COMMISSION OF THE EUROPEAN COMMUNITIES



Brussels, 9.12.2002 COM(2002) 693 final

COMMUNICATION FROM THE COMMISSION TO THE COUNCIL AND THE EUROPEAN PARLIAMENT

Implementing the Community Strategy to Reduce CO_2 Emissions from Cars: Third annual report on the effectiveness of the strategy (Reporting year 2001)

{SEC(2002) 1338}

I. INTRODUCTION

The Commission is in the full process of implementing the Community's strategy to reduce CO₂ emissions from passenger cars and improve fuel economy^{1,2}. The strategy is based on the following three pillars³:

- (1) Commitments of the automobile industry on fuel economy improvements, aiming at achieving an average specific⁴ CO₂ emission figure for new passenger cars of 140 g CO₂/km by 2008/9.
- (2) Fuel-economy labelling of cars⁵ which aims at ensuring that information relating to the fuel economy and CO₂ emissions of new passenger cars offered for sale or lease in the Community is made available to consumers, in order to enable consumers to make an informed choice.
- (3) The promotion of car fuel efficiency by fiscal measures.

The annual Commission report on the effectiveness of the strategy meets as well the reporting requests expressed in Article 9 of Decision 1753/2000/EC⁶. In addition, this third report, for the reporting period 1995 to 2001, addresses Article 7 of the same Decision which requires to report, by 31 December 2002 at the latest, on the operation of the monitoring scheme established under the Decision.

The Commission believes that such a consolidated reporting will allow all interested parties to follow the implementation of the Community strategy in the most efficient way⁷.

II. BRIEF OVERALL ASSESSMENT

Overall in the Community, considering all measures, including those taken at national level, the average specific CO_2 emission from passenger cars decreased in the period 1995 to 2001 from 186 g CO_2 /km to about 167 -170 g CO_2 /km 8 . The Community's strategy to reduce CO_2 emissions from passenger cars and improve fuel economy aims at achieving an average specific CO_2 emission figure for new passenger cars registered in the EU of 120 g CO_2 /km by 2005, and by 2010 at the latest. It is quite unlikely that the Community target of

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¹ COM (95)689 final

Council conclusions of 25.6.1996

These pillars are supplemented by research activities

The term "specific" is taken from the title of Decision 1753/2000/EC and is used in order to indicate that the CO₂ emissions are expressed in grams per kilometre

Directive 1999/94/EC relating to the availability of consumer information on fuel economy and CO₂ emissions in respect of the marketing of new passenger cars

Decision 1753./2000/EC of the European Parliament and of the Council establishing a scheme to monitor the average specific emissions of CO₂ from new passenger cars

Information concerning the Community strategy can also be found on the web site: http://europa.eu.int/comm/environment/co2/co2_home.htm

The range takes in to account all known potential uncertainties. The lower value is based on data delivered by the associations, including all corrections carried out by the associations, the upper value corresponds data delivered by Member States, without any correction. The upper value will be corrected as soon as an agreement on the appropriate correction factor will have been concluded.

120 g CO₂/km will be reached as early as 2005. However, it is realistic to hope that the target would be met by 2010 if the necessary measures are taken and all efforts are made.

III. PROGRESS MADE BY THE CAR INDUSTRY WITH REGARD TO THEIR RESPECTIVE COMMITMENT.

Commitments have been made by the European (European Automobile Manufacturers Association – ACEA⁹)¹⁰ the Japanese (Japan Automobile Manufacturers Association - JAMA¹¹) and Korean (Korea Automobile Manufacturers Association - KAMA¹²) automobile associations¹³. Table 1 shows the detailed list of the most important manufactures/affiliations/brands that have been allocated to the respective association for the monitoring figures shown in this report.

ACEA	ALFA ROMEO, ALPINA, ASTON MARTIN, AUDI, BAYERISCHE MOTOREN WERKE, BENTLEY, CADILLAC, CHEVROLET, CHRYSLER, CITROEN, DAIMLER, FERRARI., FIAT, FORD, GENERAL MOTORS JAGUAR, JEEP, LAMBORGHINI, LANCIA-AUTOBIANCHI, LAND-ROVER, MASERATI, MATRA, MCC (SMART), MERCEDES-BENZ, MG*, MINI, OPEL, PEUGEOT, PORSCHE, RENAULT, ROLLS-ROYCE, ROVER*, SAAB, SEAT, SKODA, VAUXHALL, VOLKSWAGEN, VOLVO
JAMA	DAIHATSU, HONDA, ISUZU, LEXUS, MAZDA, MITSUBISHI, NISSAN, SUBARU, SUZUKI, TOYOTA
KAMA	DAEWOO, HYUNDAI, KIA, SSANGYONG

^{*} Please note that although Rover, including MG, is no longer a formal member of ACEA, it was incorporated within ACEA figures for 2001

Table 1: List of most important manufacturers/affiliations/brands which have been allocated to the respective association for the monitoring figures shown in this report.

All three commitments constitute equivalent efforts, having the following main features:

(1) The CO₂ emission objective: All commitments contain the same quantified CO₂ emission objective for the specific average of new passenger cars sold in the European Union, i.e. 140 g CO₂/km (to be achieved by 2008 by ACEA and 2009 by JAMA and KAMA).

Japanese car manufacturers in JAMA: Daihatsu, Fuji Heavy Industries (Subaru), Honda, Isuzu, Mazda, Nissan, Mitsubishi, Suzuki, Toyota

⁹ European car manufacturers in ACEA: BMW AG, DaimlerChrysler AG, Fiat S.p.A., Ford of Europe Inc., General Motors Europe AG, Dr. Ing. H.c.F. Porsche AG, PSA Peugeot Citroën, Renault SA, Volkswagen AG

¹⁰ COM (98) 495 final

Korean car manufacturers in KAMA: Daewoo Motor Co. Ltd., Hyundai Motor Company, Kia Motors Corporation

¹³ COM (99) 446 final

(2) <u>Means of achievement</u>: ACEA, JAMA and KAMA commit themselves to achieving the CO₂ target mainly by technological developments and related market changes.

