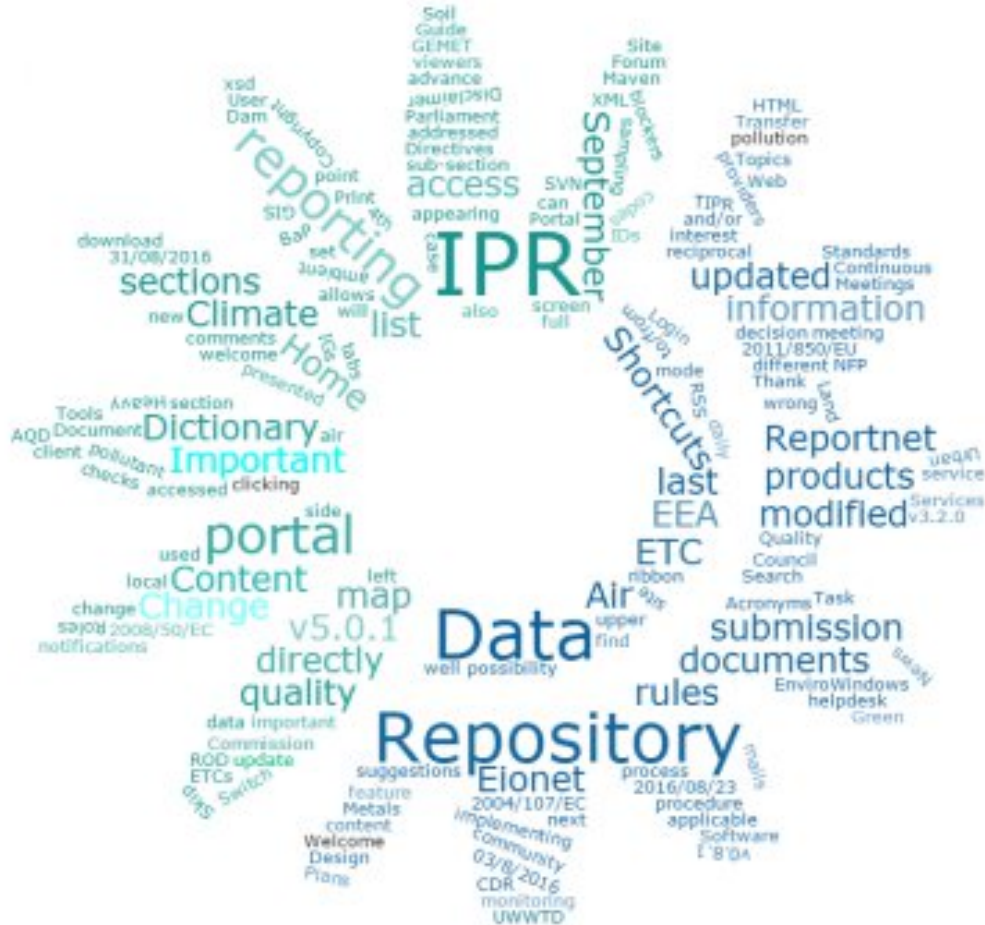


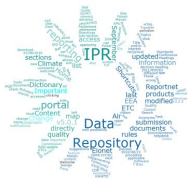
27th March 2023

Information/Alert thresholds

Information/Alert thresholds

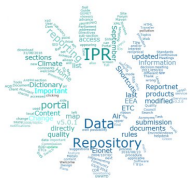
Luca Liberti (EEA)





1 Information & Alert threshold(s)

- Why?
- How?
- Important reminder



2 Why is this important?

- Under CAFE Directive, these are mentioned in several places & are quite important....

ANNEX XII

INFORMATION AND ALERT THRESHOLDS

A. Alert thresholds for pollutants other than ozone

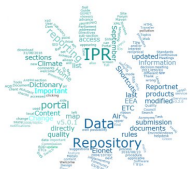
To be measured over three consecutive hours at locations representative of air quality over at least 100 km² or an entire zone or agglomeration, whichever is the smaller.

Pollutant	Alert threshold
Sulphur dioxide	500 µg/m ³
Nitrogen dioxide	400 µg/m ³

B. Information and alert thresholds for ozone

Purpose	Averaging period	Threshold
Information	1 hour	180 µg/m ³
Alert	1 hour ⁽¹⁾	240 µg/m ³

⁽¹⁾ For the implementation of Article 24, the exceedance of the threshold is to be measured or predicted for three consecutive hours.



2 Why is this important?

B) Environmental objectives and reporting metrics

Formula	Protection target	Environmental Objective type (Code ⁽¹⁾)	Averaging period of assessments	Reporting metric of environmental objective	Numerical values of the environmental objective (allowed number exceedances)
Pollutants for which up-to-date and validated data have to be reported					
NO ₂	Health	LV	1 hour	Hours in exceedance in a calendar year	200 µg/m ³ (1)
		LVMT			
		LV	1 calendar year	Annual average	40 µg/m ³
		LVMT			
		ALT	1 hour	Three consecutive hours in exceedance (at locations representative of air quality over at least 100 km ² or an entire zone or agglomeration, which ever is smaller)	400 µg/m ³

SO ₂	Health	LV	1 hour	Hours in exceedance in a calendar year	350 µg/m ³ (24)
			1 day	Days in exceedance in a calendar year	125 µg/m ³ (3)
		ALT	1 hour	Three consecutive hours in exceedance (at locations representative of air quality over at least 100 km ² or an entire zone or agglomeration, which ever is smaller)	500 µg/m ³
		NAT ⁽²⁾	1 hour	Deducted hours in exceedance in a calendar year	n.a.
			1 day	Deducted days in exceedance in a calendar year	n.a.
	Vegetation	CL	1 calendar year	Annual average	20 µg/m ³
			Winter	Average value over the winter months, i.e. 1 October year x-1 to 31 March year x	20 µg/m ³

