PUBLIC DATA SHARING EXPERIENCES IN AUSTRIA

JOHANNES MAYER, 5 MARCH 2019

AUSTRIA

- Small EU&EEA Member State in central Europe with high environmental and institutional governance standards

- Federal Republic with national-level and nine regional parliaments/governments and a corresponding multitude of competencies and institutions

- Thematic lead competence for environmental legislation, monitoring, data handling and reporting are regulated by the Constitution, eg
  → Federation for air quality, water, hazardous waste
  → Regions for nature protection, non-hazardous waste

- Networking and co-operative solutions for effective policy implementation is a must

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AIR QUALITY – INSTITUTIONAL DEVELOPMENT STEPS

- 1992 – Federal Ozone Act – *daily ozone report* from April to September AND establishing *automated Ozone monitoring network* – 9 regions monitoring and sending continuously data to Environment Agency Austria

- Since 1996 – Public access to near-to-real time air quality data (as core element of first Umweltbundesamt website) based on near-to-real time half hourly mean values

- 1997 – Federal Air Quality Act – *daily air quality report* – multi-pollutant *air quality data network*; first provinces (Vienna, Lower Austria ..) start providing further pollutant data (Sulphur dioxide, nitrogen dioxide, particulate matter …)

- Since 2000 – all provinces provide all continuously monitored air quality data

- Austrian Air Quality Database can provide all national and EU level reporting
 → daily air quality reports and EU reporting fully automated

  legal obligations

04.03.2019

	NO2 HMW	NO2 TMW	PM10 TMW	SO2 HMW	SO2 TMW	CO MW8
Burgenland	50	18	23	13	7	0.6
Kärnten ohne Klagenfurt	72	32	31	16	4	-
Klagenfurt	72	34	25	2	1	0.6
Niederösterreich ohne St. Pölten	78	37	38	13	12	0.4
St. Pölten	109	38	14	6	-	0.5
Oberösterreich ohne Ballungsraum Linz	80	40	14	51	5	0.4
Ballungsraum Linz	89	47	22	38	8	0.8
Land Salzburg ohne Stadt Salzburg	77	38	21	15	7	0.3
Stadt Salzburg	91	32	14	3	2	0.3
Steiermark ohne Ballungsraum Graz	72	28	29	88	20	1.6
Ballungsraum Graz	105	45	35	13	5	0.7
Tirol ohne Innsbruck	109	57	35	101	8	0.6
Innsbruck	71	31	13	2	1	0.4
Vorarlberg	120	43	13	/	/	0.3
Wien	120	49	23	9	6	0.6

