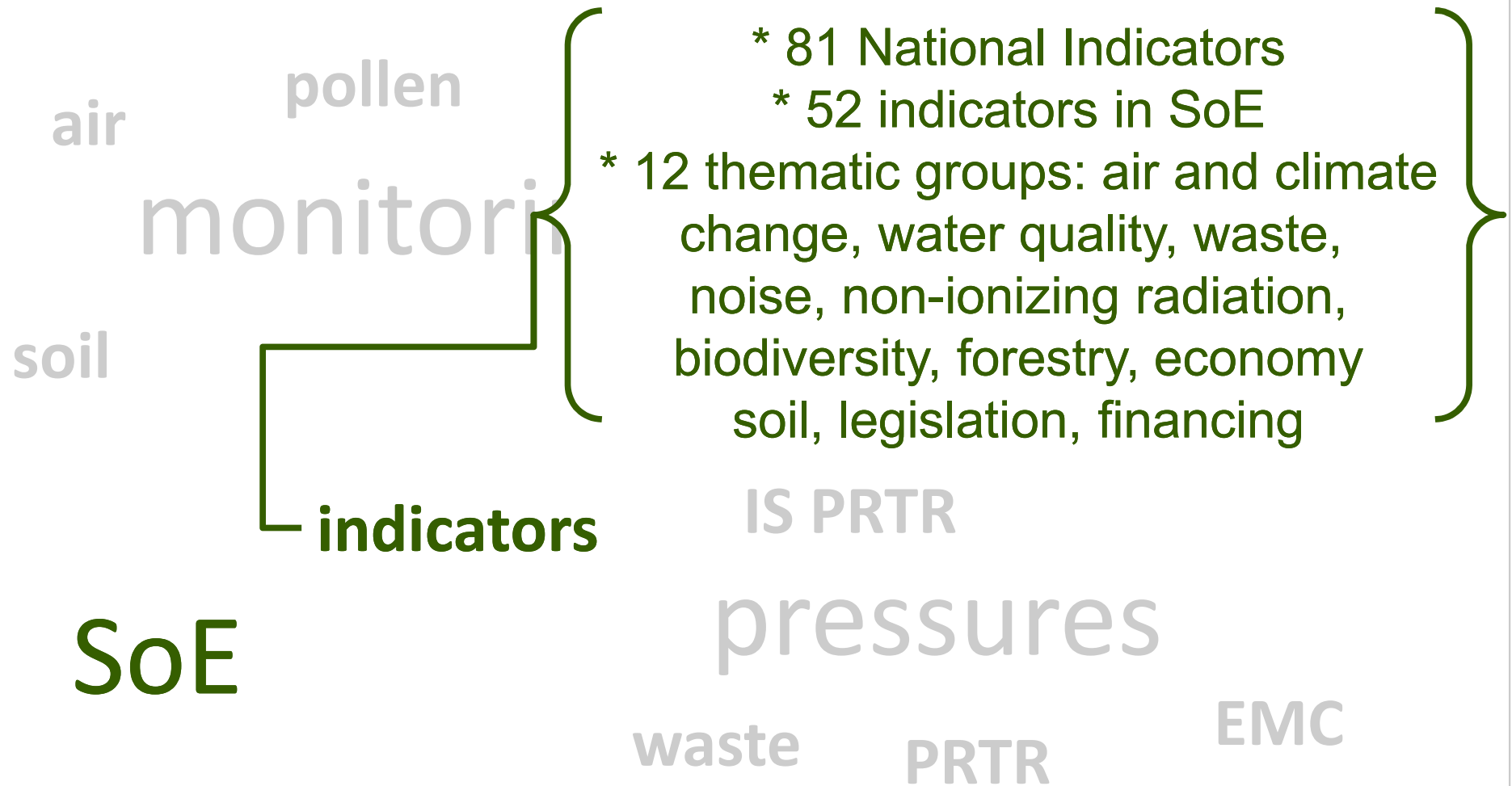
waste

PRTR

EMC



# SEPA – how we do it?





# SEPA – how we do it?

- \* on the State of the Air Quality
- \* on the Surface and Groundwater quality,
- \* on the Status of Reservoirs
- \* on the State of Soil
- \* on Waste and Packaging Waste, .....

soil

reporting

indicators

IS PRTR

pressures

SoE

waste

PRTR

EMC

information system



# SEPA – how we do it?

air pollen  
monitoring

laboratory  
water calibration

soil

Web

Eionet  
**reporting**

**SOER+Sense**

indi

state

**information sys**

- \* real-time air quality
- \* water quality, pollen, SWQI, dumps
- \* 300,000 visits per year
- \* 840,000 visited pages
- \* 40% new visits
- \* 50% increase in a year



# SEPA – how we do it?

air pollen laboratory  
water calibration  
monitoring

soil

Eionet

## reporting

- \* 10 years of cooperation with EEA
- \* priority data flows + Ozoneweb
  - \* SOER 2010/2015
  - \* NFP + NRC/PCP
- \* 90% in 2014/2015 data flow cycle
- \* 14th place (of 39 countries)

sta  
**information system**





# Serbian Environmental Protection Agency

automatic monitoring air  
climate change pollen  
biodiversity  
laboratory  
water accreditation calibration  
biological analysis  
Eionet NFP+NRC  
agriculture Web reporting economic instruments  
soil Web reporting instruments SEIS  
CSI financing CORINE  
IS PRTR emissions  
forestry indicators  
renewable resources  
state  
hunting  
fisheries  
information system  
waste flow energy packaging waste  
waste CLRTAP industry  
PRTR GHG noise