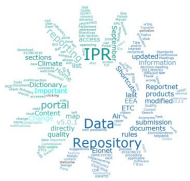
• Under IPR Decision

Formula	Protection target	Environmental Objective type (Code ⁽¹⁾)	Averaging period of assessments	Reporting metric of environmental objective	Numerical values of the environmental objective (allowed number of exceedances)
O ₃	Health	TV	Maximum daily eight-hour mean	Days when maximum daily eight-hour mean exceeded the target value averaged over 3 years	120 µg/m ³ (25)
		LTO	Maximum daily eight-hour mean	Days when maximum daily eight-hour mean exceeded the long term objective in 1 calendar year	120 µg/m ³
		INT	1 hour	Hours in exceedance in a calendar year	180 µg/m ³
		ALT	1 hour	Hours in exceedance in a calendar year	240 µg/m ³
	Vegetation	TV	1 May to 31 July	AOT40 (calculation see Dir. 2008/50/EC Annex VII)	18 000 µg/m ³ ·h
		LTO	1 May to 31 July	AOT40 (calculation see Dir. 2008/50/EC Annex VII)	6 000 µg/m ³ · h
CO	Health	LV	Maximum daily eight-hour mean	Days when maximum daily eight-hour mean exceeded the limit value	10 mg/m ³

Pollutants for which only validated data have to be reported					
Benzene	Health	LV	1 calendar year	Annual average	5 µg/m ³
Lead	Health	LV	1 calendar year	Annual average	0,5 µg/m ³
Cadmium	Health	TV	1 calendar year	Annual average	5 ng/m ³
Arsenic	Health	TV	1 calendar year	Annual average	6 ng/m ³
Nickel	Health	TV	1 calendar year	Annual average	10 ng/m ³
B(a)P	Health	TV	1 calendar year	Annual average	1 ng/m ³

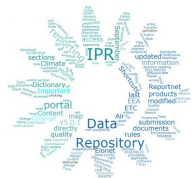
⁽¹⁾ LV: limit value, LVMT: Limit value plus margin of tolerance, TV: target value, LTO: long-term objective, INT: Information threshold, ALT: Alert threshold, CL: Critical level, NAT: Assessment of natural contribution, WSS: Assessment of winter-sanding and -salting, ERT: Exposure reduction target, ECO: Exposure concentration obligation.

⁽²⁾ No up-to-date data is to be made available.



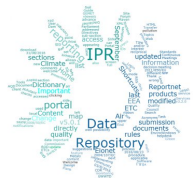
3 How we should report them?

- They need to be reported in C & G



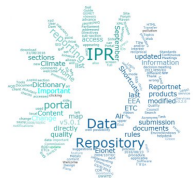
3 How we should report them?

- EEA-ETC/HE & DG Environment have revised requirement under Directive & Decision
- 3 topics have been discussed and the outcome is presented:
 - A) Are these to be reported?
 - B) Are these Env Objectives at zone level o at country
 - C) What should be reported in Attainment (G)



3 How to report in C & G?

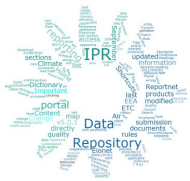
- A) These Env Objectives must be reported like any other
- B) Zone/Agglomeration vs ~~country~~
 - It is clear in Directive, that all 4 must be reported at zone/agglomeration



3 How to report in C & G?



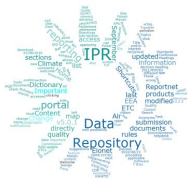
- These are NOT to be reported like PM2.5 ECO/ERT
- Each zone for designated for the protection of
 - NO2 Health
 - SO2 Health
 - O3 Health x 2
- **MUST** include these Environmental Objectives



3 How do we report C? – NO₂ ALERT



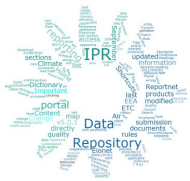
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3 How do we report C? – SO₂ ALERT



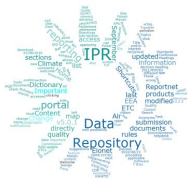
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3 How do we report C? – O₃ INFO



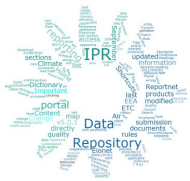
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3 How do we report C? – O₃ INFO



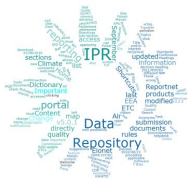
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3 How do we report C? – O₃ ALERT



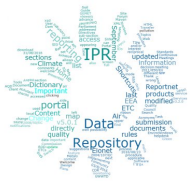
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4 How to report in G?



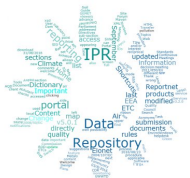
- In G, we need to report -> **numberExceedances**
- Like others, we will report the SPO with highest number of exceedances.



4 How to report in G?



- In G, we need to report -> **numberExceedances**
 - If in zone X,
 - 10 SPOs exceeded the O₃ Info Thr of 180ugm-3,
 - And the SPO with highest number of exceedances was 15, then....
 - `<aqd:exceedance>true</aqd:exceedance>`
 - `<aqd:numberExceedances>15</aqd:numberExceedances>`



4 How to report in G?

- In G, we need to report -> **numberExceedances**



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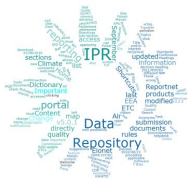
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Spain, for example, also add specific information in aqd:comments

11th Air Quality IPR Technical Meeting



AEI Reporting

Any questions/comments?

Thank you for your attention!