Angeführt ist der höchste gemessene Wert des jeweiligen Gebietes.
Durch Anklicken eines Wertes in der Übersicht gelangen Sie zu den Werten der zugehörigen Messstellen ...
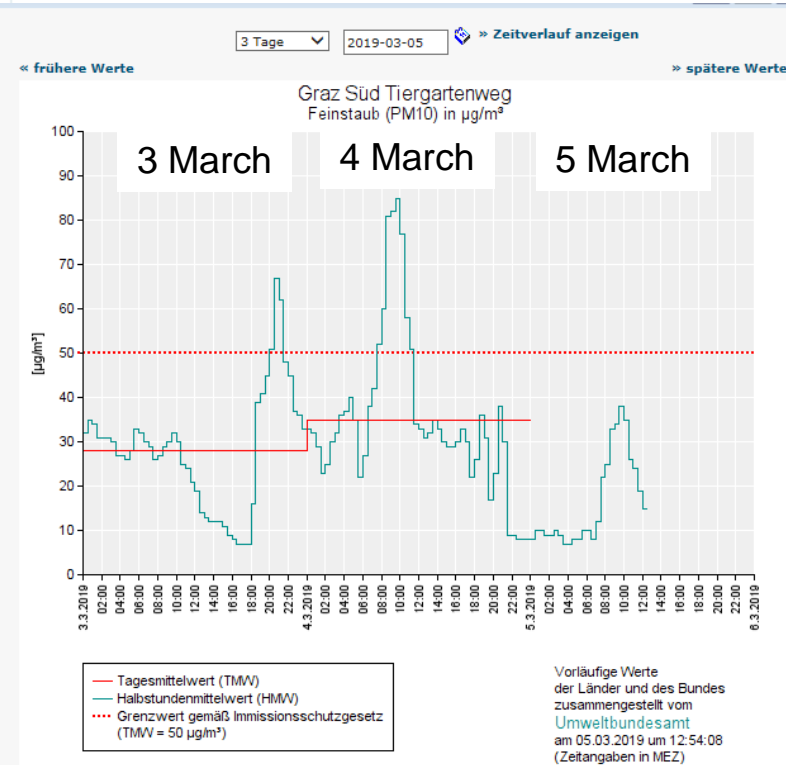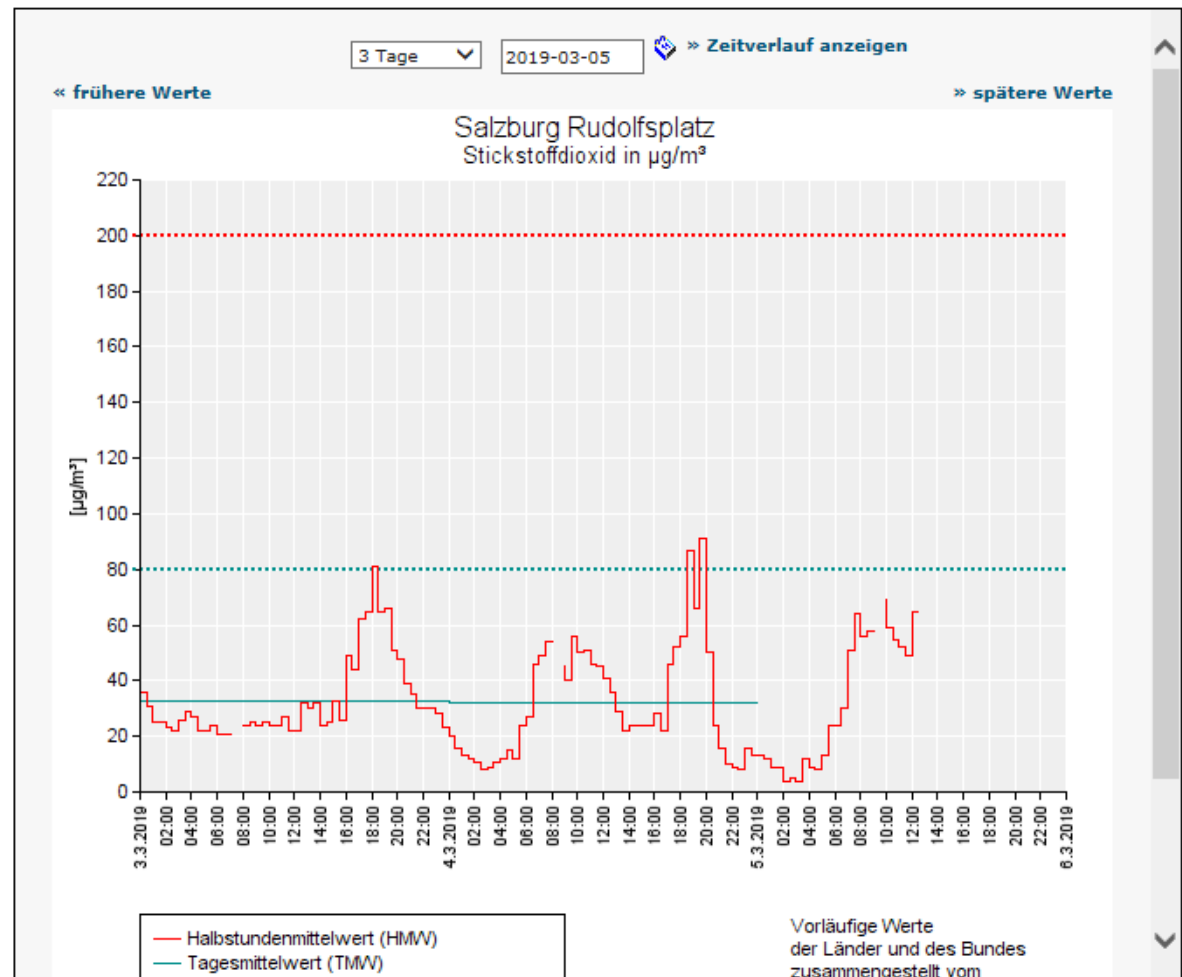
ACCESS TO NEWEST (OR EARLIER) DATA BY MAPS

