

Sharing and disseminating environmental information

National roundtable in Armenia

September 2019



*This project is funded by the European
Union and is implemented by the
European Environment Agency*



Project background information and organisation

Sharing environmental information through national e-governance and open data frameworks based on SEIS principles should be further underpinned with clearly developed visions and comprehensive road maps for this specific area.

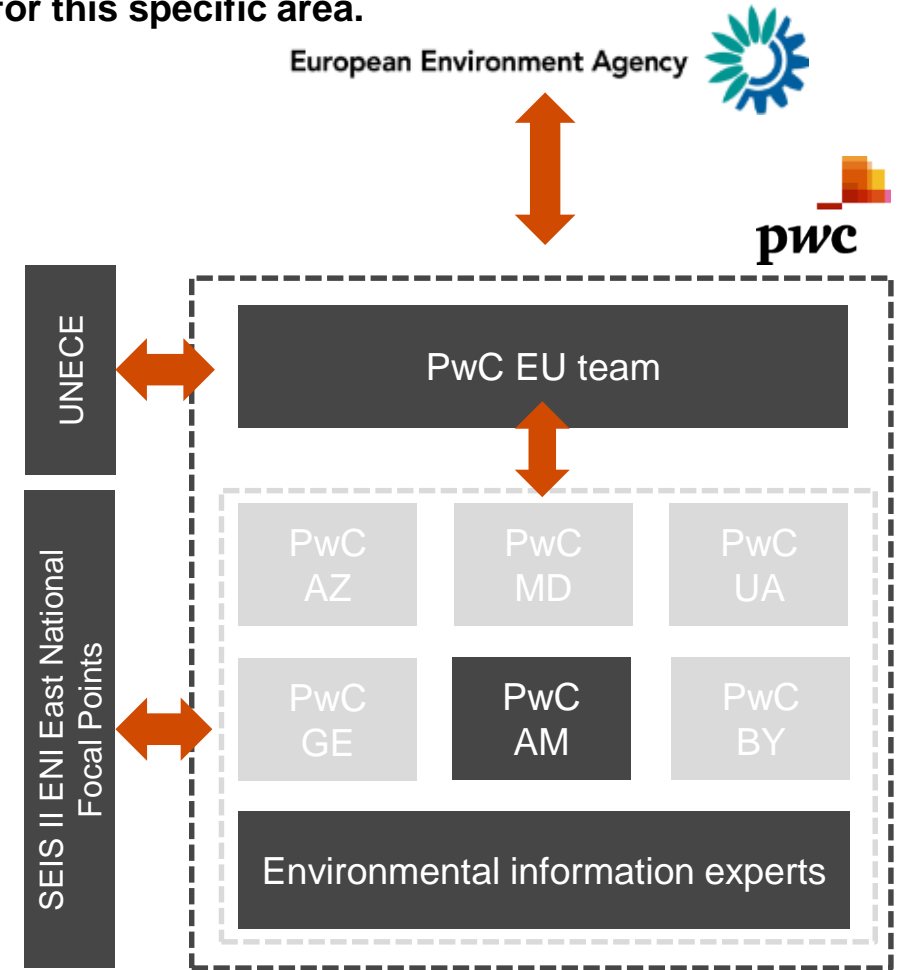
EaP countries have undertaken several international obligations and commitments to collect, update, share and disseminate environmental information as set out in:

- Article 5 of the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention) and decision VI/1 of the Meeting of the Parties to the Aarhus Convention on promoting effective access to information.
- The Protocol on Pollutant Release and Transfer Registers (Protocol on PRTRs).
- The Batumi Declaration “Greener, cleaner, smarter!” adopted by Ministers of the UNECE region calling to have SEIS in place in support to regular assessment in countries of UNECE region by 2021.
- The Declaration on cooperation on Environment and Climate Change in Eastern Partnership (Luxemburg 2016).
- The 2030 Agenda for Sustainable Development.

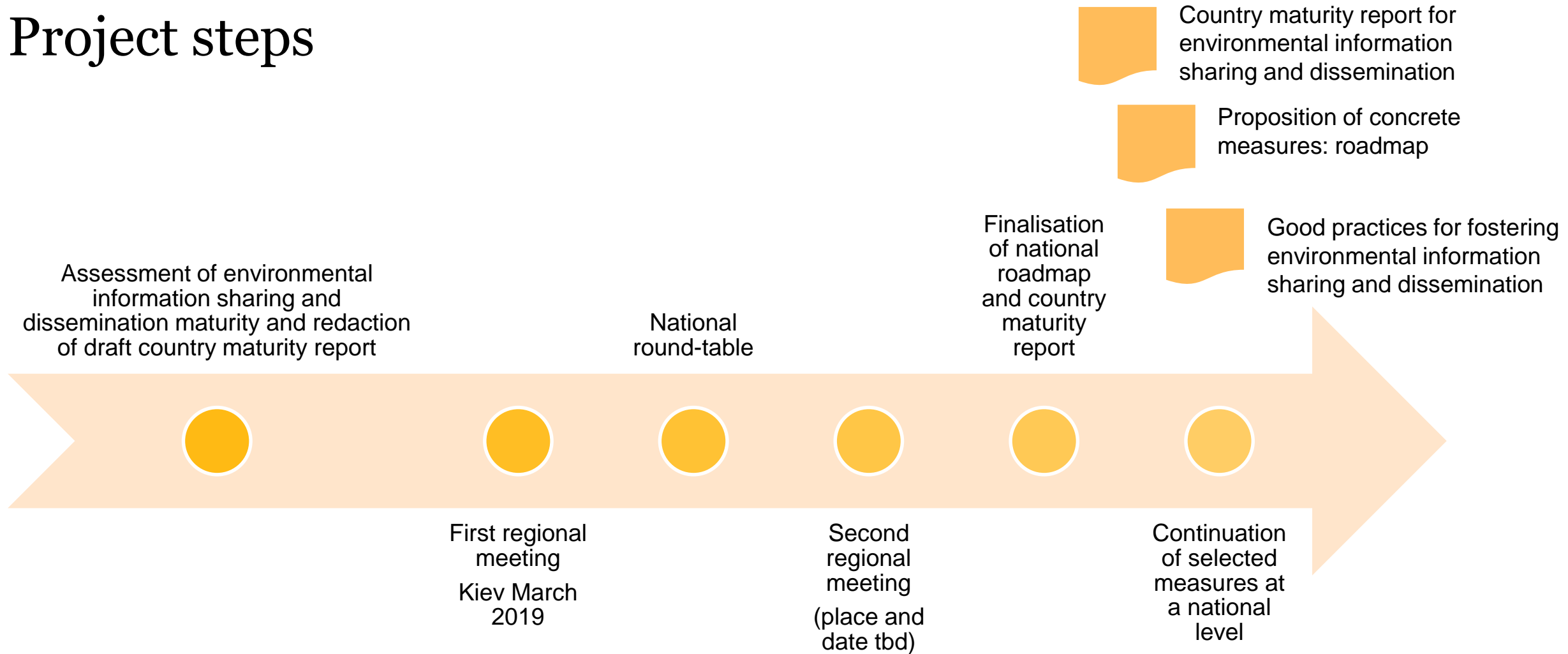
Key objectives of project:

- Support governmental policies and actions in environment and related areas, the transition towards green economy, innovations, compliance with various reporting obligations as well as the implementation of various sustainable development goals (SDGs).
- Streamline efforts and reduce the reporting burden for the national bodies.
- Exchanging ideas, experiences and good practices between countries and institutions, seek advice and receive targeted assistance to make progress smoother and steadier.