In addition, "estimated target ranges" are set for $2003/2004^{14}$ for the average new car CO_2 emissions. Finally, all associations have committed themselves to review in 2003 (ACEA and JAMA) or 2004 (KAMA) the potential for additional CO_2 reductions, "with a view to moving further towards the Community objective of $120 \, g \, CO_2/km$ by 2012".

The commitments are subjected to a thorough and transparent monitoring scheme¹⁵. For this purpose every year "Joint Reports", one with each of the associations, are drafted and agreed between the parties. They are published in parallel to this Communication as SEC paper (see Annex). Since the official EU CO₂ monitoring system was not fully operational in 2002¹⁶, the respective associations have, as before, provided the underlying data. The associations' data sources are considered as reliable.

The main findings for the reporting period 1995 to 2001 are:

- ➤ In the last year all associations reduced the average specific CO₂ emissions of their cars sold on the EU market (ACEA by about 2.5 %, JAMA by about 2.2 % and KAMA by about 2.6 %¹⁷). The fuel efficiency improvements for diesel passenger cars are significantly better compared to gasoline vehicles (see Table 2).
- ACEA shows good progress while JAMA's is satisfactory. Both can be considered to be on track (see Figure 1). ACEA reached already in the reporting period 2000 the intermediate target range envisaged for 2003, and is now at the very low end of this range. If JAMA can, on average, continue with the reduction rate achieved in year 2001 it would meet at least the 2003 intermediate target of 175 g/km.
- ➤ KAMA's progress is unsatisfactory, although in 2001 it achieved the highest reduction rate so far. There is a real risk that KAMA will not meet its 2004 intermediate target range. This could put the whole approach in danger¹⁸. KAMA blames the lack of progress

 14 For ACEA 165 - 170 g CO $_2$ /km in 2003; for JAMA 165 - 175 g CO $_2$ /km in 2003; for KAMA 165 - 170 g CO $_2$ /km in 2004

All percentage figures based on the data as corrected by the associations. The final figures will be slightly lower

The transparency of the figures shown for the year 2001 suffer somewhat due to the fact that the associations and the Commission could not agree yet on the "correction factor" to be used for the recent change in test procedures. The Commitments specify that new car CO₂ emissions will be measured according to Directive 93/116/EC, which is the basis on which future targets were established, and the basis of historical monitoring data in this report. Since the establishment of the Commitments, the mandatory type approval method of measuring CO₂ emissions has been revised by Directive 99/100/EC. One of the principle changes (being introduced over the period 2000 to 2003 for M1 vehicles) relates to the drive cycle - the deletion of the initial 40 seconds of unmeasured engine idling just prior to the test. As a rule, such a change of test procedure increases the measured value of CO₂ emissions. A correction factor therefore needs to be applied to the measured CO₂ emissions of such vehicles to broadly bring them into line with the 93/116/EC procedure

Article 8 of Decision 1753/2000/EC requires that the monitoring system from the year 2003 onward shall serve as the basis for the voluntary obligations agreed between the Commission and the automobile industry

It should be recalled that the Council invited the Commission "...to present immediately proposals, including legislative proposals, for consideration, should it become clear, on the basis of the monitoring and after consultation with the associations, that one or more of the associations would not honour the commitments made" (Council conclusions of October 1999)

mainly on the economic situation of the Korean car industry, including its restructuring. They also claim that initially their technology was much behind so it will take longer to reach the higher reduction rates. However, in the last year at least part of its industry was showing good profitability, the Korean economy is recovering rapidly and the restructuring of the industry is progressing into a more stable situation. Therefore, the Commission expects that KAMA will catch up in the coming years. KAMA has reconfirmed its commitment to do so.

In order to meet the final target of 140 g/km additional efforts are necessary as the average annual reduction rate of all three associations needs to be increased. On average the reduction rate must be around 2 %, or about 4 g/km per year. Over the reporting period 1995 to 2001, ACEA has achieved on average about 1,9 % per year, JAMA 1.5 % per year and KAMA 0.9% per year. However, it was anticipated from the beginning that the average reduction rates would be higher in the later years.

On April 30th, 2002 ACEA informed the Commission that the manufacturer Rover - which was initially covered by the Commitment as part of BMW- is no longer an ACEA member. In 1995, the reference year of the Commitment, Rover sold about 300 000 passenger cars in the EU; sales has decreased over time and reached about 130 000 units in 2001. Since it is the first time that a change in membership occurred after conclusion of the commitments, the Commission services is studying the case very carefully from a legal and competitive point of view. The Commission will make every effort to ensure that changes in membership will neither have negative repercussions on the integrity of the Commitments nor on the level playing field. The figures given in this Communication still include Rover.

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All percentage figures based on the data as corrected by the associations. The final figures will be slightly lower

	1995	1996	1997	1998	1999	2000	2001	Change 95/01
ACEA						(3)	(4)	(4)
	CO_2							
	(g/km)	(%)						
Gasoline	188	186	183	182	180	177	172/174	-8.5/-7.4
Diesel	176	174	172	167	161	157	153/154	-13.1/-12.5
All fuels (1)	185	183	180	178	174	169	164/166	-11.4/-10.3
JAMA	1995	1996	1997	1998	1999	2000 (3)	2001 (4)	Change 95/01 (4)
	CO ₂ (g/km)	(%)						
Gasoline	191	187	184	184	181	177	175	-8.4
Diesel	239	235	222	221	221	213	200	-16.3
All fuels (1)	196	193	188	189	187	183	179	-8.7
	1995	1996	1997	1998	1999	2000	2001	Change 95/01
KAMA						(3)	(4)	(4)
	CO_2							
	(g/km)	(%)						
Gasoline	195	197	201	198	189	185	179/180	-8.2/-7.7
Diesel	309	274	246	248	253	245	234/236	-24.3/-23.6
All fuels (1)	197	199	203	202	194	191	186/188	-5.6/-4.6
	1995	1996	1997	1998	1999	2000	2001	Change 95/01
EU-15 (2)						(3)	(4)	(4)
	CO_2							
	(g/km)	(%)						
Gasoline	189	186	184	182	180	178	173/174	-8.3/-7.8
Diesel	179	178	175	171	165	163	156/157	-12.7/-12.2
All fuels (1)	186	184	182	180	176	172	167/168	-10.4/-9.9

Table 2: Average specific CO₂ emissions of new passenger cars per fuel type, for each association and the European Union

⁽¹⁾ Petrol and diesel-fuelled vehicles only, other fuels and statistically not identified vehicles are not expected to affect these averages significantly.

