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FOLKETINGET



**Trafikudvalget**

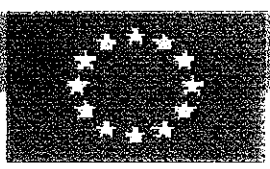
**Til:** Udvalgets medlemmer og stedfortrædere  
**Dato:** 15. januar 2010

**Meddelelse om materiale.**

Vedlagt fremsendes materiale om begrænsning af emissioner fra transportsektoren, udleveret af John Wester ved foretrædet den 14. januar 2010.

Med venlig hilsen

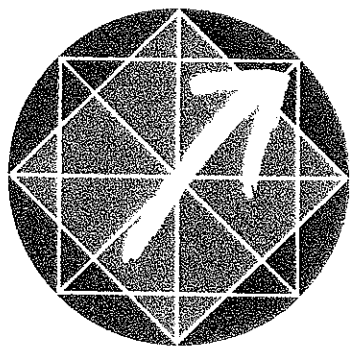
Aicha Esdam,  
udvalgsassistent



# **THE FIFTH FRAMEWORK PROGRAMME**

**The Fifth Framework Programme focuses on Community Activities in the field of research, technological development and demonstration (RTD) for the period 1998 to 2002**

## **WORK PROGRAMME**



# **COMPETITIVE and SUSTAINABLE GROWTH**

**TRAFIC & ENVIRONMENT  
EUROPEAN INFRASTRUCTURE  
CITY-VENTILATION**

**THE FIFTH FRAMEWORK PROGRAMME**  
The 5 framework programme focuses on  
**community activities in the field of research,  
technological development and demonstration  
(RTD) for the period 1998 to 2002**

**Clinton-National Geographic**

The President of United States Bill Clinton, made it clear in a speech on the National Geographic Channel, that American scientists now declare there is no scientific proof or documentation that CO2 has any impact on the environment and also the discovery that the so-called "holes" in the ozone layer now are closing up again.

**City Ventilation & Satelitetools**

The good experience form U.S.A. and parts of Europe should be incorporated in the European Infrastructure when it comes to traficregulations.

Unnecessary stop in and out the city roads, ring-roads etc. must be eliminated. Local politician's must be responsible for the city-environment and that the traffic is moving, satellites can be used as a control and steering system for computers. In any city improvement of the environment and better ventilation of traffic can be made and without big investments.

**Priority-Roads/ Ring Roads**

In a number of European city's no coordination of traffic can be found, and many unnecessary stops of thousands of tons of traffic, again and again, will be the daily picture and very bad for the environment. The very bad coordination and non-synchronized traffic lights has a direct impact on emissions where un-burned particles from Diesel & Petrol engines simply creates smog in the city environment – the stop start situations will increase this problem by several hundred %.

The management will be as much as possible to keep a curtain march speed trough the city ring-roads etc. where emissions nearly cant be measured. Also in various city's people will be living near the roads and the noise level comming from repeated stop/start traffic can be reduced to a much higher extend as another improvement of better local environment. The local technicians in the community are responsible that such changes here will be made.

**Open up-traffic lights**

**Pollution reduced by minimum 50%**

In Europe conversion of traffic lights into establishment of "roundabouts" is the important creation of better ventilation and better environment also allowed turning to "the right" by red light is a more flexible and secure traffic regulation, here the unnecessary stop situation and waiting time, creating pollution and emission of un-burned particles can be eliminated.

General allowed turning to the right can be practised with success, the security for other traffic will be increased even for bicycles, at the same time the right lane will be available for ambulances, police when an important and quick turn-out situation occur. The ambulance will be able to continue without being blocked cause waiting traffic.

2.

With the open right lane and the individual traffic-unit - the time on the road will be less between destination A & B meaning less burning of fuel and less consumption and less release of unburned particles.

The positive experience from U.S.A and parts of Europe - even former eastern Germany, must be taken into practise. The open traffic lights and allowed "Right Turn" is a success, now followed with converted "Yellow light" after 22.00 PM hours in U.S.A. states to "cut down" waiting time and pollution. The yellow light makes it possible to pass the traffic light and continue crossing.

