Reducing noise pollution from cars
Noise = Health
Relevance of cars for environmental noise

1. Road traffic noise is very significant: 20% of EU population is exposed to unhealthy levels.
2. Road traffic noise is dominated by cars (only at night along large trunk roads significant contribution from Heavy Duty Vehicles)
Noise abatement

Health ☑ Laws ☑ Levels of protection

Conventional way: barriers and insulation.

High growth of traffic ☑ uncontrollable rise of cost

All studies: source abatement is most effective and most cost efficient:
Source abatement

1. Lower noise cars and trucks (ECE/EU regulations)
2. Lower noise tyres (ECE/EU regulations)
3. Lower noise road surfaces (national and local programs)

1. Cars: We have celebrated the 30th anniversary of regulation for cars and we still wait for the first results!!
2. Tyres: already ineffective regulation is coming into force
3. Road surfaces: big progress in several EU countries
Noise production of passenger cars in ’74 and in ’99.

Over last 30 years no effect, even slight increase at medium speed.
No result for light vehicles: why?

Trends:
- More diesel engines
- Wider tyres
- Increasing share of vans

And non-effective type testing due to:
- Liberal measuring methods;
- Liberal limits:
  - not technology forcing, not even technology following
- Extensive possibilities for applying allowances
Test results light vehicles

Distribution of noise values
OICA test program 2004 on small vehicles in EU, USA and Japan
(173 passenger cars and delivery vans)

Pure test results according to EC/70/157 (dB(A))

% of tested vehicles

limit for passenger cars

January 20, 2005
Test result for tyres

source abatement: let's speed it up
Expectations for near future are low

1. TYRES:
   • Introduction of the already liberal tyre limits completed in 2011!!
   • Foreseen tightening: insignificant

2. VEHICLES:
   • No intention to bring present limits on state-of-the-art level
   • Present development of vehicle approval procedure has programmed stand-still of another 15 years
Political factors

Type approval originally serves two objectives:

1. Harmonization of product specifications to improve international trade

2. Improving the environment by source reduction

Present situation:
1. Harmonization is the key issue resulting in non-stringent requirements that everybody can easily fulfil;
2. No check on environmental objectives
Result:

Progress is much too weak

Society is paying the costs
Sustainable Road Transport

**NL Presidency paper** debated in the Council (ENV)
October 14, 2004

Urgency of environmental health problems recognized
Decisions needed on additional measures
Discussion Council Environment
NL Presidency conclusions on noise:

Urgency: 100 mln affected by serious nuisance (EU 15)
The need for ASAP progress: broadly supported
Broad consensus for tightening limits and abolishing allowances
ASAP a new method for testing vehicles

DECISION PROCESS: INVOLVE ENVIRONMENT COUNCIL
(as is the case with gaseous emissions)
New method for type approval road vehicles

OK: new start
OK: incentive for low noise tyres,

But
1. a method is as good as the real limits,
2. a method is as good as the enforcement in the aftermarket (tyres/exhaust)
3. inclusion of powertrain/exhaust noise needed: (vehicle passage as single event)
Intended policy Commissioner Verheugen (Ent)

Make life easier for industry by:
• rely on UN/ECE regulation
• withdraw EU-Directives

So:
European Parliament: not involved anymore
Council: not involved anymore
The end
Thank you for your attention