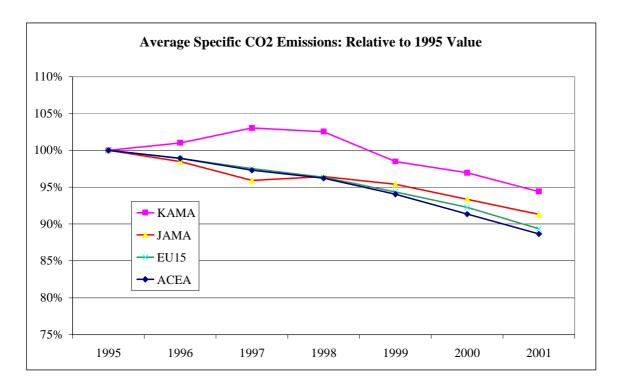
⁽²⁾ New passenger cars put on the EU market by manufacturers not covered by the Commitments would not influence the EU average significantly.

⁽³⁾ The figures are not corrected for the change in driving cycle.

⁽⁴⁾ The first figure shows the data as delivered by the association, the second figure is uncorrected²⁰. Percentages are calculated from CO_2 integer figures.

In December 1999 the Commission launched a study to TNO to get independent expert advice on the correction factor. ACEA and JAMA provided test data (which, however, are not representative for the fleets the associations sell on the EU market because the test data delivered came all from large vehicles which show a higher dependency on the test cycle change) and TNO added its own data. Based on all these data, and taking into account comments from the association on data representivity, TNO calculated the correction factor, applying standard statistical methods. However, the associations do not agree to the calculated correction factor. As a consequence, no agreed correction factor could be applied to the year 2000 and year 2001 figures. Estimates for the effect of the cycle change vary between 0.7 % (Commission estimate based on independent expertise) and 1.2 % (ACEA). However, the "correction factor" actually applied cannot be exactly specified because the actual fraction of passenger cars tested under the new cycle is not known. For the year 2001 ACEA and KAMA delivered corrected figures. ACEA explained it assumes for 2001 that at least 90 % of all vehicles below 2500 kg were tested in accordance with the new cycle. It calculated that 90% of a correction factor of 1.2 is equal to 1 % and instructed AAA to reduce 2001 data collected for M1 vehicles up to 2500 kg by an average 1%. In KAMA's case exact number of

It should be mentioned that the CO₂ figures shown in this report show the effect of all CO₂ related measures taken in the Community. Article 10 of Decision 1753/2000/EC requires the Commission to report to Council and European Parliament by 2003/4 and 2008/9 about the reductions achieved by technical and by other measures. In 2002 the Commission launched a service contract in order to study this issue in greater detail.

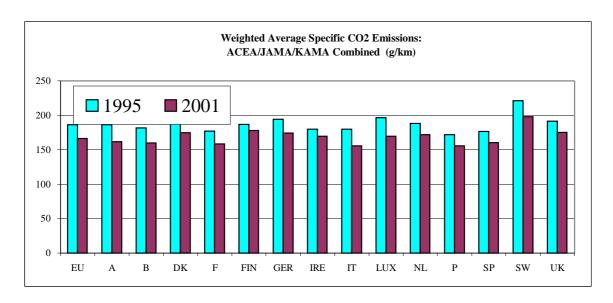


All data as delivered and corrected by the associations

Figure 1: Average specific CO₂ emissions of new passenger cars relative to 1995, for each association and the European Union

The overall average CO₂ emissions of new passenger cars registered in 2001 was lower in all Member States than 1995 and the years in between (see Figure 2). However, it should be mentioned that in some Member States the specific CO₂ emissions of individual associations increased, e.g., in France, Germany, Ireland, Portugal and Sweden CO₂ emission increased for KAMA. This is not in conflict with the commitments. However, it shows the trends for individual associations in specific Member State can differ significantly.

vehicles tested under the new test procedure were - according to KAMA - identified. Then a correction factor of 1 % was applied to these vehicles. JAMA did not apply any correction factor. In the Joint Reports of ACEA and KAMA the Commission states that it cannot agree to the adjustment made because the correction factor should be 0.7% and not 1.2% (or 1.0 %, as by KAMA) and the exact number of vehicles tested in accordance with the new test procedure should be known. The Commission believes that the CO_2 emissions of new registered cars should be reduced by an agreed and appropriate correction factor and that application should start next year. As long as no agreement exists no correction should be applied. In July 2002 it was agreed at Supervisory Group level that a solution needed to be found soon. It should be mentioned that the effect of correction factor differences was minor in 2001.



All data as delivered and corrected by the associations

Figure 2: Average Specific CO₂ emissions of new passenger cars in the EU and in Member States in 1995 and 2001 (weighted averages based on the data for diesel and gasoline vehicles forwarded by the three associations)²¹

All associations increased further the share of diesel cars in their respective sales within the reporting period (see Table 3). This was predicted for the short-term. For the 2008/9 target it was understood that the associations would not meet it by simple increases in the diesel share only but by technological developments and market changes linked to these developments. In this respect it is important to note that the Council invited the Commission "...to make continued efforts to significantly reduce nano-particulate emissions, and in particular devise a new measuring procedure for private cars, light duty vehicles and heavy duty vehicles taking into account the results of recent studies into the health effects of nano-particulate emissions..." and that ACEA recently raised uncertainties associated with the introduction of gasoline direct injection technology. This technology was supposed to break the strong trend towards diesel powered passenger cars.