SALZBURG RUDOLFS-PLATZ

ACCESS BY UP-TO-DATE STATISTICS OF LIMIT VALUE EXCEE-DANCES

Überschreitungen Feinstaub (PM10)
1.1.2019 bis 4.3.2019

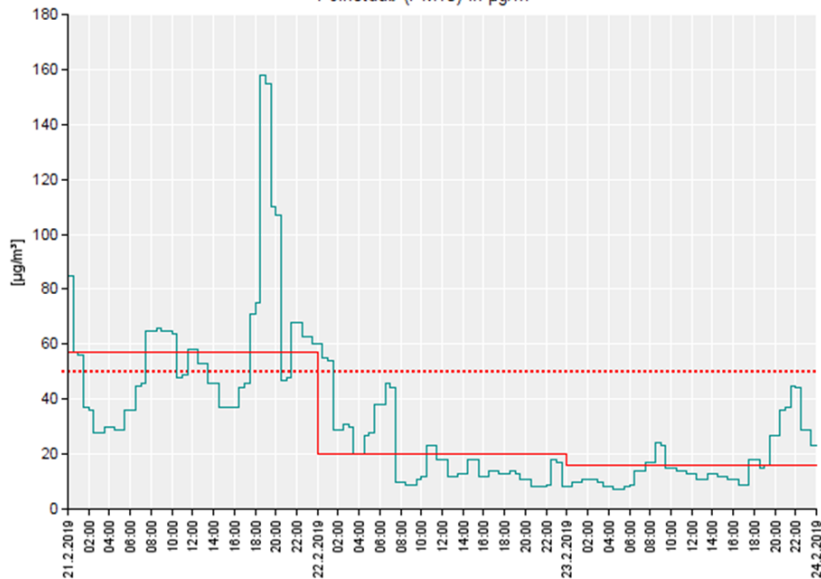| Feinstaub (PM10) Tagesmittelwert			
Messstelle	Messmethode	Anzahl Tage > 50 µg/m³	Werte vorhanden bis
St Graz Ost Petersgasse	grav./kont.	13	-/ 4.3 (100%)
St Graz Süd Tiergartenweg	grav./kont.	11	-/ 4.3 (100%)
St Graz Don Bosco	grav./kont.	10	-/ 4.3 (100%)
S Salzburg Rudolfsplatz	grav./kont.	8	-/ 4.3 (100%)
W Stadlau	kont.	8	4.3 (100%)
B Oberschützen	kont.	7	4.3 (78%)
W Floridsdorf	grav./kont.	7	31.1/ 4.3 (98%)
W Taborstraße	grav./kont.	7	31.1/ 4.3 (100%)
OÖ Linz Römerberg B139	grav./kont.	6	25.2/ 4.3 (97%)
St Weiz Bahnhofstraße	kont.	6	4.3 (100%)
W AKH	grav./kont.	6	31.1/ 4.3 (100%)
W Laaer Berg	grav./kont.	6	31.1/ 4.3 (100%)
B Illmitz am Neusiedler See	grav./kont.	5	12.2/ 4.3 (100%)
W A23 Südosttangente/Wehlistraße	grav./kont.	5	31.1/ 4.3 (100%)
W Gaudenzdorf	grav./kont.	5	-/ 4.3 (100%)
W Kaiser-Ebersdorf	grav./kont.	5	-/ 4.3 (95%)

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Luftgütemessstelle Graz Ost Petersgasse

Feinstaub (PM10)
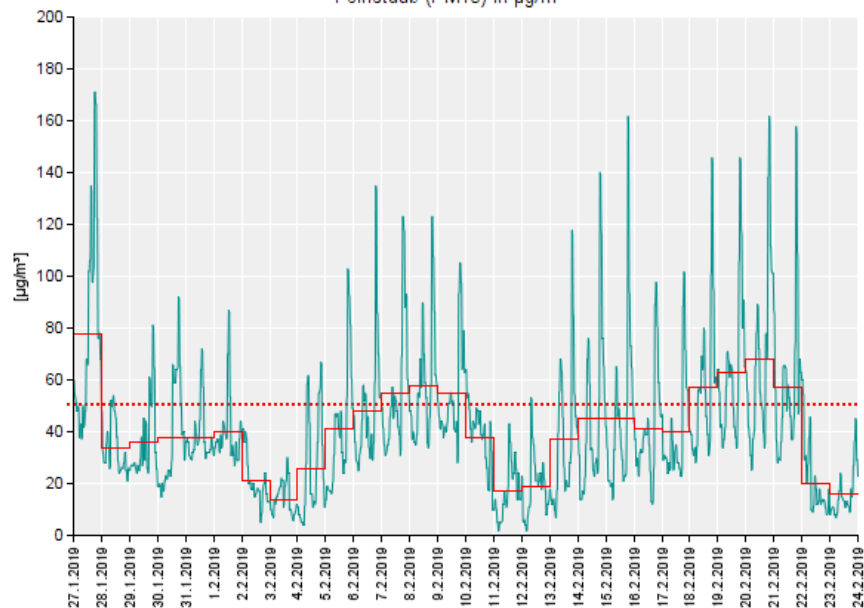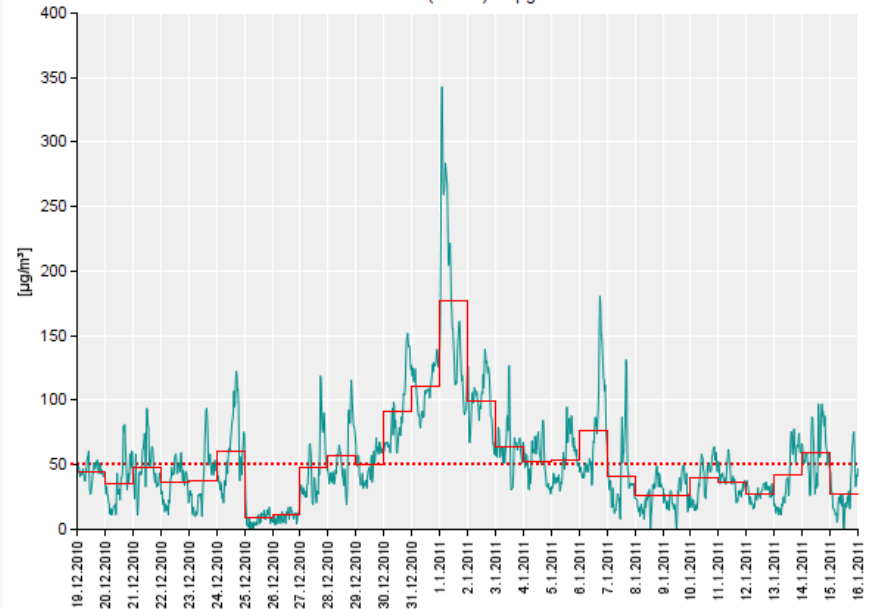
Überschreitungen Graz Ost Petersgasse
Tages -Mittelwert > 50 µg/m³
1.1.2019 bis 4.3.2019