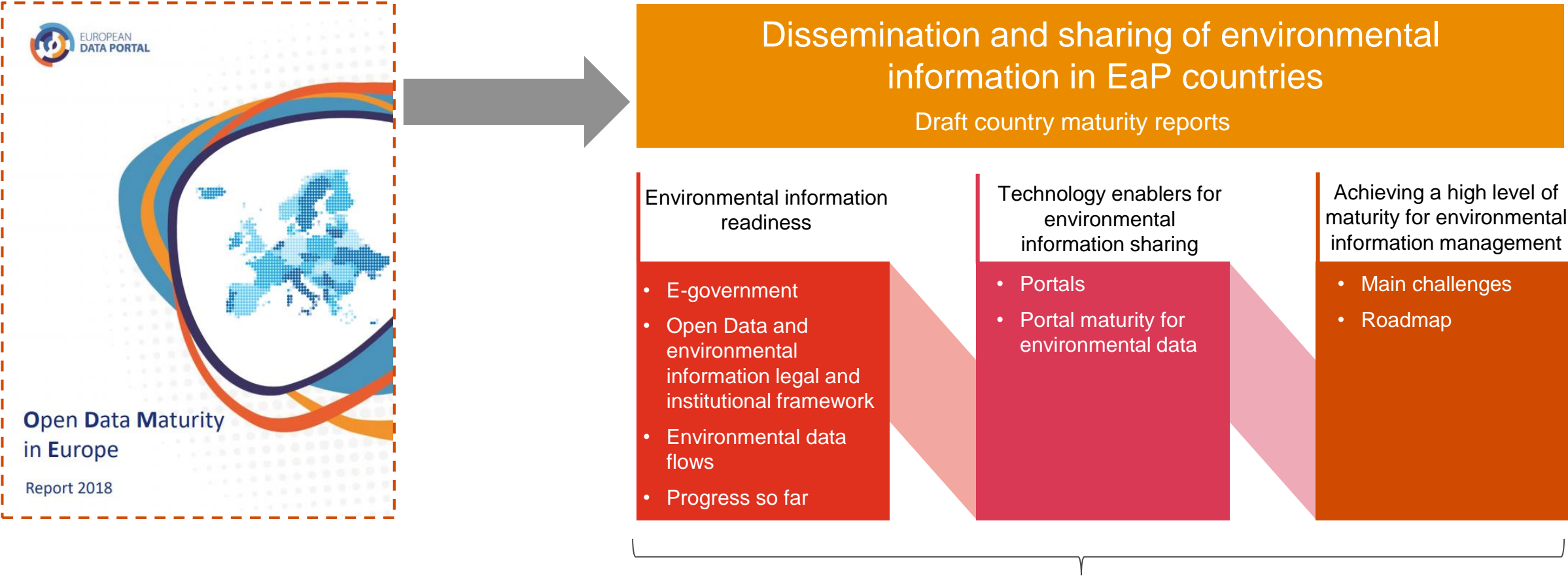
Out of scope: environmental system architecture, detailed legal analysis, provision of framework/methodologies/APIs, detailed analysis of environmental monitoring systems and related organisations, financing mechanisms.



Project steps



Approach and methodology for the draft maturity report



Objective of the roundtable

The roundtable aim to identify concrete steps to advance in terms of legal, organisational, technical conditions to ensure that environmental information is integrated/aligned with national e-government and open data initiatives at country level and in line with SEIS principles.

A key objective in this process is to raise awareness on the benefits of sharing environmental information and knowledge at all levels. For the implementation of this component, close links need to be established, among others, with key international partners, such as UNECE WGEMA, Aarhus Convention/PRTR Protocol Secretariat, OSCE/Aarhus Centres, RECs, NGOs, etc. In this regard, the national roundtable audience consists of a mix of environment, e-government, open data, and international experts.

A finalised road-map/set of actions for improving the dissemination and sharing of environmental data through e-governance and open data initiatives.

Input to relevant processes impacting the further development of SEIS in the European Neighbourhood East region, the pan-European assessment processes based on SEIS or/and the Aarhus-related meetings such as the Aarhus Convention Task Force on Access to Information.

Final remarks on the country maturity report, to be gathered during the discussions.

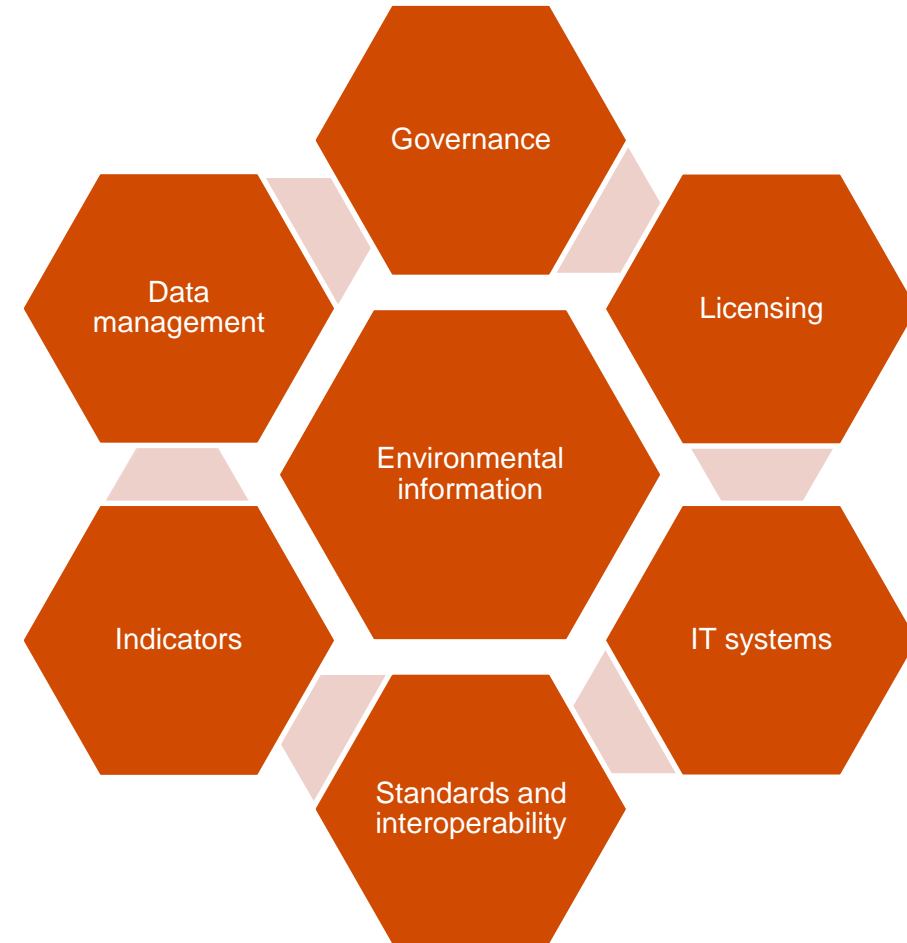
A set of measures for continuing the implementation of the Aarhus Convention, Protocol on PRTRs (as applicable), SEIS principles and other international commitments



Main outcome from the regional meeting in Kiev

The regional meeting in Kiev provided a lot of insights regarding the achieved and ongoing initiatives in the EaP countries. For Armenia, it was made clear that real progress is being made in the area of e-government, and that organisational changes are ongoing regarding the environment. In general, the following points were identified:

- Governance: set up the right governance model and embed stakeholders from Open Data, e-government, health, statistics and the environment.
- Necessity to provide a single web-access point for environmental information.
- Necessity to develop/adopt metadata standards for environmental information.
- Necessity for licensing norms for Open Data and dissemination of environmental information.
- Importance of interoperability between information systems for exchanging environmental information.
- Data governance: necessity to define environmental data quality from a monitoring and publication perspective, necessity to manage confidentiality and data privacy, and managing consistency of data published on various platforms.
- Necessity to defined the granularity of environmental data published according to clear rules.
- Importance of considering user feedback and ad hoc request for information.
- Lack of "story" to support environmental indicators (assessments).