Council conclusion of 18/19.12.2000

²¹ EU does not include data for Greece or Finland as insufficient data available

The three "Joint Reports" do not address this complex question of market changes further

								Change '95-01'
ACEA	1995	1996	1997	1998	1999	2000	2001	(2)
Gasoline	73.4%	72.9%	73.1%	70.3%	65.8%	60.9%	58.2%	-15.2%
Diesel	24.0%	24.3%	24.3%	27.0%	31.0%	35.8%	39.4%	15.3%
All fuels	10,241,651	10,811,011	11,226,009	11,935,533	12,518,260	12,217,744	12,552,498	22.6%
								Change '95-01'
JAMA	1995	1996	1997	1998	1999	2000	2001	(2)
Gasoline	82.1%	82.1%	83.2%	81.6%	80.4%	80.8%	79.1%	-3.0%
Diesel	9.5%	10.4%	11.2%	13.1%	14.9%	16.5%	17.4%	7.9%
All fuels	1,233,975	1,342,144	1,510,818	1,666,816	1,716,048	1,667,987	1,520,643	23.2%
								Change '95-01'
KAMA	1995	1996	1997	1998	1999	2000	2001	(2)
Gasoline	87.9%	87.6%	89.2%	85.9%	81.9%	80.9%	85.2%	-2.7%
Diesel	1.6%	1.8%	2.3%	6.1%	7.4%	8.3%	13.9%	12.3%
All fuels	169,060	236,454	275,453	373,230	463,724	491,244	396,792	134.7%
								Change '95-01'
EU-15 (1)	1995	1996	1997	1998	1999	2000	2001	(2)
Gasoline	74.5%	74.2%	74.6%	72.1%	68.0%	63.9%	61.2%	-13.4%
Diesel	22.2%	22.4%	22.3%	24.7%	28.4%	32.6%	36.4%	14.2%
All fuels (3)		12,389,609	13,012,280	13,975,579	14,698,032	14,376,975	14,469,933	24.3%

⁽¹⁾ New passenger cars put on the EU market by manufacturers that are not covered by the commitments do not effect the numbers significantly.

Table 3: Trends in composition of new cars registered on the market, for each association and the EU

As already mentioned all associations declared in their respective commitment that they would meet the final target by mainly technological developments and market changes linked to these developments. Such developments contributed indeed to the reductions achieved so far (mainly the introduction of High Speed Direct Injection Diesel (HDI) engines, and to less extent by the introduction of Gasoline Direct Injection (GDI) engines, Continuously Variable Transmission, (CVT) "Mini Cars", and Alternative Fuelled Vehicles (AFVs) and Dual Fuelled Vehicles (DFV). Since the year 2000 ACEA and – to a lesser extent - JAMA introduced passenger cars emitting 120 g CO₂/km or less (meeting one of the commitments); in 2001, ACEA sold over 305,000 such cars (almost a doubling of sales compared to the year 2000), JAMA about 5600. KAMA is still to introduce such models on the market.

⁽²⁾ The change over the period 1995 to 2001 for gasoline and diesel driven cars represents the change in the absolute share of each fuel type of total registrations. The change for the total cars is the growth or drop in absolute new registrations. The change in total cars represents the growth in the EU-15 new registrations over the period.

⁽³⁾ Totals include statistically unidentified vehicles and vehicles using 'other fuel' types.

With regard to the assumptions underlying the commitments the associations have, in the "Joint Reports", drawn attention to a number of issues, e.g. enabling fuels^{24,25}, distortion of competition²⁶, promotion of fuel efficient technologies²⁷, End-of-Life Vehicle (ELV) Directive²⁸, new regulatory measures²⁹, fiscal measures³⁰ (see Table 4 for details).

There are some differences in the interpretation of the text of the Commitments. This is partly due to a difference of understanding of the role of the Commitments within the Community strategy "policy frame". Apart from the Commitments the strategy has, as mentioned before, two additional pillars: consumer information and taxation - measures which aim at influencing the demand side. All three pillars together aim at achieving the Community target of 120 g CO₂/km in 2005, and 2010 at the latest. The Commitments focus strongly on technical measures, and market changes linked to technical measures³¹, which are supposed to bring the average emissions down to 140 g CO₂/km, leaving scope for consumer demand measures which are necessary in order to meet the Community target of 120 g CO₂ /km. The associations accepted the consumer information part, but expected that no use of the fiscal pillar would be made³², or at least to await the results of the 2003 review of the Commitment, before re-addressing the issue³³.

The associations made their commitments on the basis of the fuel quality requirements laid down in Directive 98/70/EEC, although they expect that better fuel qualities might be available in the market in the future. In this respect the associations expected that some gasoline (e.g. Super-Plus 98 octane) and some diesel plus with a maximum sulphur content of 30 ppm are provided in 2000 on the whole EU market in a sufficient volume and geographical cover; in 2005 full availability of fuels on the whole EU market which satisfy the following: gasoline with a maximum sulphur content of 30 ppm and of a maximum aromatic content of 30% and diesel with a maximum sulphur content of 30 ppm and a cetane number of minimum 58

See COM(2001)241 final of 11.5.2001 which indicates, inter alia, that "...The impact of these fuels in relation to the attainment of the 140 g CO₂/km target will, therefore, be taken account of in the joint monitoring mechanism. The availability of zero sulphur fuels resulting from this Directive, will also provide a basis for the Commission to explore with the automobile manufacturers additional commitments aimed at the attainment of the Community's target of 120 g/km for the average CO₂ emissions of the new car fleet when the current environmental commitments with the automobile manufacturers are reviewed in 2003..."

The ACEA Commitment contains the assumption that "...the Community will use its best efforts to continue to seek that other car manufacturing countries, notably Japan, USA and Korea, will undertake equivalent car CO2 reduction efforts, in line with the Kyoto Protocol spirit ensuring that the European automobile industry is not put at a competitive disadvantage in world markets by CO2 reduction commitments in Europe."

The Commitments are based on "... the assumption of an unhampered diffusion of these and other car CO₂ efficient technologies into the market..."