	Wert	M
13.1.2019	56 kont.	
15.1.2019	52 kont.	
16.1.2019	71 kont.	
25.1.2019	51 kont.	
26.1.2019	54 kont.	
27.1.2019	78 kont.	
7.2.2019	55 kont.	
8.2.2019	58 kont.	
9.2.2019	55 kont.	
18.2.2019	57 kont.	
19.2.2019	63 kont.	
20.2.2019	68 kont.	
21.2.2019	57 kont.	

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COMPLETE STATISTICS OF LIMIT VALUE EXCEE-DANCES FOR EARLIER YEARS (FROM 2001)

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WATER

now within one Ministry; previously set up in agreement between Ministries of Agriculture and Environment

- Water Information System Austria (WISA)
  = Austrian correspondence of
  WISE (Water Information System for Europe)

- Co-operative effort of national-level (federal) institutions involved in water data management
  → Ministry of Sustainable Development [and Tourism] organises monitoring
  → Environment Agency manages/analyses/reports on data

- WISA allows data management, administration, participation and reporting (national & to EU for WISE)

- Ongoing: Full implementation at federal and integration with regional levels

- Differentiated access for administrations and public

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WATER INFORMATION SYSTEM AUSTRIA (WISA)

- GIS-viewer
- Public participation
- Link to distributed data bases (being implemented)
- Library
- Map-Distribution
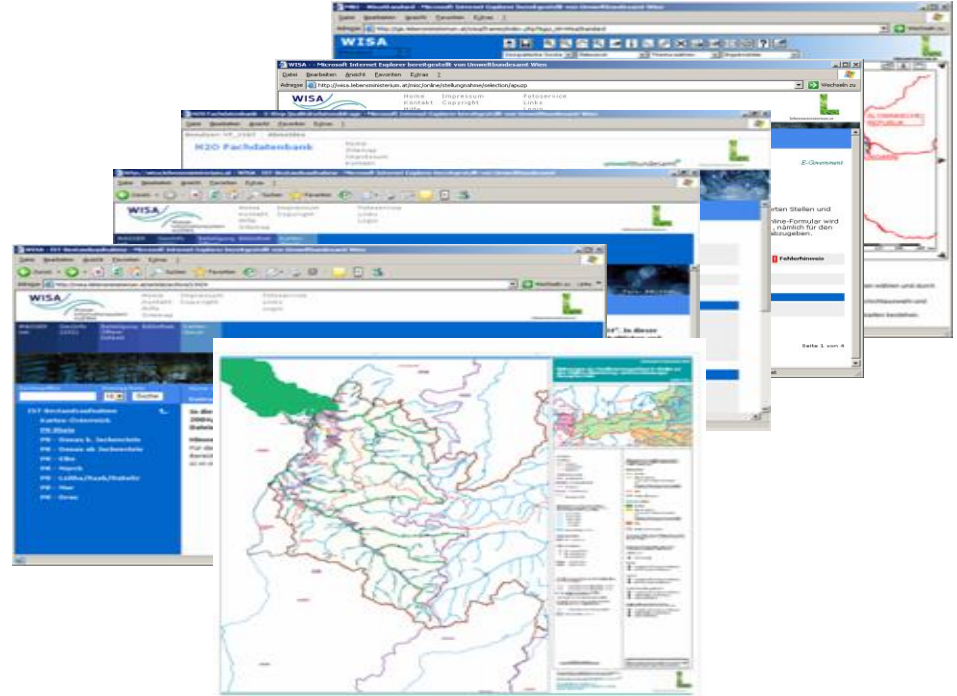
NATURE

- www.geoland.at integrated spatial data service of the nine Austrian Provinces - Borderless Web-Service within Austria

- Managed by inter-regional working group (Environment and IT experts of regional governments)

- Fast and easy access to up-to-date Geo-Data of Austrian Provinces

- Customer - oriented, free Geo-Service (no plug-in)

- International standards guarantee compatibility

- Starting place for detailed GIS-Web-Services and metadata of Austrian Regional Governments

