Indoor air first steps and way foward

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How to measure emissions – the standardisation work in CEN

2005: EC mandate to CEN (M/366)

2006- : ongoing standardisation work

Higher requirements on robustness of assessment standards

2017- : Finalisation of assessment standards

The need to communicate – but with whom?

Existing schemes:

- basic information (consumer information)

  - performance based

- "black box" (manufacturer – toxicologist)

  - "fitness for use"

What information should be publicly available?

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The need to communicate – but with whom? (cont.)

User needs to be considered:

Designers/architects/contractors

Do-it-yourself enthusiasts

Market surveillance

Building control

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… and what?

- individual pollutants or "indicators"?
- performance data or risk based data?
- declaration and background data?

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… and what?

- individual pollutants or "**indicators**"?
- performance data or **risk based data**?
- **declaration** and background data?

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… and what? (part II)

Classes:

EU-LCI ratio

Formaldehyde emissions

CMR substances emissions

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… and what? (part III)

EU-LCI ratio

2013: JRC/ECA report no 29 (framework EU-LCI)

Ongoing work on developing EU-LCIs (work on technical files partly financed by EC and UBA)

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… and what? (part IV)

Formaldehyde emissions

Currently: classes E1 (≤ 0,12 mg/m³) and E2 (> 0,12 mg/m³)

Proposed: additional class ≤ 0,06 mg/m³

France demands class ≤ 0,01 mg/m³

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… and what? (part V)

CMR substances emissions

Two classes (substances based on Regulation (EC) 1272/2008)

"Fine-tuning" but general consensus

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TVOC/SVOC (August 2016)

Classes	TVOC after 3days $TVOC_{D3}$	TVOC after 28days $TVOC_{D28}$	∑ SVOC	Not yet assessed substances C_{nonLCI}
Class A_3	≤ 10000 µg/m³	≤ 200 µg/m³	≤ 100 µg/m³	≤ 100 µg/m³
Class A_2		≤ 500 µg/m³		
Class A_1		≤ 1000 µg/m³		
Class B	> 10000 µg/m³	< 1500 µg/m³	> 100 µg/m³	>100 µg/m³
Class C		< 2000 µg/m³		
Class D		> 2000 µg/m³		

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TVOC: wide range of emission "thresholds" (EU-LCI ratios)

2 substances have EU-LCI value above 10000 µg/m³

23 substances have EU-LCI value above 2000 µg/m³

29 substances (out of 111) have EU-LCI value below 200 µg/m³ (lowest TVOC class)

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Versions
August 2016 – April 2017

		VOC (µg/m³)	TVOC (µg/m³)	EU-LCI (ratio)	Formaldehyde (mg/m³)	CMR (mg/m³)	Class (August 2016)	Class (April 2017)
Product A	Substance a	450	450	0.8	0.00	0.001	**A_2 R1 F1 C1**	R1 F1 C1
Product B	Substance b	9	1329	0.95	0.55	0.001	**B R1 F2 C1**	R1 F1 C1
	Substance c	120		0.7				
	Substance f	1200		0.4				
Product C	Substance b	9	149	0.95	0.12	0.001	**A_3 R1 F4 C1**	R1 F2 C1
	Substance c	120		0.7				
	Substance d	20		0.98				
Product D	Substance b	9	79	0.95	0.12	0.001	**A_3 R2 F4 C1**	R2 F2 C1 (substance e: 1.05)
	Substance d	20		0.98				
	Substance e	50		1.05				

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For any ideas/comments/solutions:

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