Directive 2000/53/EC

The Commitments require that "... The impact on CO₂ emissions of new regulatory measures..." has to be monitored

The Commitments are based on the assumption that they provide "...complete and sufficient substitute for all new regulatory measures to limit fuel consumption or CO₂ emissions, and for any additional fiscal measures in pursuit of the CO₂ objectives..." of the Commitments. Any fiscal measures, including their added value to the Commitments, will be taken into account in the monitoring procedure and their potential effects will be assessed in good faith. In addition to the concern mentioned in Table 4 ACEA considers fiscal measures as potentially in conflict with the unhampered diffusion of CO₂ efficient technology

[&]quot;...These targets will mainly be achieved by technological developments affecting different car characteristics and market changes linked to these developments..."

On 2 October 1998 the ACEA President wrote to the Commission saying that "...the communication adopted by the Commission in July represents an accurate analysis of ACEA's commitment. I wish, nevertheless, to repeat that although we do not question the right of the Community and its member States

Apart from the work on fiscal measures, the 2003 review (2004 for KAMA) will be of major importance for the further development of the Community strategy. According to the text of the Commitments, as well as the Commission's Recommendations, ACEA and JAMA shall in 2003 "... review the potential for additional CO₂ reduction, with a view to moving further towards the Community's objective of 120 g CO₂/km by 2012." The Commission proposed to the associations in July 2002 to discuss the planning for the review, e.g., the timetable and the procedures. The Commission believes the work concerning the different elements of the review need to be prepared and planned at an early stage.

Finally, and irrespective of the outcome of the review mentioned above, in the monitoring years 2003 and 2004 comparisons of these years average and the respective "estimated target range" will be carried out³⁴. The Communication of these years will also address for the first time the request of Article 10 of Decision 1753/2000³⁵.

to exercise their prerogatives in the field of fiscal policy, the Commitment does not constitute an agreement on the part of ACEA that fiscal measures that would have the effect of changing the structure of the market should be taken by the Community or its Member States in the filed of vehicle taxation. Not does ACEA find the use of this instrument relevant in the light of its ambitious CO_2 objective. Such initiatives could have serious consequences for the competitiveness of the industry and the employment in the sector, while actions at the Member States level can have serious repercussions on the internal market". The Commission presented the letter to the Council at its meeting of 6.10.1998.

On 8 June 2000 the President of ACEA reacted to the work on fiscal measures which the Commissions launched in the year 2000. In a letter to the Commission he reiterated ACEA's concern that "...fiscal measures that would have the effect of changing the structure of the market will be counter productive..." and mentioned that the Commission "...seeming to forget that after a long negotiation the Commission endorsed ACEA's Commitment which states that in '2003 ACEA will review the potential for additional CO₂ reduction with the view to moving further towards the Community objective on 120 g/km by 2012'..."

For ACEA 165 – 170 g CO₂/km in 2003; for JAMA 165 – 175 g CO₂/km in 2003; for KAMA 165 – 170 g CO₂/km in 2004

"The reports for the intermediate target years and the final target years will indicate whether the reductions are due to technical measures taken by the manufacturers or to other measures such as changes in consumer behaviour". The three "Joint Reports" do not address this question in great detail.

Issue	Raised by	Details of concern	Commission's comments
Enabling fuels	ACEA JAMA KAMA	Concern because the full market availability of fuels with a sufficient quality to enable the application of technologies is imperative for the industry to achieve its CO ₂ commitment.	The "zero sulphur fuels" proposal, see COM(2001)241 final, should guarantee that the required fuels would be available in sufficient quantities throughout the Community from 2005 onwards. The mandatory date for 100% availability is 2009 for gasoline and diesel, subject to a review process for diesel fuel. The Commission draws attention to the fact that the provision of 10 ppm fuels wents well beyond the expectations at the time of the signature of the Commitment.
Distortion of competition	ACEA	Disappointment that the European Community has hitherto failed to ensure that the EU's automobile industry is not put at a competitive disadvantage as a consequence of the differences of views on "Kyoto".	The Commission draws attention to its efforts to convince, inter alia, Japan and the United States to ratify the Kyoto Protocol. Moreover it draws attention to fuel efficiency measures taken or planned in other parts of the world (Japanese Energy Efficiency Law, US CAFÉ rules, declaration of US manufacturers to reduce the fuel consumption of special types of cars by 25 %, California's warming bill 1793). On the EU market all manufacturers require equivalent efforts, and in this respect the Commitments guarantee a level playing field.
Promotion of fuel efficient	ACEA	Concern about anti-diesel policies in a number of Member States, including the UK and Sweden.	The Commission takes note of ACEA's arguments but believes that the consequences of national fiscal measures have to be studied taking a wider view, considering, inter alia, that Member States have all rights to exercise their prerogatives in the field of fiscal policy.
technologies	ACEA JAMA KAMA	Concern that the End of Life Vehicle (ELV) Directives will have adverse implications for the fuel efficiency of cars.	The Commission believes that the ELV Directive will not have any adverse effects on fuel efficiency given that it does not limit the use of any material.
	KAMA	Concern that the Commitment on Pedestrian Protection will have adverse implications for the fuel efficiency of cars.	There is no evidence shown that technical measures to increasing pedestrian protection increase the CO2 emission from cars. The Commission cannot accept that voluntary commitments made by car manufacturers with regard to pedestrian safety be taken into account within the monitoring of the CO ₂ Commitment.
New regulatory measures	KAMA	Concern about meeting the required EU-legislation NOx levels and the CO ₂ target at the same time.	It is the Commission's opinion that KAMA was fully aware of the emission standards laid down in the amended Directive 70/220/EC.
Fiscal measures	ACEA	With regard to the proposal for CO ₂ differentiated taxes ACEA draws attention to the fact, that these taxes should not distort the market as this could contravene its Commitment, for example, they could jeopardise product diversity (by driving larger more powerful cars out of the market), or could damage financial performance.	The Commission draws attention to the fact that fiscal measures form the third pillar of the strategy, as outlined already in the 1995 Communication, and that the text of the ACEA Commitment clearly specifies that ACEA assumes that the Commitment provides complete and sufficient substitute for any additional fiscal measures in pursuit of the CO ₂ objectives of this Commitment. The fiscal measures considered do not aim at providing additional support to meet ACEA's target of 140 g/km in 2008, but aim at supporting the overall achievement of the Community target which is 120 g/km by 2012 at the latest. It should also be noted that the Environment Council reiterated in October 1999 ³⁶ the need to study the possibility of establishing a reference framework for fiscal incentives.