- Most services with full public access

voluntary inter-regional co-operation initiative

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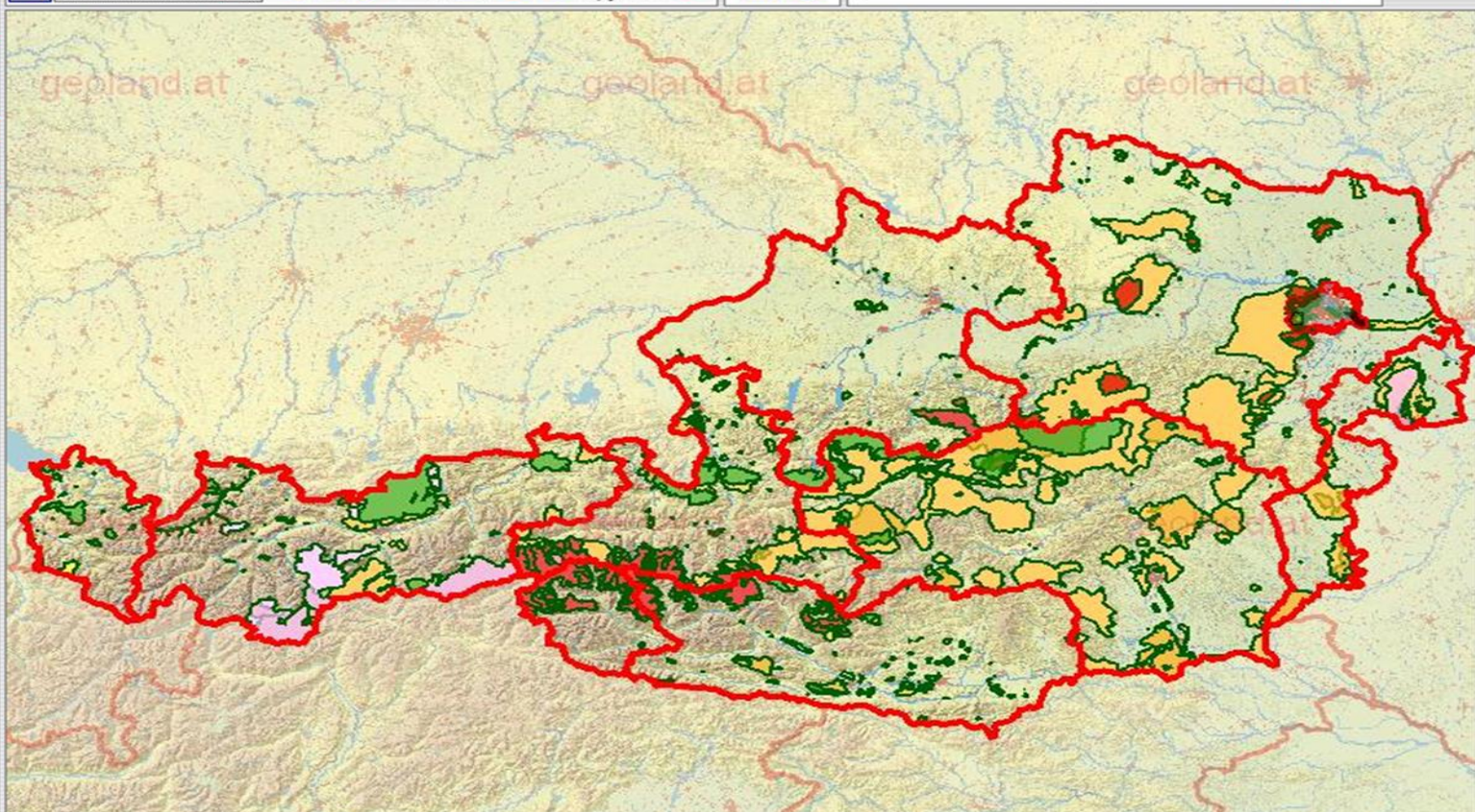
FOR BUSINESS OPERATORS

- ✓ "One-stop-shop" (single registration of businesses) for all permitting procedures and related reporting to the Authorities through the portal www.edm.gv.at ("electronic data management" - EDM)

- ✓ Started in waste management, gradually extended to other thematic areas

- ✓ *Obligatory use legally defined for each reporting duty*

- ✓ Supports all data handling, administration and further reporting by Authorities (at federal, regional & local levels)

- ✓ Technically managed by Environment Agency IT Dept on behalf of the Ministry of Sustainable Development [and Tourism]

- ✓ Assures transparent documentation and reduces reporting & data management burden for both businesses and authorities

System Modules Of Electronic Data Management (EDM)

EDM Waste-Management		
eWEEE	eIncineration	
ePackaging	eBatteries & Accumulators	
eSHIPMENT	eLandfill	
eEoL-Vehicles	eWaste-Balance	
eHazardous Waste Transport	eLicence	
eCompost	eCertificate	

