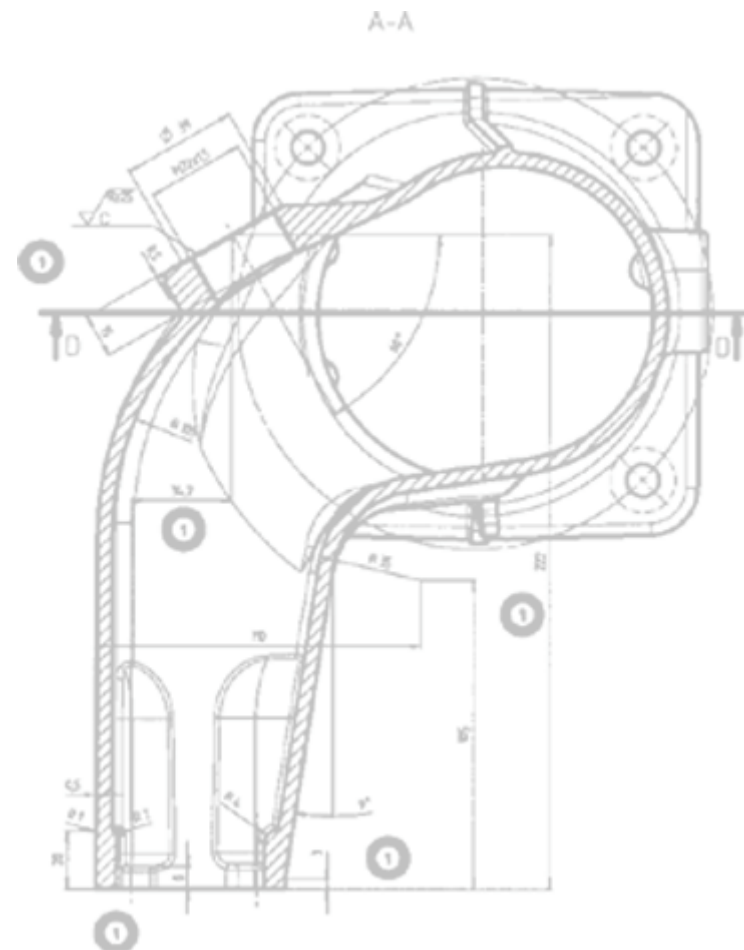


EUROMOT - Concerns and questions

Rome, 2-3 April 2007

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Actual status of work - Stationary Engines (1)

- Euromot proposed general aspects for the review of the Annexes of the Gothenburg Protocol ➡ Marseille, November 2006
- Finland proposed ELVs for the review of Annex V ➡ Marseille, November 2006 ➡ ELVs have to be corrected
- EGTEI has sent a word file with proposals for amendments of the Protocol's annexes ➡ Euromot supported with general comments ➡ December 2006

Actual status of work - Stationary Engines (2)

- Actual proposal for review of ELVs for stationary engines: →

Source	Technology	NO _x mg/m ³ (all in 15% O ₂)	
		Special area (e.g. city)	Rural
PROPOSAL for revised values for diesel engines in Gothenburg Protocol Annex V Table 4	Liquid fired diesel engine < 400 mm bore	750	1600
	Liquid fired diesel engine ≥ 400 mm bore	750	1850
	Spark ignited 4-stroke gas engine High Pressure Gas diesel	190	190
	Dual fuel engine gas mode	750	1600
	Dual fuel engine liquid mode	400	400

- Corrected ELVs for stationary engines (with all engine main types and modes):

- based on cost-effective, environmental quality needs aspects
- emission bonuses should be granted for power plants with high efficiency, in mechanical drive applications and/or engines fired with biofuels

Technology	NO _x mg/Nm ³ (at 15% O ₂)	
	Special area (e.g. city)	Rural area
Oil fired diesel engine (CI)		
< 400 mm bore	750	1600
>= 400 mm bore	750	1850
Spark Ignition 4-stroke natural gas lean burn engine	190	190
High Pressure gas diesel engine natural gas mode	750	1600
Low pressure Dual fuel engine - natural gas mode	400	400
Dual fuel engine - liquid mode	750	1850

Questions/Concerns from Stationary Engines' Manufacturers

- What is the status of the word file that was sent by EGTEI? ✓
- When will it be discussed in the WGSR? April 2007? ✓
- Will there be a table with new ELVs? ✓
- If so where and when will it be published? ✓
- Are there open question from EGTEI or other parties relating to the Finnish proposal and/or Euromot proposal (relating to Annex V)? → ELVs could be sent for reviewing to whole EGTEI group for discussions before sending ELVs to the WGSR

Recommendations of Stationary Engines' Manufacturers

- An unilateral Protocol like the Gothenburg Protocol should preferably take into account local conditions and be cost effective via an environmental quality need driven approach
- This has been for example done in the update proposal for the emission limits (see slide 3) by dividing the surrounding into "special areas (e.g. city)" and "rural areas"
- Competing technologies such as boilers and single unit gas turbines are regulated only for sizes > 50 MWth while engines are strictly regulated starting already from very small plant units 3 .. 5 MWth depending on engine type. This is distorting the competition between different prime mover alternatives. Different prime movers should be fairly treated, which is not the case with the current NOx-limits in Annex V of the Protocol."