## Consultation "Reducing CO<sub>2</sub> emission from cars"

### Additional written contribution The Netherlands

### Certainty of environmental outcome

In its previous written contribution (submitted to DG ENVI on July 2, 2007) The Netherlands stated that the legislative instrument should, in its design, guarantee that it will bring 130 g/km by 2012. The Netherlands observed, in and around the public hearing on July 11, 2007, that a utility based system is one of the serious options for a legislative instrument. The car industry expressed its preference for weight to be the utility parameter.

Utility based systems, in general, bare the risk of not bringing 130 g/km, unless special attention is paid to its design. The uncertainty arises from the following two points:

### 1. Autonomous increase utility parameter will result in average above 130 g/km

There is a clear market trend towards larger cars. This means any utility parameter, whether it's weight, footprint, power or ..., will increase between 2005/6 and 2012. In this respect in the Impact Assessment and the Communication  $CO_2$  and

Cars, a 1.5% annual increase of weight has been assumed. If the construction of the utility function would be based on 2005/6 data and no correction were to be applied for the

2005/6 data and no correction were to be applied for the autonomous utility increase, the 2012 average  $CO_2$  emission will be significantly higher than 130 g/km

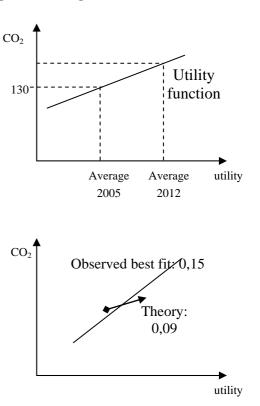
### 2. Perverse effects on utility reduction

Whatever the slope of the utility function, it will always discourage reduction of the utility parameter chosen. In the best case it only frustrates a reduction of the utility parameter, as it not (fully) rewards its  $CO_2$  reduction. In the worst case, it could even have a perverse effect in the sense that increase of the utility parameter allows to meet the target. This is illustrated in the graph using weight as the utility parameter.

If the slope of the utility function is based on a best fit of the distribution of cars currently on the market, the coefficient

would be 0.15 g/km/kg, where as adding 1 kg weight to a car only results in 0.09 g/km increase in  $CO_2$  emissions (coefficient 0.09 g/km/kg). Car manufacturers could bring cars that are above the utility function under the function simply by adding weight.

This is an unwanted situation as reducing utility (weight, footprint, etc.) is, and should be, an important and cost-effective measure for  $CO_2$  reduction.



At the moment The Netherlands sees two options to bring more certainty of environmental outcome into utility-based systems.

# Suggestion 1: shift and rotate the utility function

The utility function should be based on the forecasted utility for 2012

AND

The slope of the utility function should be as shallow as possible to stimulate utility reduction and to prevent any perverse effects that an increase of utility might be used to meet the legislation.

In case of weight being the utility parameter, the slope should be well below 0.09 g/km/kg in order to reward and stimulate weight reduction as a measure to reduce  $CO_2$  emissions from cars.

# Suggestion 2: fixed targets per manufacturer

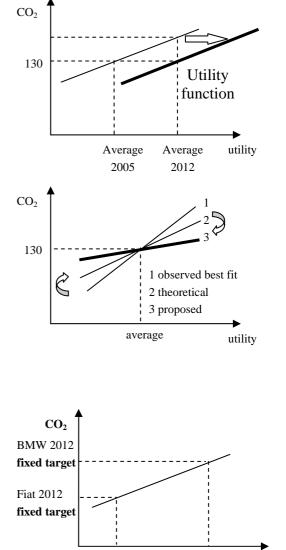
For each manufacturer, determine the 2012 average  $CO_2$ limit as a fixed number, based on the average utility of each manufacturer in 2005/6.

This proposal ensures certainty of meeting the target even with increase of utility, as fixing the 2012 target based on 2005 utility implies manufacturers should compensate for market trend of utility increase by adding  $CO_2$  reduction measures. This system would fully reward utility reduction applied by a manufacturer in the period 2005/6 to 2012.

The only uncertainty in this system is a possible change of market shares. If a manufactures gains market share over a manufacturer with a lower 2012 target, the overall target of 130 g/km will not be met. But observing that one of the major requirements is that the system should be "as competition neutral as possible" and observing that ACEA managed to find agreement over a utility function, the risk of substantial changes in market shares seems to be limited.

#### Note:

These additional written comments don't necessarily imply that The Netherlands considers a utility based system to be the preferred option.



Fiat 2005

Average

**BMW 2005** 

Average

utility