Emisson-Trading

Fluorinated Hydrocarbons

European Pollutant &Transfer Register

eWater Emissions Register

Radiation Sources

Project: nationwide Masterdata Registry of installations

ZAReg

EDM-Environment

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Information Flows In Electronic Data Management (EDM)

Information flows

EDM-Register

variable data

public master data

master data for authorities

EGovernment-Registers

standardized interface

manual input via https

direct application to application communication

paper based transmission

enterprise data

input by authority

data processing by competent authority

international data exchange esp. data of waste

EU Member States & Basel Convention

DATA EXCHANGE PRINCIPLES IN EDM

✓ Differentiated, carefully defined and managed access rights of all users according to their legal/institutional competencies and data protection needs/rights

✓ Trust of businesses in correct data handling is essential to further improve and intensify electronic co-operation with the Authorities

✓ Currently public access is limited to basic functions of public service interest (such as collection points for wastes, e.g. Waste Electrical and Electronic Equipment – currently 2067) and technical information on the system

✓ Only accumulated data are published in national and European reports/statistics [exception: operator-specific data in Austrian and European Pollutant Release and Transfer Register]

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Umweltbundesamt
www.umweltbundesamt.at

ENI SEIS II East – Environmental data workshop
Kyiv ● 5 March.2019

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THE EUROPEAN UNION

- Originally a sustainable peace project after World War II, through creating a durable joint Economic Area of European countries

- Strengthened free economic development from the 1950s increased pressures on environment, health and quality of life of European citizens

- Since the 1970s European legislation sets carefully developed and sometimes very specific environmental standards, in order to optimise economic growth, human health, living and social standards throughout Europe

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VISION OF EU ENVIRONMENT POLICIES

'In 2050, we live well, within the planet's ecological limits.

Our prosperity and healthy environment stem from an innovative, **circular economy** where nothing is wasted and where natural resources are managed sustainably, and **biodiversity** is protected, valued and restored in ways that enhance our society's **resilience**. Our **low-carbon** growth has long been decoupled from resource use, setting the pace for a global safe and sustainable society.'

Source: 7th EU Environment Action Programme

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SUSTAINABLE DEVELOPMENT IS A GLOBAL CHALLENGE
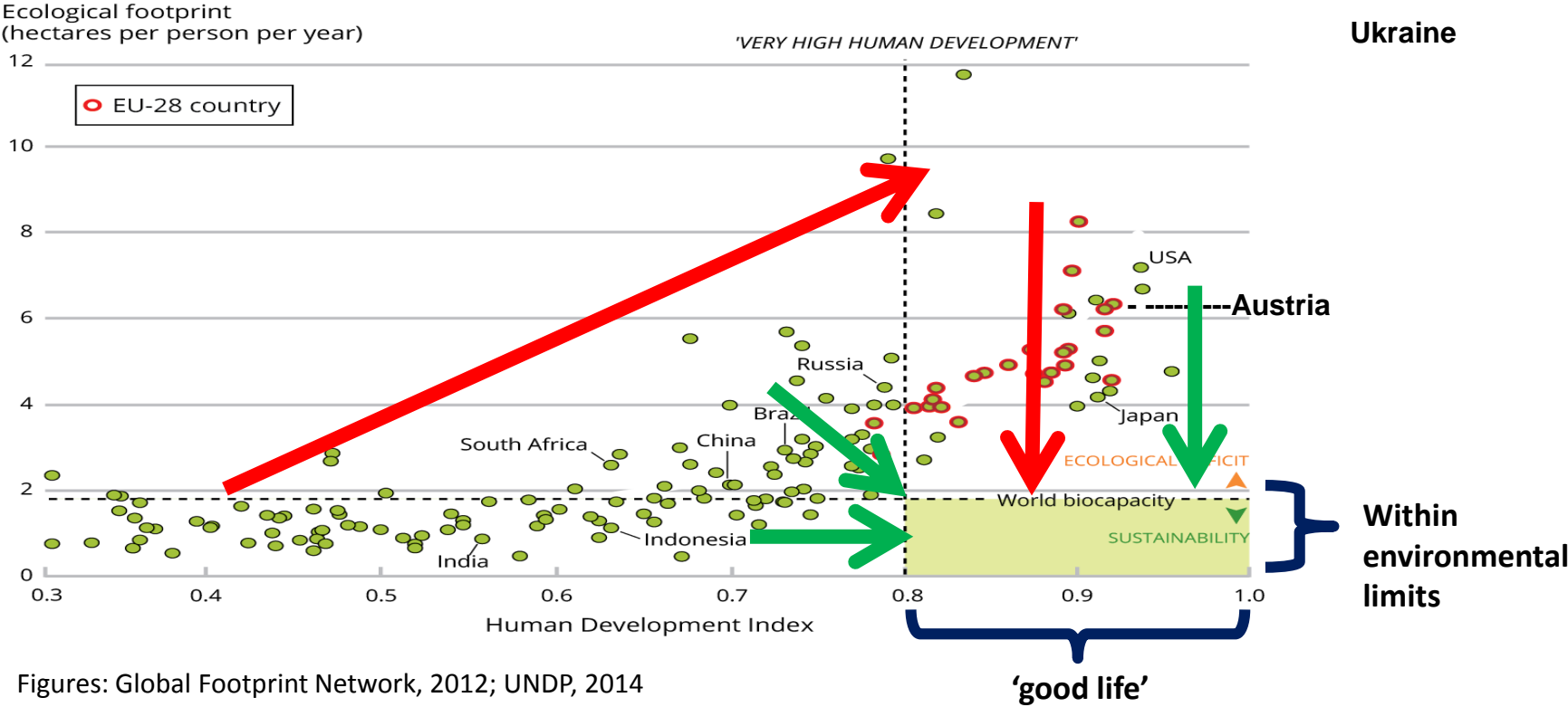
Figures: Global Footprint Network, 2012; UNDP, 2014

