CWTA — Canadian Wireless Telecommunications Association / ACTS — Association canadienne des télécommunications sans fil

September 29, 2003

Mr. Peter C. Burns
Chief, Ergonomics
Road Safety and Motor Vehicle Regulation
Safety and Security
Transport Canada
330 Sparks Street
Tower C, 8th Floor
Ottawa, Ontario
K1A 0N5

RE: Strategies for Reducing Driver Distraction from In-vehicle Telematics: A Discussion Document

Dear Mr. Burns:

The Canadian Wireless Telecommunications Association ("CWTA") is pleased to provide the attached response to Transport Canada's *Strategies for Reducing Driver Distraction from In-vehicle Telematics: A Discussion Document*.

Sincerely,

//electronic copy//

Charles A. Bergeron
Director
Government Affairs

CWTA RESPONSE TO TRANSPORT CANADA'S DISCUSSION PAPER

Strategies for Reducing Driver Distraction from In-vehicle Telematics:
A Discussion Document

September 2003

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PART I: GENERAL COMMENTS

1. Introduction

On behalf of the Canadian Wireless Telecommunications Association (CWTA), we would like to thank Transport Canada (the Department) for providing our organization the opportunity to comment upon the Department's discussion paper entitled *Strategies for Reducing Driver Distraction from In-vehicle Telematics: A Discussion Document*. It should be noted that the CWTA provided commentary to the questions and issues to which it has knowledge and technical expertise. There are questions to which the wireless industry does not have the expertise to provide meaningful commentary. We would encourage the Department to obtain direct feedback from the key stakeholders and the driving public who would be directly impacted by the regulatory and legislative remedies proposed in the consultation paper, that is the automobile and telematics industries.

The CWTA has reviewed the above mentioned discussion paper and presents its comments below.

2. About the CWTA:

The CWTA is the authority on wireless telecom issues in Canada. We represent all types of players in the wireless industry – from carriers and to equipment manufacturers to the companies that supply services to the industry. Our industry employs some 25,000 Canadians, generates $7.6 billion in annual revenues and has invested more than $12.5 billion in Canada's wireless infrastructure.

3. CWTA Commitment to Driver Safety:

As an industry, we are committed to educating our customers about how to safely use their mobile devices. CWTA's Responsible Driving Committee, comprised of both wireless carriers and mobile phone manufacturers, continues to build strong partnerships with important safety stakeholders across the country.

With their input, the CWTA has developed national, industry-wide safety guidelines. Canada's wireless industry has always actively promoted responsible driving. Social marketing campaigns on driver distraction and responsible driving can be traced as far back as 1988.

Our slogans have ranged from "Safe Driving - Your First Priority" to "Drivers often face distractions on the road - A cell phone shouldn't be one of them" to "Practice Safe Cell". Most recently, we have been advocating "Safety - Your Most Important Call".

The wording for our educational efforts has changed over the years; however, our commitment to our customers' safety has never wavered. Although Canada's wireless industry is relatively young compared to many industries, it is mature and responsible when it comes to protecting the interests of its customers.

An example of our commitment to driver safety was the launch in December 2001, during the Canada Safety Council's 2001 National Safe Driving Week, of our most

comprehensive and far-reaching safety awareness and education program. The "Driven to Distraction" program was produced in partnership with the Canada Safety Council and the CWTA. It addresses all aspects of driver distraction – from eating when you're behind the wheel – to talking with other passengers in the car – to taking in the sights instead of keeping your eyes on the road.

In determining the content for this program, we consulted with Young Drivers of Canada, the Insurance Bureau of Canada, provincial Ministries of Transportation, the Insurance Corporation of British Columbia, Société de l'assurance automobile du Québec, the Driving School Association of Ontario, the Road Safety Educators Association and others.

The "Driven to Distraction" CD ROM includes a ten-minute video and an easy-to-use program guide that provides helpful safety tips for drivers. It was distributed – free of charge – to employers, driving instructors, safety associations, insurers, police, schools and many others.

4. Telematics Defined:

In reviewing *"Strategies for Reducing Driver Distraction from In-vehicle Telematics: A Discussion Document"* (the Discussion Document), the Department writes:

> *"(i)n-vehicle telematics is a more general class of devices that feature information- and computer-based technologies."*[1]

It also highlights that:

> *"cellular phones are currently the most common type of telematics devices used in vehicles, other telematics technologies and applications are poised to enter the market."*[2]

The CWTA observes that the term "telematics" is broad and may invoke different definitions from different parties. Historically, Simon Nora and Alain Minc first coined the term, "télématique" ("telematics") from merging the French words "télécommunications" and "informatique"[3]. The term generically means the blending of computers and telecommunications.