Table 4: Summary of issues listed by the car manufacturers' associations with regard to the assumptions of the Commitments, and brief comments which illustrate the Commission's position.

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Council conclusions of 6.10.1999

IV. IMPLEMENTATION OF DECISION 1753/2000/EC

The so-called "Monitoring" Decision came into force on 30 August 2000. The data collected under this Decision will be used by the Commission services in order to monitor the voluntary commitment by the automobile industry to reduce emissions of CO₂ from passenger cars.

According to Article 7 of the Decision the Commission "...shall report to the European Parliament and to the Council by 31 December 2002 at the latest on the operation of the monitoring scheme established under this Decision." In the following this report is delivered.

The main obligations of the Decision are:

- a) According to Article 5 Member States are required to designate a competent authority for the collection and communication of the monitoring information.
- b) According to Article 6 Member States have to report to the Commission on how they intend to implement the provisions of this Decision.
- c) According to Article 4 Member States shall transmit data on specific CO₂ emissions of new passenger cars no later than 1 July 2001; subsequent transmissions shall be completed by 1 April.

Step a) can now be considered as completed, although not all Member States managed to do so by the required date.

Step b) is completed as well. However, for some Member States details of the methods of implementation are still under discussions. This is mainly caused by the fact that a number of Member States - as a consequence of the Decision - are reorganising their national data collection systems. It should be mentioned that the national data collection systems might undergo - due to requests coming from other parties - additional modifications in the future in order to up-date methodologies, incorporate new data processing routines and so on. There is no "final" system, and it will consequently be an ongoing task to exchange information on methodologies, data treatment and data transfer routines.

With regard to c) a number of Member States failed to deliver data on time in 2001 (Austria, Belgium, France, Greece, Luxembourg, Spain and Sweden were late) and in 2002 (Greece was late). Nevertheless, most of these Member States managed to forward data with some delay. There is a clear progress and the Commission is optimistic that the data delivery by these Member States will be in time in 2003. Most worrying, however, is the fact that Ireland did not deliver data at all up to now, and Portugal - with a delay of more than one year - for the year 2000 only³⁷. The Commission started infringement procedures last year and is preparing cases against these two Member States.

In order to identify and solve potential problems associated with the implementation of the Decision the Commission - in application of Articles 3 and 6 of the Decision - established an expert group in 2001. To support the group the Commission launched a study aiming at improving the data transfer and identifying potential data inconsistencies. Up to now the

Due to the late delivery the Portuguese data could not be incorporated in this Communication

group has met three times and made progress on a number of methodological and data transfer issues.

The first two deliveries by Member States were mainly used to compare the data with those submitted by the car manufacturers' associations for the year 2000 and 2001 joint monitoring reports. It should be recalled that the associations in their reports have used CO₂ statistics supplied by the AAA (Association Auxiliaire de L'Automobile - ACEA and KAMA) or by Marketing Systems (JAMA). Marketing Systems and AAA base their estimates on statistics delivered by Member States, supplemented and combined with their own technical passenger car data, including data on fuel consumption and CO₂ emissions. This means the data sources are nearly identical to those used by many Member States. For example AAA's CO₂ database covers, in a consistent manner, over 90% (90-92%) of the EU registrations, the rest are unknown figures. Uncertainties within the associations' data result from the incompleteness of the data sets. They could not be numerically quantified in the past, however, they are estimated to be small. Member States' data are the ones that are valid for the monitoring process. Uncertainties in the Member States' data bases are mainly caused by problems to link the registration data to the CO₂ emissions of individual passenger cars, a problem known as well by AAA and Marketing Systems. A few Member States face in addition problems to obtain a complete data set of all M1 passenger cars. These Member States are currently making all efforts to close the gaps.

Nevertheless, overall the error margins are quite small and in summary the associations' data sets correspond quite well with the data delivered by Member States (see Table 5)³⁸.

	2000 difference	2000 difference	2001 difference	2001 difference
	in g/km	in %	in g/km	in %
EU	-2	-1.3	1.8	1.1
ACEA	-2	-1.1	2.4	1.4
JAMA	-2	-1.2	-1.4	-0.8
KAMA	-5	-2.7	-1.9	-1.0

[&]quot;-" means the association data are higher

Table 5: Comparison of specific CO₂ data delivered by Member States and the car manufacturers' associations

Please note: All figures given in this chapter are uncorrected data as delivered by Member States

For individual Member States' and associations' combinations the situation looks as follows (see Tables 6 to 9):

	EU – Specific CO2 Emissions					
Country	Member States' Data (g/km)	Associations' Data (g/km)	Difference (g/km)	Difference (%)		
Austria	165.6	162.7	2.9	1.8		
Belgium	163.6	161.4	2.2	1.4		
Denmark	172.9	176.1	-3.2	-1.8		
Finland	178.1	179.2	-1.1	-0.6		
France	159.8	159.6	0.2	0.1		
Germany	179.5	175.7	3.8	2.2		
Greece	166.0	167.9	-1.9	-1.4		
Ireland	-	170.8	-	-		
Italy	158.3	157.0	1.3	0.8		
Luxembourg	177.0	171.2	5.8	3.4		
Netherlands	174.2	173.5	0.7	0.4		
Portugal	-	156.9	-	-		
Spain	156.2	161.0	-4.8	-3.0		
Sweden	200.2	199.5	0.7	0.4		
UK	177.9	176.6	1.3	0.7		
EU-13	169.7	167.9	1.8	1.1		

Table 6: Comparison of specific CO₂ emissions data of Member States and combined association data (2001 data)

The data for the three associations show partly larger error bands. It has been decided to look into these differences in greater detail within bilateral contacts between the respective association and the Member State concerned.