European Environment Agency

WHY DO WE MONITOR AND REPORT ON THE ENVIRONMENT ?

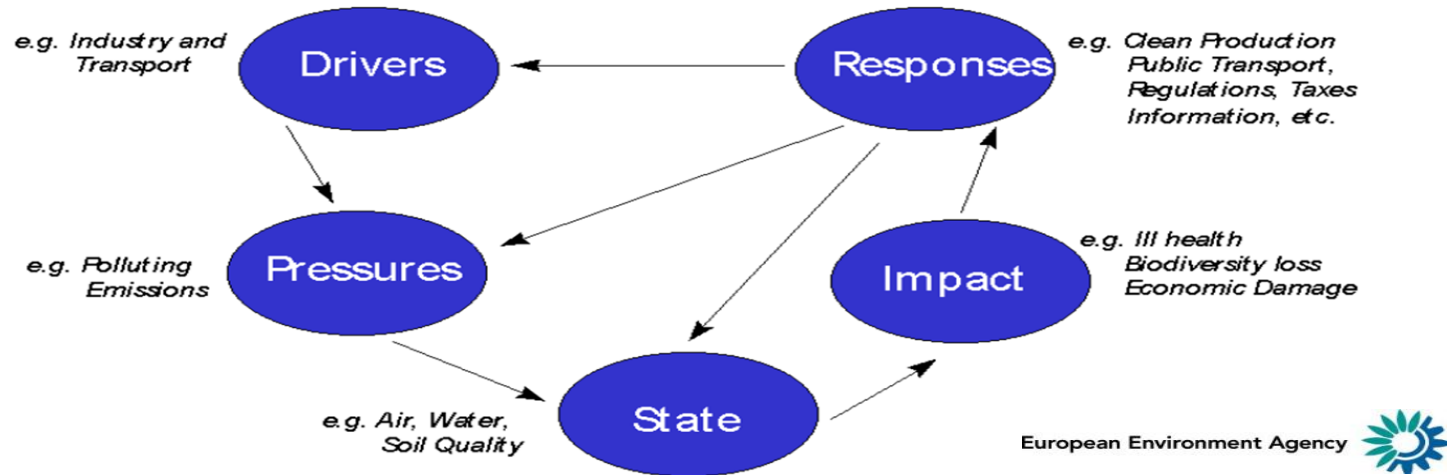- To know about the actual state of driving forces, pressures on and state of the environment, and its impacts as a basis for defining policy responses

WHY DO WE MONITOR AND REPORT ON THE ENVIRONMENT ?

- To understand the effectiveness of our policies, in order to improve implementation and/or adapt our policy responses

- Most reporting from EU Member States is required by the European Commission and the Secretariats of international conventions (of which typically both the EU and its Member States are Parties)

- Reporting of monitoring data to decision-makers and public requires factual information, policy-relevant assessment and open data exchang

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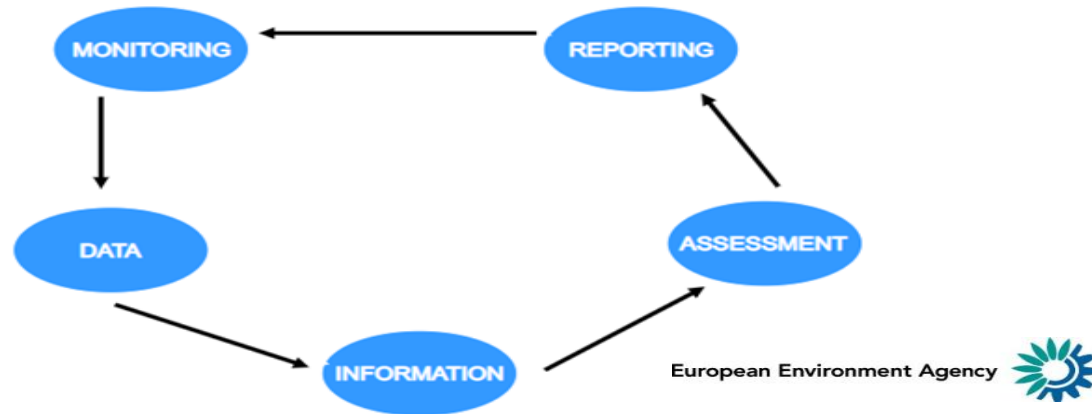
EUROPEAN ENVIRONMENT AGENCY AND EIONET

- Most monitoring data reporting from EU Member States is directed to the European Environment Agency (EEA)

- With its Environmental Information and Observation Network (Eionet) of more than 300 institutions in 39 European countries, the EEA can provide timely, reliable and relevant information to inform policy-making and the public

- EEA & Eionet have been established by EU Regulation

- EEA as a EU Agency, and the Member State institutions in Eionet operate at the interface of science and policy.