Sharing and dissemination of environmental information

Report highlights



E-government and Open Data

International rankings of EaP countries for e-government

E-Government Development Index

Year	EaP Avg.	EU Avg.	UA	BY	GE	AZ	AM	MD
2014	0,57	0,73	0,50	0,60	0,60	0,55	0,59	0,56
2016	0,60	0,76	0,61	0,66	0,61	0,63	0,52	0,6
2018	0,66	0,80	0,62	0,76	0,69	0,66	0,59	0,66

Key findings:

No Open Data portal

Key development of a series of e-government modules (e.g. registries, e-signature, etc.)

Key challenges:

- Categorization of e-services
- Exchange of information between environmental, statistical, geospatial and health information systems
- Digitalisation of public institutions and services
- Enhance multilingual support for public authorities websites (including metadata where applicable)
- Leverage on e-government initiatives for fostering environmental information monitoring, sharing and dissemination
- Raising awareness for implementing e-government solutions and for Open Data



Good practice example

The European Interoperability Framework provides guidance on how to set up interoperable digital public services by offering recommendations on the improvement of governance of interoperability activities, establish cross-organisational relationships, streamline processes supporting end-to-end digital services, and ensuring that both existing and new legislation do not compromise interoperability efforts. The four layers of interoperability are: legal, organisational, semantic, and technical.

The EIF can be used to foster the Interoperability Framework Program in Armenia.



E-government and Open Data

International rankings of EaP countries for Open Data

Open Data Inventory (ODIN)

	AM	AZ	BY	GE	MD	UA	Avg.
Overall	53	51	48	55	67	42	53
Coverage	51	59	58	53	54	47	53
Openness	56	43	40	57	80	37	52

Key challenges:

- Build an Open Data portal
- Develop procedures and define responsibilities for Open Data
- Define standards for the provision of Open Data and the definition of e-services
- Enhance the e-government portal



Good practice example

Open Data portal in Ireland

Data.gov.ie is intended to provide easy access to datasets that are free to use, reuse, and redistribute. The portal is operated by the Government Reform Unit of the Department of Public Expenditure and Reform. The portal provides a good functionality to “suggest” data to be opened.



Good practice example

Open Data potential in Kyiv

The research is prepared by Kyiv School of Economics jointly with Open Data Institute within USAID/ UK aid Transparency and Accountability in Public Administration and Services program /TAPAS and with the support of the State Agency for eGovernance of Ukraine.

In Ukraine, they estimated that Open Data could contribute up to USD 1.4 billion to the Ukrainian economy by 2025, representing 0.92% of Ukrainian GDP, through a combination of direct and indirect benefits.



Environmental information availability

Main reports published

Type of Report	AM
National environmental reports	To be improved
Specialised reports - climate (national communications to UNFCCC)	Available
Specialised reports - air	Available
Specialised reports - water	Available
Specialised reports - biodiversity	Available
Specialised reports - waste	Available
Indicator-based reports	To be improved
National Statistical Yearbook	Available
National Statistical Yearbook on environment	Available
Report on sustainable development	Available

 To be improved  Available

Key challenges:

- User feedback for environmental information published.
- Frequency of reporting.
- Improve the timely availability of reports.
- Make use of geospatial information.
- Implement environmental indicators.

Good practice example

The EEA indicators are the basis of the reports, which are produced by the EEA. The Core Set of Indicators (CSI) cover such thematic categories as climate change, energy, biodiversity and other. The main function of the indicators is to aid in the process of policy making by providing information on which environmental issues are demanding immediate attention and solutions and evaluate the progress made, since the current policies have been enabled. These indicators contain a lot of metadata, a history and an analysis.



Portals for environmental information dissemination

Main platforms maturity level

	AM
Availability of information on a central portal	Not available/unknown
Publication of environmental data on the Open Data portal	Not available/unknown
Description of environmental data according to metadata standards	Not available/unknown
Availability of environmental data in machine-readable format (excl. indicators)	Not available/unknown
User-friendliness of main environmental portals	To be improved
Publication of time-series indicators	Available
Publication of environmental data on geoportal	Not available/unknown
Licence available for Open Data Portal	Not available/unknown



Not available/unknown



To be improved



Available

Key challenges in:

- Need for Open Data portal.
- Many platforms for dissemination of environmental information.
- Lack of metadata descriptions.
- Improving multilingual aspect (on various public portals) and usability of websites.
- Development of GIS (data, user friendliness, multilingual aspects, etc.).

Good practice example



Ireland has developed Environmental Protection Agency portal, which provides information on various environmental dimensions: licensing, such as IE or IPC licensing and its enforcement, as well as environmental legislation, reports on various sectors, such as drinking water, urban waste water and landfills. In addition, new research and publications on the current state of the environment are available. Maps with air quality index, sewage treatment and others are accessible to the user. Also, the portal promotes news and events on various environmental topics.



Sharing and dissemination of environmental information

Good practices



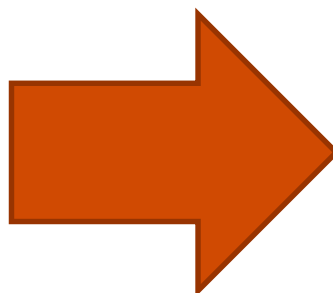
How to read the good practices document?

3.2 Environmental implementation roadmap

This section presents key areas³³⁶ of development for the Republic of Moldova. It is to be noted that these initiatives should be undertaken taking into account regional and international collaboration. In particular, initiatives which were undertaken in other countries could be leveraged. In addition, the development of national standards would benefit if developed regionally and/or aligned to international standards. This especially is true for the design of information systems, metadata standards, portals and interoperability standards.