	ACEA - Specific CO2 Emissions					
	Member States'	ACEA				
	Data	Data	Difference	Difference		
Country	(g/km)	(g/km)	(g/km)	(%)		
Austria	162.2	158.6	3.6	2.3		
Belgium	161.9	158.8	3.1	2.0		
Denmark	173.5	174.6	-1.1	-0.6		
Finland	180.3	181.1	-0.8	-0.4		
France	157.8	157.6	0.2	0.1		
Germany	178.9	174.3	4.6	2.6		
Greece	165.9	-	-	-		
Ireland	-	166.9	-	-		
Italy	156.4	154.6	1.8	1.2		
Luxembourg	175.2	169.0	6.2	3.7		
Netherlands	173.6	172.7	0.9	0.5		
Portugal	-	155.5	-	-		
Spain	155.8	158.1	-2.3	-1.5		
Sweden	201.7	201.1	0.6	0.3		
UK	176.8	175.4	1.4	0.8		
EU-12	168.3	165.9	2.4	1.4		

Table 7: Comparison of specific CO₂ emission data of Member States and ACEA (2001 data)

Country	JAMA - Specific CO2 Emissions					
	Member State Data (g/km)	JAMA Data (g/km)	Difference (g/km)	Difference (%)		
Austria	182.5	183.0	-0.5	-0.3		
Belgium	175.0	179.9	-4.9	-2.8		
Denmark	168.4	180.2	-11.8	-7.0		
Finland	170.8	173.5	-2.7	-1.6		
France	185.7	185.8	-0.1	-0.0		
Germany	182.0	183.1	-1.1	-0.6		
Greece	164.4	167.2	-2.8	-1.7		
Ireland	-	177.0	-	-		
Italy	169.6	170.9	-1.3	-0.7		
Luxembourg	193.6	191.4	2.2	1.1		
Netherlands	173.9	173.5	0.4	0.2		
Portugal	-	164.3	-	-		
Spain	164.2	180.4	-16.2	-9.9		
Sweden	189.1	189.2	-0.1	-0.1		
UK	181.7	181.5	0.2	0.1		
EU-13	178.2	179.6	-1.4	-0.8		

Table 8: Comparison of specific CO₂ emission data of Member States and JAMA (2001 data)

	KAMA - Specific CO2 Emissions					
Country	Member States' Data (g/km)	KAMA Data (g/km)	Difference (g/km)	Difference (%)		
Austria	196.2	197.6	-1.4	-0.7		
Belgium	188.8	189.7	-0.9	-0.5		
Denmark	182.6	183.7	-1.1	-0.6		
Finland	202.7	206.3	-3.6	-1.8		
France	217.6	217.5	0.1	0.0		
Germany	207.6	209.5	-1.9	-0.9		
Greece	168.7	168.7	0.0	0.0		
Ireland	-	189.7	-	-		
Italy	175.0	179.2	-4.2	-2.3		
Luxembourg	191.0	190.2	0.8	0.4		
Netherlands	185.7	185.5	0.2	0.1		
Portugal	-	172.6	-	-		
Spain	-	188.3	-	-		
Sweden	197.7	199.1	-1.4	-0.7		
UK	191.0	189.2	1.8	1.0		
EU-12	186.6	188.5	-1.9	-1.0		

Table 9: Comparison of specific CO₂ emission data of Member States and KAMA (2001 data)

In summary, the data of the majority of Member States can be considered as being of very high quality. A few Member States will have to improve the data quality further. For this reason, and due to the fact that some Member States delivered data for the period 2001 late, Member State data were not used for the official monitoring of the commitments for the 2001 calendar year. As agreed with the car manufacturers' associations they will, however, be used as the basis for the monitoring process from year 2002 (report of 2003) onwards. Wherever necessary additional bilateral meetings between particular Member States and the associations³⁹ will be organised in order to study the reasons for identified differences between the two data sets.

In any case the work to improve the quality of the data will be continued, and is, as a matter of fact, a permanent task.

V. IMPLEMENTATION OF DIRECTIVE 1999/94/EC

The "Labelling" Directive was adopted on 13 December 1999; the implementation by Member States was required by 18 January 2001. By the end of August 2002 the following Member States had not implemented the Directive: France, Germany, Italy, Spain and United Kingdom for some parts of its territory. Under Article 226 EC, the Commission has already delivered the cases to the Court of Justice⁴⁰.

In July 2001 the Commission launched - in response to the obligation mentioned in Article 9 of the Directive - a study on the "Establishment of Recommendations to enable the application of the principles of the provisions on promotional literature to other media and material". The final report was delivered in July 2002⁴¹. At a meeting of the Committee established under Article 10 of the same Directive the results of the study were discussed in detail. A majority of Member States was in favour of covering, as soon as possible, "Internet marketing" of passenger cars, and other electronic storage media, with requirements equivalent to those requested for promotional literature which is already covered by the Directive. None of the Member States showed any interest to cover TV and radio. Two procedural options for the next step to be taken with regard to "other media" were considered: To await Member States' reports under Article 9 which are due by 31.12.2003⁴², or to submit a Commission Recommendation which could be published next year (roughly in line with the dates mentioned in the "block exemption proposal")⁴³. Most Member States expressed their preference for a Commission Recommendation on Internet and other storage media. Based on the results of the study and the discussions in the Committee the Commission intends to put forward a proposal in near future.

In addition, several Member States explained difficulties identified with regard to the practical implementation of the Directive: The requirement of Annex III, last sentence, to add new vehicles to the poster, cannot be met in practice because, as a rule, too many new models have to be added. This jeopardises the lay-out of the poster and is often difficult to manage in a

³⁹ KAMA explained that it sees no need to meet Member States bilaterally

France (C-161/02), Germany (C-72/02), Italy (C-22/02), Spain (C-28/02), and United Kingdom (C-62/02)

TNS (2002): "Enable Application to other media and material of Directive 1999/94/EC". Final report to study contract ENV.C.1/ETU/2001/0009

In this case proposals for the amendment of the Directive could most likely not be made before 2004, coming into force most likely not before 2005/2006

Commission Regulation 1400/2002

practical way. Moreover, many dealers would like to present the information on an electronic screen that allows easy up dating. It was proposed to modify the Annex as soon as possible and to consider laying down special requirements for electronic screens. The Commission will consider this case without delay.