The Discussion Document acknowledges this by stating:

> *"In-vehicle telematics is a more general class of devices that feature information- and computer based technologies."*

[1] Strategies for Reducing Driver Distraction from In-Vehicle Telematics Devices:A Discussion Document, TP 14133 E, Prepared by: Standards Research and Development Branch Road Safety and Motor Vehicle Regulations Directorate April 2003, p.3
[2] Idem, p.2
[3] Simon Nora and Alain Minc, *The Computerization of Society; MIT Press, 1980*

The CWTA notes that automotive telematics, as portrayed in the Discussion Document, includes any computer device that presents information, communication or entertainment to a driver in visual or audible format, and may involve discontinuous or continuous telecommunications outside of the vehicle.

There are more than 15 million Canadians currently using wireless devices. As the Department will appreciate, the scope of wireless devices goes beyond just cellular phones.

The CWTA stresses that discontinuous or continuous telecommunications outside of the vehicle may include, but are not limited to, two-way voice communications over a cellular, Personal Communications Services (PCS), Enhanced Specialized Mobile Radio (ESMR), Family Radio Service (FRS), or other radio networks; two-way data communications such as email, Short Message Service (SMS), Internet content, telemetry, database transactions, Bluetooth, 802.11 (WiFi) and one-way broadcast communications such as radio, television, electronic sign post, and Global Positioning System (GPS) location signals.

We believe that these services and devices, when used by *passengers* in an automobile, are of no threat to safety. Therefore, these services and devices must not be inhibited or precluded by any action that the Department may elect to take in relation to devices that are used by *drivers*.

The Discussion Document further states:

> *"Within the category of in-vehicle telematics a distinction is made between technologies that are intended to support the driver (driver assistance systems) and technologies that are intended to increase driver productivity or support information and entertainment demands (infotainment systems). Infotainment systems include navigation systems, warning systems, and a variety of telecommunications devices and services that deliver information and entertainment to drivers (e.g. email, Internet access, and location based information such as gas stations, restaurants, traffic, and weather). Automated driver assistance systems include collision warning, adaptive cruise control, lane departure warning, lane change aids, and parking aids. The distinction between infotainment and assistance systems is becoming increasingly nebulous as telematics functions grow ever more intertwined. Moreover, while distraction is often cited as a criticism of infotainment systems, the potential for distraction from driver assistance systems is no less important."*

The CWTA also notes that the Department is concerned with the potential adverse consequences of in-vehicle telematics and that the Department wants to explore intervention strategies for limiting the risk of collisions associated with their use. The CWTA also notes the Department's categorizations of automotive telematics into two groups: driver assistance systems and infotainment systems. The CWTA observes that infotainment systems are not further segregated into "back seat" and "driver" infotainment systems. The impact on driver distraction differs greatly, depending on what type of segregation is used. The CWTA suggests that a third category, automatic systems, be used in the telematics Discussion

Document. For example, an automotive ODB II (On-Board Diagnostic systems II) is a standardized automatic on-board computer that monitors engine and other automotive conditions for dynamic engine tuning.

5. Consultation Process:

Under the auspices of the *Motor Vehicle Safety Act*, telematics devices installed by vehicle manufacturers as original equipment fall under the purview of the federal government, therefore under Transport Canada's realm of responsibility.

Transport Canada's consultation paper affirms that the Department is concerned about in-vehicle telematics devices and the potential threat that they present to road safety. The consultation document goes further and suggests that in-vehicle telematics devices increase driver distraction and cause an increase in distraction-related crashes. This concern, the Department writes, is based on a substantial and mounting body of evidence indicating that using these devices impairs driving performance.

While Transport Canada's consultation document stresses its concern regarding the role of driver distraction and in-vehicle telematics devices, CWTA questions some of the experimental research that is referenced in the document which indicates these devices can impair driving performance. The consultation paper references experimental research undertaken by the Department that found that hands-free devices can have negative effects on driver scanning patterns and braking performance.

We commend the Department for undertaking research on driver distraction. However, the CWTA submits the following concerns that it has regarding the experimental research undertaken by the Department such as the 2001 study: *The effect of cognitive distraction on drivers' visual behaviour and vehicle control.*[4]

While we recognize that Transport Canada has the mandate under the *Motor Vehicle Safety Act* of overseeing telematics devices installed by vehicle manufacturers as original equipment, we fail to understand why significant financial and human resources were invested by the Department in completing research on a specific driver distraction that is not part of the Department's mandate or realm of responsibility. We understand that it is important for the Department to fully grasp the impact of driver distractions, but we are puzzled as to why the Department would have not chosen to undertake a broader analysis of the various distractions that drivers face behind the wheel of their vehicles.

The Department's 2001 study targets specifically the cognitive distraction of drivers while they drove a specific route under three task conditions (performing difficult addition problems, performing easy addition problems, and with no additional task). Participants in the study were also required to communicate their responses via a fully hands-free cell phone so that the participants did not have to look away from the road to manually operate the phone.

[4] Harbluk, J.L., Noy, Y.I., & Eizenman, M. (2001). *The effect of cognitive distraction on drivers' visual behaviour and vehicle control.* Technical Memorandum TME 2001-01. Transport Canada.