### **Cars/Collective traffic**

The environmental status of the Car seems to be really improved over the last decade to an extent where the individual car as a unit becomes cleaner and cleaner, within a few years the car consider to be the cleanest transport with less damage to the environment. On the opposite very bad problems follows the build up of collective traffic like buses and trains where the emissions of NO<sub>x</sub> nitrogen in the environment creates lung cancer. By check up one (1) bus estimated pollutes more than 90 private cars.

Professor Herman Autrup, University Of Aarhus, Denmark, directly claim a reduction and a complete stop of the collective traffic for environmental reasons, after closely studies of the problems in this area.

### **Light distillates**

The light distillates and the burning of Diesel Fuel or Gasoil in the high number of busses and trains creates a chemical problem with the emissions of NO<sub>x</sub> the problems here - are much more serious than the claimed CO<sub>2</sub> and much more serious than discovered in the first round.

### **Injection System/Catalysed**

SAAB presentation in London made quite an impression. The Swedish Car-manufactory SAAB introduced a new injector and engine model. The demonstration set up in London showed that the intake air from the city was more polluted, than the emissions released from the car, the test was completed when a test person for some time was inhaling the emissions without any inconvenience. Also the development of the catalysed system is a beginning in the right direction however the upgrading of the catalysed system is still under development and more continues research being done.

Commercially all car-manufactures are interested in updating environmentally properties on each car it is convincing being a good investment and a better sales argument.

### **Petrol/Gasoline**

In the refineries the crude oil passes cracking processes to achieve a higher volume of Petrol per tons of crude oil however trough refinery processes and by additives the Petrol or Gasoline quality is environmentally better today also the fact that the unleaded Petrol now is introduced on the European market is an improver to better environment.

3.

**Environmental experience**

Specially in California, Santa Ana Valley as an example, the problems with "smog" from the leaded-Gasoline in 1960-1975 was a serious problem the visibility in the Valley was = 0. Today where the increased number of car-units passes the Valley, visibility conditions are excellent for two reasons, the development of unleaded Gasoline and the catalysator.

**Higher Speed – Environmental advance.**

The very limited inconvenience to the environment in Germany compared to the very high volume of traffic-units, relates to the higher march-speed and the high speed on motorways where the speed per unit average from 100 to more than 200 km per hrs the emissions and the number of unburned particles in the environment is difficult to measure and extremely low. These environmental problems will mostly occur in the city's and again from the stop/start situations.

In other words the basic ideas with establishment of the motorways as a secured route-net and the allowed higher speed, is actually better from the environmental point of View.

**RESUME' IMPROVEMENT OF LIFE QUALITY IN EUROPE**

1. **Reduction of "stop start" situations in connection to traffic-lights in urban regions around city ring roads priority roads etc. and establishment of more round-about,s" !**
2. **Reduction of "waiting time" allowed "right turn" at red light (or by permanent "green arrow") at the same time higher security for bi-cycles.**
3. **Overall cut-down in "driving – time" from destination A to B reduced consumption of fuel and pollution.**
4. **Better synchronised traffic lights "green waves" better ventilation of traffic abandoned unnecessary stop of tons of traffic.**
5. **Yellow traffic lights at late hours.**
6. **Better traffic release from City centres better signs to show the way out!**
7. **Environmental responsibility in any community management and among politicians and technicians concerning better ventilation of traffic.**

cc. English version  
headlines

J.Wester, Petro Chem Engineer  
Secretariat  
London Environmental Group

EU Implementation of flexibility in Germany. Elimination of stop/start situations

Reductions of unnecessary waiting time, Fuel consumption & CO2

Reduction of Fuel consumption.

**Legal right turn at red traffic light.**



## **Til højre for rødt**

■ Ikke alt i det tidligere DDR har vist sig uanvendeligt. F.eks. vil det genforenede Tyskland overtage en lærdselsregel, som tillader, at man drejer til højre, selvom der er rødt lys. Det var i DDR tilkendegivet ved et lille blik-skilt med en grøn pil fastgjort til lyskurven. Den nye «grønne pil», som ventes indført i hele Tyskland til næste år, får formentlig en mere højteknologisk udformning, men meningen er den samme. Det tyske trafikministerium har undersøgt fordele og ulemper ved systemet og fundet, at trafikken glider lettere og at uheldsrisikoen er minimal. I DDR indtraf kun en promise af alle uheld i forbindelse med højresving for rødt lys. Den frie højredrejning er i øvrigt helt uden ideologisk indhold. I USA praktiseres samme regel uden problemer.