VI. WORK ON FISCAL MEASURES

The work of the "Expert Group on Fiscal Framework Measures", supported by a study carried out by COWI⁴⁴, showed that further CO₂ reductions could be achieved with a differentiation of vehicle taxes basing it on CO₂ emissions of passenger cars. The Commission's work on fiscal framework measures has, based on the study, recently been presented in a Commission Communication⁴⁵. It is focusing on registration (RT) and annual circulation taxes (ACT). In the Commission's opinion vehicle taxation:

- is an important complementary instrument to support the realisation of the EU-target of 120 g CO₂/km for new cars by 2005, and 2010 at the latest, and to contribute to the accomplishment of the EU engagements under the Kyoto Protocol;
- needs to establish a more direct relation between tax level and the CO₂ performance of each new passenger car. Vehicle tax differentiation has been identified as an important parameter for improving the overall fuel-efficiency of new passenger cars. Existing vehicle taxes should be replaced by taxes fully based on CO₂ emissions or, alternatively, a CO₂ sensitive element should be added to existing RT and ACT. Add-on elements would also allow taking into account other national environmental objectives, e.g., the early introduction of EURO IV standards.

The repercussions of fiscal measures have to be taken into account within the monitoring process.

VII. OTHER RELATED MEASURES

The Commission's proposal concerning the type-approval for CO_2 emissions and fuel consumption of light commercial vehicles⁴⁶ (N1 vehicles) is under discussion in Council and the European Parliament. Furthermore, the Commission has launched a study on CO_2 reduction measures for N1 vehicles⁴⁷. The Commission services intend to present the results of this study in a Communication next year. The Communication will also take into account, if necessary, the discussions on the Commission's Communication on "Environmental Agreements"⁴⁸.

46 COM(2001)543 final

⁴⁸ COM(2002)412 final

⁴⁴ COWI (2001): "Fiscal measures to reduce CO₂ emissions from new passenger cars." Final report to study contract ENV.D.3/ETU/2000/0027.

See http://europa.eu.int/comm/environment/co2/co2 home.htm

⁴⁵ COM(2002)431 final

⁴⁷ "Preparation of measures to reduce CO₂ emissions from N1 vehicles", study carried out by RAND Europe, Institut für das Kraftfahrtwesen Aachen, Tansport&Mobility Leuven

The Commission started work on mobile air conditioning⁴⁹ focusing on possible options to (i) measure and, if possible, reduce the additional fuel consumption and related CO₂ emissions, and (ii) to reduce emissions of the coolant (HFC-134a).

Both activities are part of the European Climate Change Programme⁵⁰.

VIII. CONCLUSIONS

The Community's strategy to reduce CO₂ emissions from passenger cars and improve fuel economy aims at achieving an average specific CO₂ emission figure for new passenger cars registered in the Community of 120 g CO₂/km by 2005, and by 2010 at the latest. The specific CO₂/km value achieved in the calendar year 2001 is in the range of about 167 to 170 g CO₂/km, compared to 186 g CO₂/km in 1995, the reference year of the strategy. By any measure it is quite unlikely that the target set out in the Community Strategy would be met as early as 2005. However, it remains realistic that the objective will be met by 2010 if the necessary measures are taken and all efforts are made. It seems clear that to achieve the overall target the implementation of all three pillars of the strategy will be necessary.

The recently published Communication of the Commission on passenger car taxation presents, inter alia, options for taxation schemes that can support the Community Strategy to reduce CO_2 emission. In addition the results of the 2003^{51} review of the potential for additional CO_2 reductions by the manufacturers' associations with a view to moving further towards the Community's objective of $120 \text{ g } CO_2/\text{km}$ by 2012 will be of great importance.

The implementation of the commitments by the car industry shows good progress. The "Joint Reports" show that ACEA and JAMA so far made significant progress while KAMA has to increase its efforts significantly. In order to meet the final target of 140 g CO₂/km all three associations have to maintain or increase their efforts. Based on the Joint Reports the Commission has no particular reason to believe that ACEA and JAMA would not live up to its respective commitment. With regard to KAMA there is reason to be concerned about the progress made so far. Additional and significant efforts will be necessary by KAMA if it is to meet its target. It should be noted that the car manufacturers' associations have listed a number of issues with regard to their commitments. Having said this, the respective association has in the discussions reconfirmed its intention to live up to the commitment.

A number of Member States are still lagging behind schedule with regard to the implementation of Directive 1999/94 and Decision 1753/2000. This hampers the implementation of the strategy and its monitoring.

The Commission continued in the monitoring period its work on CO₂ reduction measures for light commercial vehicles and started work on mobile air conditioning.

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In its conclusions on 10 October 2000 EU's environment ministers requested the European Commission to "...study and prepare measures in reduction of all greenhouse gas emissions from air conditioning in vehicles"

⁵⁰ COM(2001)580 final

²⁰⁰³ for ACEA and JAMA, 2004 for KAMA

ANNEX {SEC(2002) 1338}

- (1) Monitoring of ACEA's Commitment on CO₂ Emission Reduction from Passenger Cars (2001), Joint Report of the European Automobile Manufacturers Association and the Commission Services, Final version of 25.06.2002
- (2) Monitoring of JAMA's Commitment on CO₂ Emission Reduction from Passenger Cars (2001), Joint Report of the Japan Automobile Manufacturers Association and the Commission Services, Final version of 28.06.2002
- (3) Monitoring of KAMA's Commitment on CO₂ Emission Reduction from Passenger Cars (2001), Joint Report of the Korea Automobile Manufacturers Association and the Commission Services, Final version of 28.06.2002

The annexes are available only in English