3.2.1 Content

Measure	Priority	Description
Revision of legal framework to promote accessibility and re-use of non-sensitive public sector information (PSI) online	High	<p>Review of the legal framework for data governance related to environmental monitoring, decision-making and control, natural resources, ecosystems and pollution inventories and environmental assessments, in accordance with the Aarhus Convention, the Protocol on PRTRs (as appropriate). This can include:</p> <ul style="list-style-type: none">improving environmental information system(s) by defining themes, sources (lists, registers, databases, funds, etc.), formats, metadata and interoperability requirements in accordance with the Aarhus Convention, Protocol on PRTRs, ECE environmental indicators and other international commitments and the e-government/open data frameworkimproving procedures for environmental data collection in electronic formsimproving procedures for environmental data update, quality assurance, reporting, online dissemination and other means of disseminationproving public participation in the design, use and update of the environmental information system(s) of the and taking on citizens science and citizens engagement initiativesdivision of responsibilities of the public authorities at all levels and across the sectors to ensure their clear roles and coordinationreviewing the application of the exceptions in disclosure of environmental information and establishing a clear and predictable legal framework to ensure the legitimate application of these exceptions and the disclosure of information on emissions in accordance with the Convention



Open data and e-government best practices for fostering environmental information sharing and dissemination

Date: May 2019

From: PricewaterhouseCoopers

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Implementation of the Shared Environmental Information System principles and practices in the Eastern Partnership countries (ENI SEIS II East)

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Publishing e-services on a dedicated e-service portal	7
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Harmonise licensing terms and conditions of environmental data to promote its public use and re-use	24
Evaluate the impact of Open Data	26
Improve accessibility and use of available environmental data and information by improving the multi-lingual aspect of portals	27
2.2.2 Infrastructure	27
Build an Open Data portal, and foster publication of public sector information (PSI)	27
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ENI SEIS II East | Best practices for fostering environmental information sharing and dissemination | Draft
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Environmental information sharing and dissemination

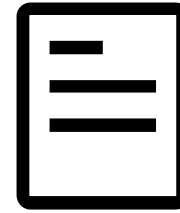
Good practices: Content



Provide mechanisms for enforcing dissemination of environmental information and ensure responsibilities are clearly defined



Define metadata standards for dissemination of environmental information



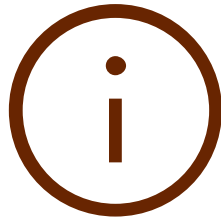
Define licences for re-use of data published



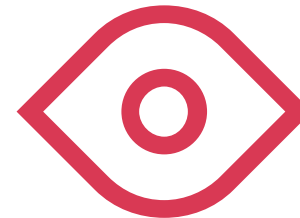
Evaluate the impact of environmental data published (economic, social, political and environmental)



Publish environmental data and reports frequently



Disseminate environmental data in machine-readable format



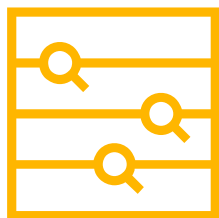
Perform regular "awareness campaign"



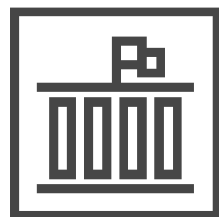
Provide multilingual support & user friendly portals

Environmental information sharing and dissemination

Good practices: infrastructure



Provision of methods and tools for environmental information sharing



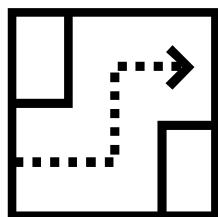
Integrate environmental sharing interoperability in e-government strategy



Align publication of information across platforms (i.e. environmental portals, Open Data portal)



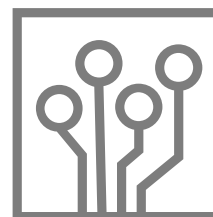
Limit the amount of portals but keep specificities (e.g. Open Data, Geoportal and Eco-portal)



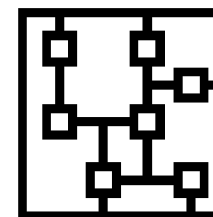
Adopt a simple governance model



Build interoperability standards (i.e. organisational and technical, provision of building blocks)



Leverage on e-government and technology



Leverage on geoportal and publish environmental data on it

Portals for environmental information dissemination

Good practices: cooperation



Build user-friendly portals



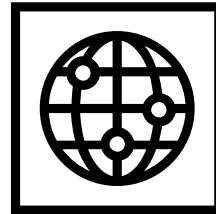
Provide automatic multilingual support (as appropriate, taking into consideration confidentiality)



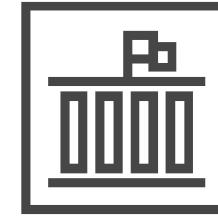
Build user community and gather their feedback



Provide a user-friendly statistical system for data visualisation



Leverage on international and regional experience (e.g. Joinup platform in the EU)



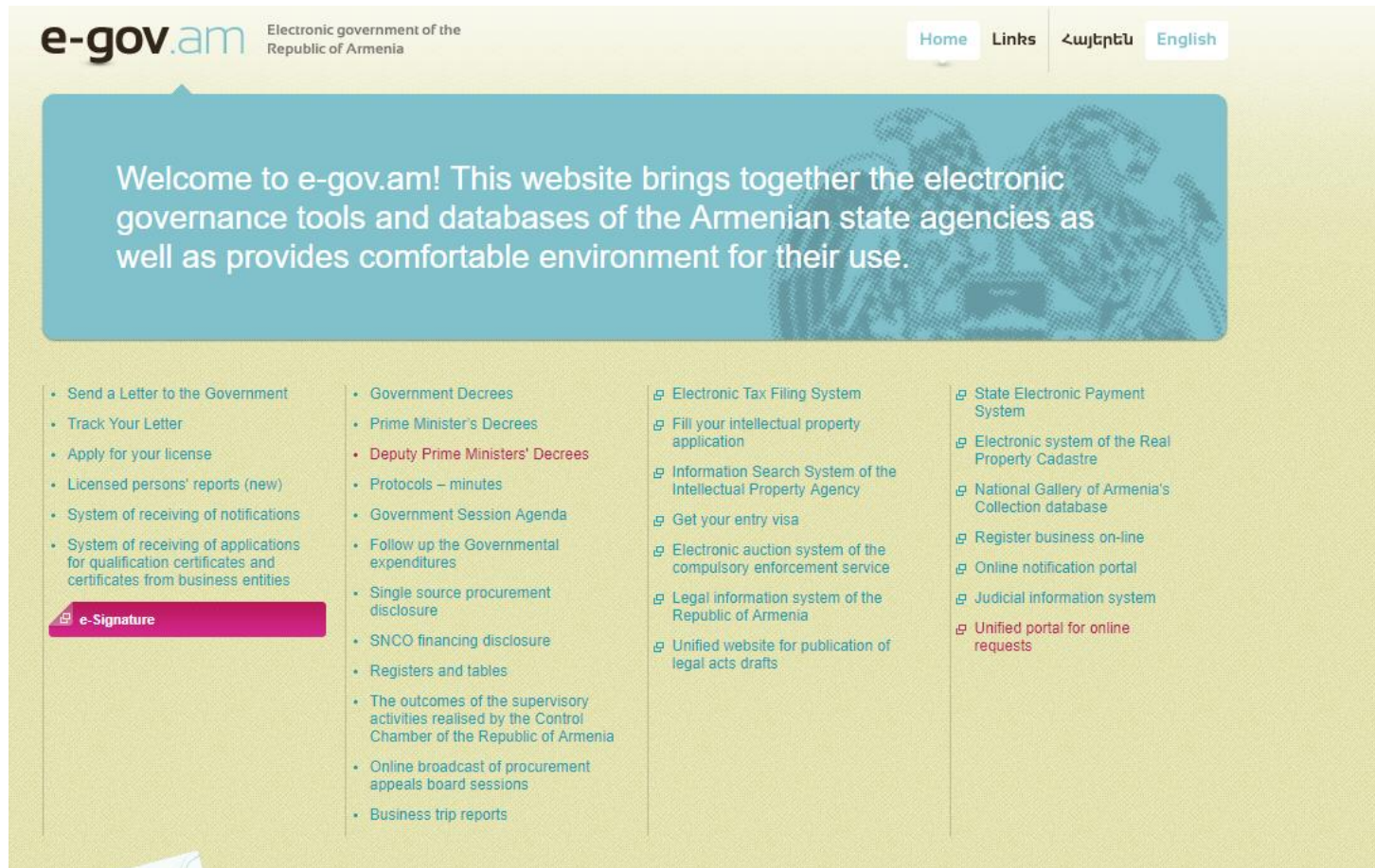
Continuously develop skills and ensure availability of resources