## AKTUELT TESTKØRSEL – FORURENINGS SITUATIONER.

Århus, Indre Ringvej. Distance 8 km.  
I alt 17 lyskryds. Ingen synkronisering.

Århus, Ydre Ringvej.  
Retning: Hasselager-Viby-Åbyhøj-Hasle-Randerskryds-Grenåkryds-Grenåvej.  
Distance 17 km.  
I alt 25 lyskryds. Ingen synkronisering.

Trafik tæthed: Dagtimerne  
Estimeret vægt/køretøjer: 50-100.000 kilo.  
Gentagne stop/start situationer.

Århus, Indre Ringvej	
1	pass
2	40 sec.
3	40 sec.
4	pass
5	pass
6	40 sec.
7	40 sec.
8	40 sec.
9	pass
10	40 sec.
11	pass
12	40 sec.
13	40 sec.
14	pass
15	50 sec.
16	40 sec.
17	40 sec.

Århus, Ydre Ringvej	
1	30 sec.
2	40 sec.
3	pass
4	pass
5	30 sec.
6	20 sec.
7	40 sec.
8	pass
9	30 sec.
10	pass
11	30 sec.
12	pass
13	50 sec.
14	pass
15	60 sec.
16	pass
17	50 sec.
18	40 sec.
19	40 sec.
20	pass
21	40 sec.
22	pass
23	pass
24	50 sec.
25	pass

\* Ventetider ved rødt lys anført i sekunder.



Sammenligning af miljøbelastning (Fuel consumption, miles per gallon (mpg) og CO<sub>2</sub>)

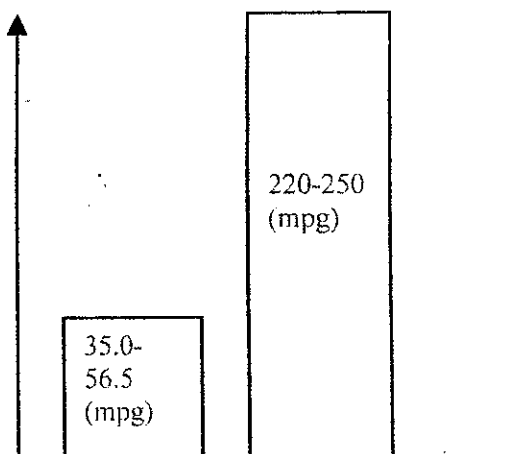
ved "GREEN WAVES" og "STOP-START" situationer.

Ringvejssystemer Aarhus området.

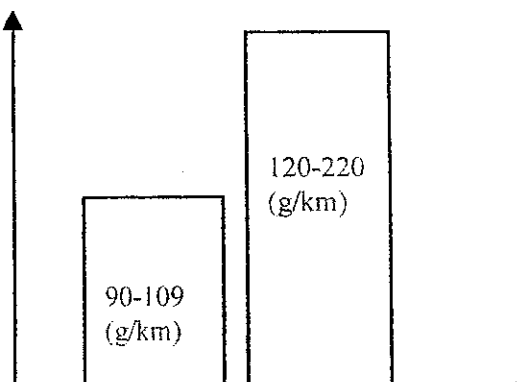
Test distance Ydre Ringvej – 18 km. Testdistance Indre Ringvej – 8km.

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FUEL CONSUMPTION (mpg)



CO<sub>2</sub>(g/km)



24 Januar 2007: Vedtaget europæiske målsætning vil være at CO<sub>2</sub> er på max niveau på 120g/km.

# MORNING AVISEN Jyllands-Posten

Mandag den 22. november 1999 · Uge 47 \*\*\*

Danmarks internationale avis

## Stop for rødt lys koster milliarder

AF LARS FROM

Bilisterne kan spare flere hundrede millioner kroner om året - og miljøet få det langt bedre - hvis lyskrydsene i byerne enten styres via computer - eller erstattes af rundkørsler, vurderer Vejdirektoratet.

Ifølge nye beregninger fra Vejdirektoratet koster stop for rødt lys hvert år bilisterne næsten tre milliarder kroner i tab af tid og spildt

benzin - ligesom de mange stop og starter er årsag til hovedparten af forureningen fra bilerne i byerne.