- EEA/Eionet work is targeted at EU institutions, EEA member countries, civil society and the general public

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EUROPEAN ENVIRONMENT AGENCY AREAS

EEA coverage
*Kosovo under UNSCR 1244/99

■ Member countries   ■ Cooperating countries
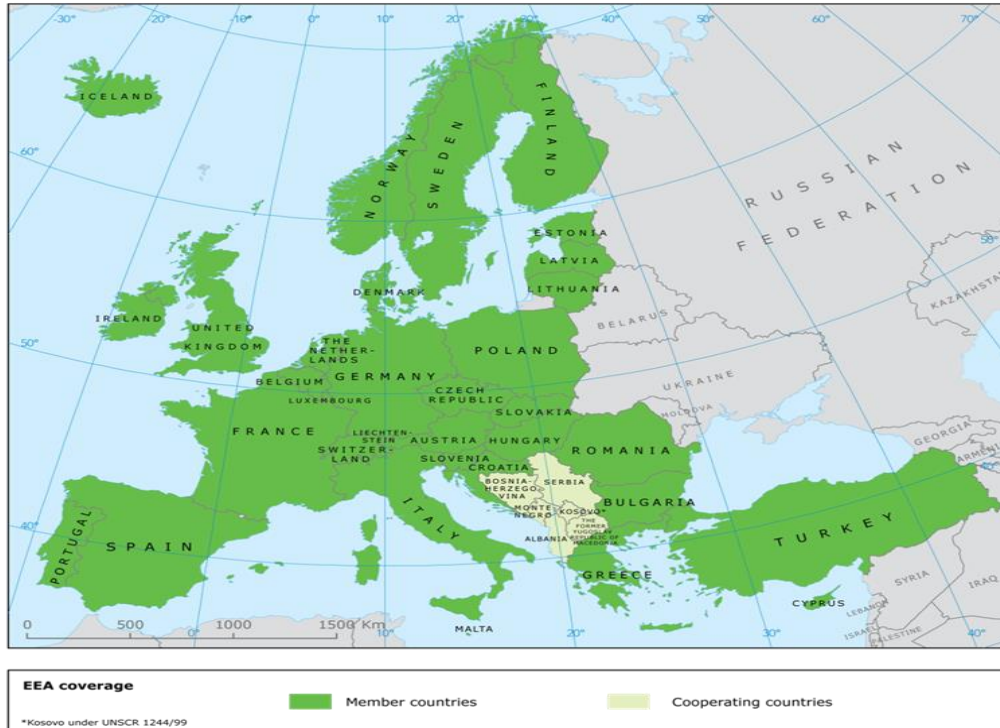
33 EEA Member States
(EU28 + NO/IS/LI/CH/TR)
6 Western Balkan Co-operating
countries

SEIS East project:
BY, UA, MD,
GE, AM, AZ

European Environment Agency

| ENVIRONMENTAL MONITORING AND DATA MANAGEMENT

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UMWELT & GESELLSCHAFT

SEIS – Shared Environmental Information System

European Commission Communication of 2008 defined seven "SEIS principles"

Data & Information should be:

- Managed as close as possible to its source.
- Collected once and shared with others for many purposes.
- Readily available to easily fulfil reporting obligations.
- Easily accessible to all users.
- Accessible to enable comparisons at the appropriate geographical scale and the participation of citizens.
- Fully available to the general public and at national level in the relevant national language(s).
- Supported through common, free, open software standards.

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Three Pillars of SEIS – Content, Infrastructure, Co-operation

A functional SEIS should be structured around three pillars: content, infrastructure and cooperation.

- The system needs to identify the types of content (data) required, as well as potential sources.
- An effective, web-enabled technical infrastructure is required that takes full advantage of the most cutting-edge ICTs, including web services (where machines talk to each other without the need for costly or less efficient human involvement).
- A cooperation and governance structure is required to manage human resources, inputs and networking.

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SEIS AT EEA AND IN EIONET

- The Shared Environmental Information System (SEIS) was established to improve the collection, exchange and use of environmental data and information across Europe.

- SEIS aims to create an integrated web-enabled, EU-wide environmental information system, by simplifying and modernizing existing information systems and processes.

https://youtu.be/iulhhldZUTc

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