Sharing and dissemination of environmental information

Examples of implementation of
good practices



E-government portal



The portal is not structured as a usual e-government portal. It misses:

- Clear structure of public services and e-services
- Standard description of services
- Life events

E-government portal of Lithuania



E-Government Gateway

Administrative and public e-services portal

LT EN

Login

Home

Citizens

Business

Public sector

E-signature

e.pristatymas

Centralizuoti viešieji pirkimai

Services of important life events



Birth of the child



Losing and finding a job



Entering university or
vocational school



Applying for a driver's
licence



Starting a business



Registering a car

[More life events](#) ▼

Service categories



Data protection



SIRIP services for public
sector



Energetics



Taxes



Trade and production



Communication



Example of good practices

Providing environmental reporting metadata (1/2)

WATER RESOURCES

Water use and disposal

In 2016, the water abstraction comprised 3 181.9 mln. cub. m, water use –2 469.9 mln. cub. m (89.7% – agriculture, fish breeding and forestry, 5.9% – industry, communal and construction, 4.4% – drinking).

Water losses during transit comprised 712.0 mln. cub. m or 22.4% of water abstraction. In 2016 the volume of discharged waste water comprised 769.7 mln. cub. m.

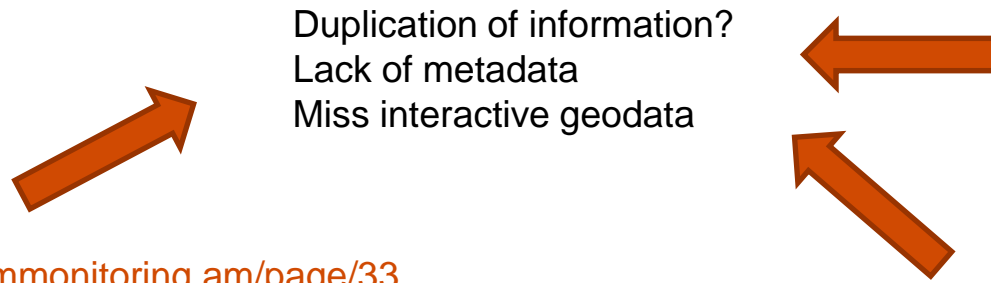
Water abstraction by RA marzes and Yerevan city, 2016, mln. cub. m

	Water abstraction
Yerevan city	177.0
Aragatsotn	383.3
Ararat	749.1
Armavir	571.2
Gegharkunik	46.0
Lori	11.9

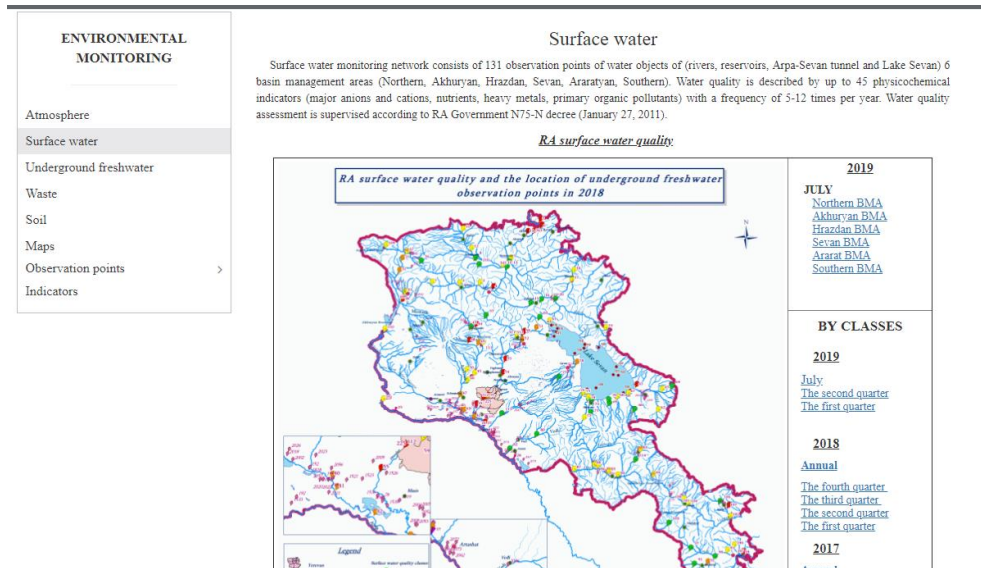
Very short summary
Outdated information
Missing standard
description of reports
(metadata)



Environmental information dissemination – duplication?



<http://armmonitoring.am/page/33>



Publications

<http://www.wrma.am>

Water Resources Atlas of Armenia

Within the framework of the USAID funded "Program for Institutional and Regulatory Strengthening of Water Management in Armenia", the water resources atlas was prepared in 2008. The latter contains maps of water resources of the Republic of Armenia, developed by Geographic Information System, which are also a spatial component of the State Water Cadaster Information System.

Download

Water Resources Management in Armenia

The objective of the booklet "Water Resources Management in Armenia" is to present major reforms of the recent 5 years in the water resources management and protection in Armenia, as well as the work of the Water Resources Management Agency of the Staff of the RA Ministry of Nature Protection.

Download

<http://www.mnp.am/en/pages/155>

WATER RESOURCES

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	Water abstraction
Yerevan city	177.0
Araratsoin	383.3
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Armavir	571.2
Gegharkunik	46.0
Lori	41.9



Example of good practices

Providing environmental reporting metadata (2/2)

Emissions

Emissions of hazardous substances from stationary sources

Emissions in 2013

In 2013 emissions of hazardous substances into atmosphere comprised 261.4 thousand t., 54.2% of which fell to share vehicles. 45.8 thousand t. of hazardous substances were emitted from stationary sources of emission comprised 314.4 thousand t., 61.9% of which fell to share vehicles. 38.1% emitted into atmosphere. 26.6% of noxious substances emitted into atmosphere was comprised by sulphureous anhydride (1.5thousand t.). Total quantity of heavy metals comprised 49.4 t. Quantity of dust emitted into atmosphere comprised 148.4t. of which was organic dust 18%.

The quantity of volatile organic compounds in the atmospheric emissions comprised 23.3 thousand t. or 16.4% of total emissions.

Atmospheric emissions from vehicles

Emissions in 2013

In 2013 the quantity of hazardous substances emitted into atmosphere from vehicles comprised 141.7 thousand t. A large part of emissions was comprised by carbon oxide 102.6 thousand t. or 72.4% of total emissions, volatile organic compounds-23.3 thousand t. or 16.4% nitric oxides 10.8%.