»Vores erfaringer viser, at man kan spare 10-20 procent alene ved at lave computerberegneede grønne bolger,« forklarer civilingeniør Steen Lauritzen fra Vejdirektoratet. Og han foreslår endnu større besparelser, hvis man benytter mere avanceret computerteknologi.

### Spild af benzin

Ifølge Steen Lauritzens beregninger bruger bilisterne hvert år 130

millioner liter benzin på at stoppe for rødt lys - hvilket koster dem omkring en milliard kroner. Dertil kommer tab af tid, siltage på bilerne - og en kraftig belastning af miljøet. Og så er hverken siltage på bilerne eller belastningen af miljøet med i regnestykket.

I London har tænketanken London Environmental Group for nylig afleveret et forslag til EU-Kommissionen, der peger i samme retning. En række højt placerede personer fra Londons erhvervsliv og universiteter foreslår blandt andet, at der

etableres langt flere rundkørsler, ligesom de mener, det bør være tilladt at dreje til højre ved rødt lys - som det er tilfældet i f. eks. USA.

EU-Kommissionen har modtaget forslaget positivt, og FDM i Danmark bakker fuldt op. I Vejdirektoratet er man positive over for flere rundkørsler, men skeptiske over for ideen om at lade bilisterne køre over for rødt lys. Til gengæld lyder alt på, at flere rundkørsler også vil få antallet af trafikdrabte til at falde markant.

1. SEKTION, SIDE 2

# Rundkørsler redder liv

Rundkørsler gavner både miljøet og øger trafikikkerheden.

## TRAFIK

AF LARS FROM

■ Antallet af dræbte og tilskadekomne i vejkræds falder med 80-90 procent, når et vejkræds bliver erstattet med en rundkørsel, viser tal fra Vejdirektoratet.

Men ifølge nye beregninger, er der også både besparelser og store miljøgevinster at hente ved at bygge

flere rundkørsler. Rundkørsler får nemlig trafikken til at glide langt bedre end i lyskræds - hvilket betyder mindre spild af tid og benzin, mindre forurening og mindre slid på bilerne.

I dag findes mellem 300 og 500 rundkørsler i Danmark. Men det burde være langt flere, mener civilingeniør Anders Møller Gaardbo fra Vejdirektoratet.

»Rundkørsler er en utrolig effektiv måde at forbedre ulykkelsesbelastningen.

Derfor er der meget, der taler for at anvende rundkørsler i langt større omfang end i dag.»

Ifølge Vejdirektoratets undersøgelser falder antallet af tilskadekomne i gennemsnit med 85 procent, når der bliver etableret en rundkørsel i et farligt vejkræds. Faldet er størst på landet, hvor 90 pct. færre kommer til skade, mens det er på 64 pct. i byerne.

I EU-kommissionen har et forslag fra tænketanken London Environmental Group vakt interesse. Lon-

don Environmental Group, der består af en række fremtrædende folk fra erhvervs- og universiteter, har foreslået kommissionen at etablere flere rundkørsler i Europa samt at tillade bilerne at svinge til højre for rødt lys - først og fremmest for at sikre et bedre miljø, fortæller den danske direktør John Wester, der er medlem af gruppen:

»Alle undersøgelser viser, at nedbrænding og opstart er skyld i hovedparten af forureningen fra bilerne i byerne. Derfor handler vo-

res forslag først og fremmest om at få trafikket til at glide bedre,« siger John Wester.

Og nye tal fra Vejdirektoratet bekræfter, at der er store gevinster at hente. Civilingeniør Steen Lauritzen fra Vejdirektoratet har beregnet, hvor meget de mange stop for rødt lys koster bilisterne og samfundet:

»Mine beregninger viser, at der bliver brændt 130 millioner liter benzin af i forbindelse med stop for rødt lys, fordi bilerne skal holde med motoren i tom-

gang og bagefter accelerere. Det svarer til en udgift på omkring en milliard kroner.»

Beregningerne, der hverken medregner situationen på bilerne eller belastningen af miljøet, viser, at der er et meget stort potentiale for at opnå en væsentlig miljøgevinst i byerne,« forklarer Steen Lauritzen. Alene en computerstyring af lyskrædsene kunne spare bilisterne for 10-20 procent af milliardudgiften til de mange stop, siger han.