[Calculation of Grid Emission Factor for the Electricity System of the Republic of Armenia for the Year 2011](#)

POLLUTION (see [Armenian version](#))

The sampling points for the monitoring of surface water and air pool [Map](#)

The data of air pool pollution by "Environmental Effect Monitoring Center" SNCO

2017 (see [Armenian version](#))

[May](#)
[April](#)
[March](#)
[February](#)
[January](#)

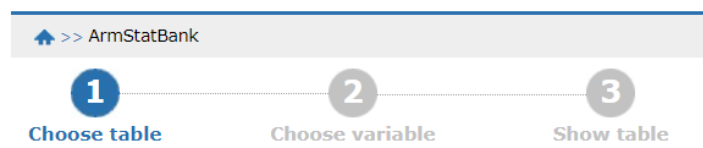
Poor metadata

Title	Air pollution, implementation report for the year 2018
Description	This report provides insight into the air pollution level in Yerevan between 2009 and 2018.
Time coverage	February 2019
Space coverage	Yerevan, Armenia
Distribution	Report in pdf: http://reportinpdf.pdf Report in Word format: http://reportinword.docx Data in Excel: http://excelrawdata.xlsx Alternative link: http://xyz.md/aarhus2019.pdf
Publisher	Ministry Of Environment of the Republic Of Armenia
Contact person	Mr. XYZ
Contact email	xyz@abc.by
Contact person phone number	+xxxxxxx
Theme	Air pollution, air statistics, air indicator
Release date	03.03.2019
Language	Russian, English
Keyword	Air pollution, February 2019



Example of good practices

Environment indicators (1/2)



ArmStatBank

- 1. Economy and finances
- 2. Population and social processes
- 3. Industry (including Energy), construction, trade and services
- 4. Transport and tourism
- 5. Foreign trade
- 6. Agriculture, forestry and fishing
- 7. Food Security
- 8. **Environment**
 - 8.1 Environment
 - (A) Emissions of pollutants into the atmospheric air
 - (B) Climate change
 - (C) Water resources
 - (D) Biodiversity
 - (E,F) Land and Agriculture
 - (H) Transport
 - (I) Waste
 - (J) Environmental financing
 - Mining of solid minerals by indicators and years
 - Environmental economic accounts



Link with environmental reports?



Example of good practices

Environment indicators (2/2)

European Environment Agency

Search

A-Z Glossary

Topics Countries Data and maps Indicators Publications Media About us The EEA is an agency of the European Union

Data and maps Indicators Chlorophyll in transitional, coastal ... Chlorophyll in transitional, ...

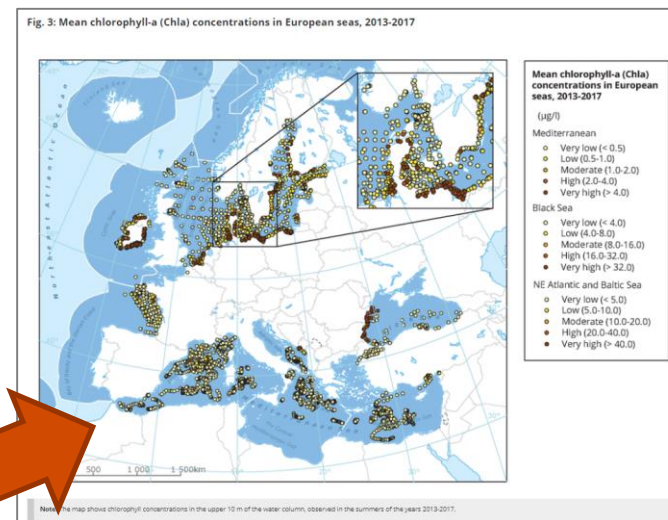
Chlorophyll in transitional, coastal and marine waters

Indicator Assessment — Prod-ID: IND-18-en Also known as: CSI 023, MAR 006 — Created 19 Oct 2018 — Published 11 Apr 2019 — Last modified 11 Apr 2019 — 15 min read

Topics: Water and marine environment

Key messages

- The trends in chlorophyll concentrations show improvements in the eutrophication status in some of Europe's seas, due to the successful implementation of nutrient management strategies.
- The highest chlorophyll concentrations are generally observed in transitional and coastal waters of the marine (sub)regions, in response to elevated nutrient concentrations in those waters.
- Decreasing chlorophyll concentrations were observed in the southwestern Baltic Sea and along the continental coast of the Greater North Sea (including Kattegat), showing the effects of measures to reduce nutrient inputs (OSPAR 2017, HELCOM 2018).
- For the other marine (sub)regions, only a few time series were available. In general, those time series did not show significant trends.



Map + graphs

Analysis

Baltic Sea

Eutrophication is still a large-scale problem in the Baltic Sea, a fact acknowledged by most, if not all, of the bordering countries (EEA, 2019).

The highest measured summer chlorophyll-a concentrations in the 2013-2017 period were found in coastal and transitional waters along the German coast and in the Gulf of Gdansk. Low concentrations were predominantly observed in the open waters of the Baltic Sea (Figure 3).

Most of the stations (86 %) did not show a significant change in chlorophyll concentration in the period 1990-2017. Overall, statistically significant decreasing trends were evident in 9 % of the Baltic Sea stations (Figure 2), which were in the southwestern part of the Baltic Sea. Chlorophyll concentrations increased at 5 % of the stations, mainly in coastal waters of the Bothnian Bay and the Bothnian Sea, and at some stations in the Baltic Proper and the Gulf of Finland (Figure 1).

Greater North Sea

Eutrophication is a problem in parts of the Northeast Atlantic. River discharges are the main sources of elevated nutrient levels caused by human activities (EEA, 2019).

In the North Sea, the highest chlorophyll concentrations were found in coastal and transitional waters along the continental coast from Belgium to Denmark.

Decreasing trends were found in transitional, coastal and offshore waters of the Kattegat and at some stations along the continental North Sea coast.

Atlantic waters: Celtic Seas, Bay of Biscay and the Iberian coast

In the Celtic Seas, only data on chlorophyll concentrations were available for transitional and coastal waters of Ireland. The concentrations generally show a decreasing gradient from inshore to offshore. In 2 % of the cases, the time series showed an increasing trend, while in all other cases there was no significant trend.

In the Bay of Biscay and Iberian coast, oxygen concentrations along the French coast were low in general (<10 µg/l). There were few time series available, none of which showed a significant trend.

Mediterranean Sea

Mediterranean Sea is probably the regional seas with fewest eutrophication problem areas. This is partly related to the fact that the offshore parts of the Mediterranean Sea are characterized by very low nutrient concentrations (EEA, 2019).

Data for the western Mediterranean Sea mainly cover offshore waters where concentrations are low. Data for the Adriatic Sea and the Ionian Sea show very low concentrations (<1 µg/l).

There were few time series available. Only 1 out of 12 available series showed a significant increasing trend.

Black Sea

More reductions in nutrient inputs are required to restore the Black Sea to being unaffected by eutrophication (EEA, 2019).



Example of good practice

Managing Open Data licences

Setting licences enables setting limits for re-using Open Data. It also enables commercial use of data – the Open Data portal can also be used to share commercial data on request.

Filtering licences according to conditions

Licences

The screenshot shows the 'Licensing Assistant' page of the European Data Portal. The page has a blue header with the portal's logo and navigation links. Below the header, there's a section titled 'Licensing Assistant' with a descriptive text box. A filter section allows users to select licence terms from three categories: Obligation, Permission, and Prohibition. Below this, a table lists three licences: CC BY 3.0 Austria, CC-BY 4.0, and CC-BY 3.0 NL. Each licence row shows a visual representation of its terms using colored boxes corresponding to the filter categories.

European Data Portal > Licensing Assistant

What we do ▾ Data ▾ Providing Data ▾ Using Data ▾ Resources ▾

Datasets Catalogues Metadata Quality Licensing Assistant SPARQL Manager Statistics

Licensing Assistant

Data which is shared with a licence becomes Open Data. There are many licences available. The licence assistant provides a description of the available licences. It also gives an overview of how to apply licences as re-publisher/distributor of Open Data and how to combine multiple licences.

Please find a licence by selecting the preferred licence terms below:

☐ Weighted filtering

[Advanced settings](#)

Obligation

Notice Attribution Sharealike
Lesser Copyleft Copyleft
State Changes

Permission

Distribution Reproduction
Derivative Works Sublicensing
Use patent claims

Prohibition

Commercial use

Name	Terms
CC BY 3.0 Austria	Obligation: Notice Permission: Distribution Obligation: Attribution Permission: Reproduction Permission: Derivative Works
CC-BY 4.0	Obligation: Notice Obligation: State Changes Permission: Distribution Obligation: Attribution Permission: Reproduction Permission: Derivative Works
CC-BY 3.0 NL	Obligation: Notice Permission: Distribution Obligation: Attribution Permission: Reproduction Permission: Derivative Works

Example of good practice

Open Data quality measurement and impact assessment

Open Data in Europe

[2018](#) [2017](#) [2016](#)

A series of indicators have been selected to measure Open Data maturity across Europe. These indicators cover the level of development of national policies promoting Open Data, an assessment of the features made available on national data portals as well as the expected impact of Open Data.



Jump to section

[Overview](#)[Country overview](#)[Detailed country view](#)[Country maturity map](#)[Download the full report 2018](#)[Method Paper 2018](#)[Download Country Scores 2018](#)

Overview

Policy

81%
Policy Framework



80%
National Coordination



88%
Licencing Norms



Portals

64%
Portal Features



76%
Portal Usage



64%
Data Provision



49%
Portal Sustainability



Impact

63%
Strategic Awareness



55%
Political Impact



44%
Social Impact



48%
Environmental Impact



31%
Economic Impact



Quality

Dimension score (weighted average)

82%
Policy



63%
Portals



50%
Impact



Example of good practice

Establish a single access-point for sharing environmental information



The screenshot shows the EPA Ireland website. At the top is the EPA logo and navigation links: Home, News & events, Videos, EPA maps, FAQ, Gaeilge, Site map, Contact us. Below is a search bar and social media links. A horizontal menu contains: Ireland's Environment, Licensing and Permitting, Enforcement, Monitoring and Assessment, Research and Education, Publications and Downloads. The breadcrumb trail reads: You are here: Home > Air > Air Quality > What We Monitor. A sidebar on the left lists: Air Quality, What We Monitor (selected), Air Quality Data, Air Quality Plans, Air Quality Standards, Air Quality Zones, Air Quality Index for Health, Reports & Bulletins, For Health Professionals, For Developers, Local Air Quality Data, Air Enforcement. The main content area is titled 'What we monitor' and includes a link to 'View up-to-date information for air monitoring locations.' It describes the national ambient air quality monitoring network and lists pollutants of concern: Particulate Matter and Nitrogen Dioxide. An 'Ozone' section explains its natural and tropospheric presence and health impacts. A 'Carbon monoxide' section discusses its source in traffic and health effects. A 'Nitrogen dioxide and nitrogen oxides' section discusses emissions from traffic and electricity. To the right is an 'I NAB ACCREDITED' logo (ISO 17025, CALIBRATION, DETAILED IN SCOPE REG NO.311C). At the bottom left is a map of Ireland showing monitoring stations and an air quality index for health scale from 1 (Good) to 10 (Very Poor).

<https://www.epa.ie/air/quality/monitor/>

The environment portal of Ireland contains information about:

- Licensing and permitting
- Enforcement – Law
- Monitoring & Assessment
- Research & Education
- Publications and Downloads

For each environment theme (air, water, etc.), a specific portal is available and provides access to data and analysis. The portal also provides access to real-time data.



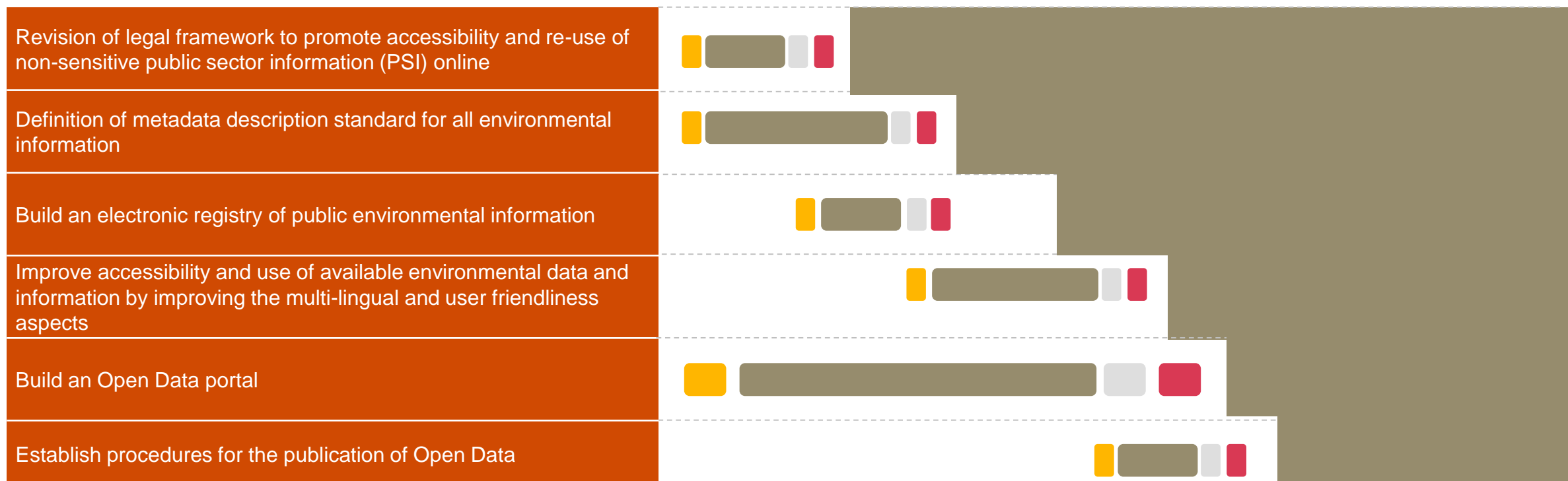
Sharing and disseminating of environmental information

Proposed actions for
discussion



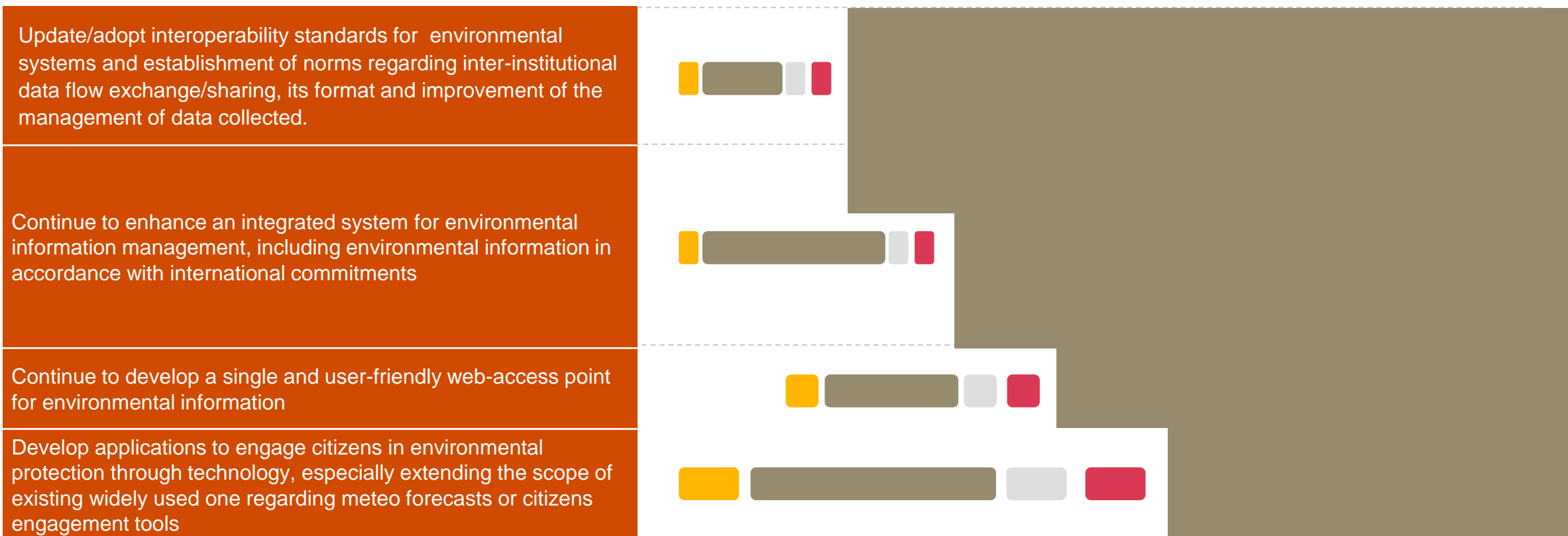
Common key initiatives

Content



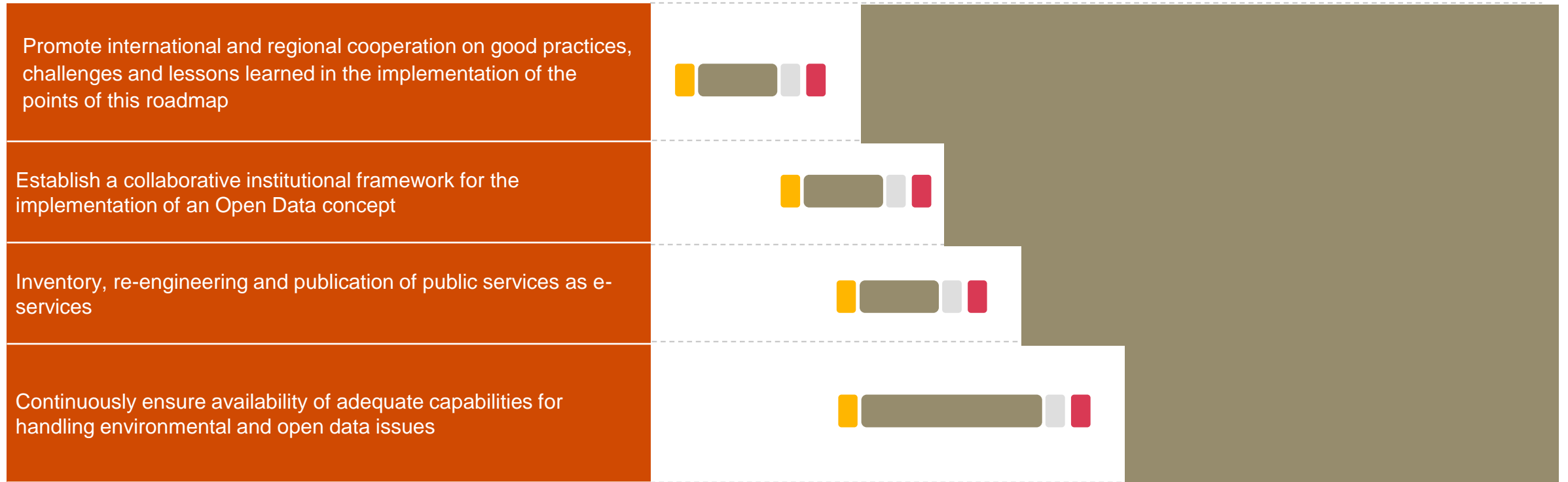
Common key initiatives

Infrastructure



Common key initiatives

Institutional Cooperation (Network)



Group discussion: content

The goal of these group discussions is to look at the initiatives proposed in the roadmap and to see how relevant they are at a national level, and how they could practically be implemented. Where possible, discuss how existing initiatives can be leveraged to address these points.

1. Reflect on the proposed national roadmap, and see how measures are relevant / applicable. Discuss potential responsibilities for the implementation of initiatives. (30 min discussion)
2. Present your initiatives to all participants (~5-10min per group)

Group discussion: infrastructure

The goal of these group discussions is to look at the initiatives proposed in the roadmap and to see how relevant they are at a national level, and how they could practically be implemented. Where possible, discuss how existing initiatives can be leveraged to address these points.

1. Reflect on the proposed national roadmap, and see how measures are relevant / applicable. Discuss potential responsibilities for the implementation of initiatives. (30 min discussion)
2. Present your initiatives to all participants (~5-10min per group)

Group discussion: cooperation

The goal of these group discussions is to look at the initiatives proposed in the roadmap and to see how relevant they are at a national level, and how they could practically be implemented. Where possible, discuss how existing initiatives can be leveraged to address these points.

1. Reflect on the proposed national roadmap, and see how measures are relevant / applicable. Discuss potential responsibilities for the implementation of initiatives. (30 min discussion)
2. Present your initiatives to all participants (~5-10min per group)

Project next steps

Our objective is to provide you with a sound as-is analysis, practical measures, and good practices for disseminating and sharing environmental information. It is up to you to decide which measure you would like to implement at a national level; the results of this project should help you to pinpoint key challenges and concrete measures.

The following steps will be:

- Review of draft reports to integrate/discuss the last comments: please provide your comments by end of September
- Update the roadmap taking into consideration the output of the meeting: please provide your comments by end of September.
- Finalisation of best practices for key issues raised in the field of e-government, Open Data and environmental information sharing and dissemination taking into consideration the output of the event.
- Second regional meeting (2nd October 2019).

...

And the journey should not end here.



Thank you

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