The CWTA would suggest that a more tailored study that would have looked at the effects of in-vehicle telematics equipment currently being used in vehicles would have likely better served the Department and, we might add, the present consultation process. The Canadian Automobile Association has publicly recommended in its annual 2002-2003 Statement of Policy, Recommendation 4.11.3, ***In-Vehicle Information and Communications Systems*** ?…[T]he federal government should proceed with or collaborate on research with the automobile manufacturers to develop suitable Canadian Motor Vehicle Safety Standards governing telematics technologies.?[5]

The CWTA would certainly consider collaborating in the development of such research. It is clear that a better data collection framework is needed to better grasp the full scope of driver distractions.

6. Regulatory and Legislative Approaches:

As the paper references, cellular phones and other electronic devices (including entertainment systems such as DVD players and positioning and mapping equipment) are currently available as after-market equipment. We understand that the Department is seeking feedback on various scenarios, which may include regulatory initiatives that could require the disabling of access to entertainment systems, telecommunication or other telematics devices while one's vehicle is in motion. Unfortunately, it is not clear how such a restrictive scenario could be proposed to regulate after-market telecommunications equipment such as cellular phones.

The cornerstone of traditional, embedded telematics services is to assist vehicle occupants in an emergency, providing emergency responders with an exact location of the vehicle in trouble, the direction of the vehicle and other critical data that helps identify the vehicle and the vehicle's owner. A connection to a telematics response centre is established either manually by pressing an emergency SOS button or automatically by means of automatic collision notification (ACN) system. Most of these systems also provide location-based roadside assistance, remote door unlocks, stolen vehicle notification and recovery, location-based traffic alerts, routing assistance, and remote diagnostics of vehicle operating functions. All services are delivered hands-free and activated by a simple press of a button. Expected to be introduced later this year, advanced ACN systems offer the potential to deliver to emergency responders post-crash data that will help indicate crash severity and the likelihood of serious injury at a crash site.

The CWTA observes that the Department has actively investigated the issues of driver distraction for a number of years and has actively participated in committee work to develop ISO standards for road vehicles and guidelines for limiting driver distraction. These include the AAM (Alliance of Automotive Manufacturers) Driver Focus Group and the SAE (Society of Automotive Engineers) Safety and Human Factors committee. The CWTA further notes that Transport Canada has <u>not</u> endorsed the AAM Driver Focus-Telematics Working Group draft document called the "Statement of Principles, Criteria and Verification Procedures on Driver Interactions with Advanced In-Vehicle Information and Communications Systems", on the grounds that the guidelines currently allow unduly

[5] Canadian Automobile Association, Statement of Policy 2002-2003, Recommendation 4.11.3, (O-01,R-02), p.13

demanding tasks to be carried out by drivers. The CWTA submits that it may be counter-productive to the automotive and other industries to abandon a collaborative industry standards-setting process and to pursue a course of unilateral regulations. Such an approach may lead to standards conflicting with regulations. Instead, the Department should persevere by contributing technical evidence that supports the Department's professional opinions at those standards-setting bodies, in order to influence the common standard.

We would caution the Department in considering proposals that may conflict with existing Federal policies such as Industry Canada's public policy statement published in the Canada Gazette[6] announcing that it will no longer authorize the use of jamming devices. Industry Canada held a public consultation on this issue in order to determine the public interest in broadening the use of radio frequency jamming devices. "Jammers" or "cellphone silencers" are capable of interfering with, or blocking cellular, radio and personal communications services. They can also eliminate the ringing and/or operation of cellphones in a variety of public and private environments.

Some of the major reasons behind Industry Canada's conclusion included public concerns that the use of these "jammers" or "cellphone silencers" could affect public safety, such as 9-1-1 calls; impede personal freedoms (for example, the inability to receive important phone calls); and impair communications for law enforcement and security agencies.

Furthermore, in section 8.4 - *Other Regulatory and Non-Regulatory Initiatives* - of the consultation document, the Department references Canadian legislation currently in place or being considered for limiting driver distraction from in-vehicle telematics devices. The paper proposes the introduction, within provincial/territorial jurisdictions, of restrictions that would focus on driver behaviour. The Department references the example of specific driver distraction legislation that is specifically tailored to restrict/ban drivers from using handheld and hands-free cellular phone apparatus while driving. As we have stated earlier, we question the validity of the paper's linkage of cellular phones while defining in-vehicle telematics.

The CWTA is concerned that any regulations formed by the Department of Transportation may conflict with Acts of Parliament. For example, a regulation that prohibits the use of open architectures and configurable interfaces in automobile designs would likely also restrict the implementation of North American and international standards and open architectures, which in turn facilitate the development of innovative services and safety features. In addition, the economies of scale made possible by North American and international standards and open architectures would not be realized, meaning that the technology used in Canada will be more costly. Such a regulation may therefore conflict with several objectives of Part I, Section 7 of the *Telecommunications Act*, which includes:

> *7 (b) to render reliable and affordable telecommunications services of high quality accessible to Canadians in both urban and rural areas in all regions of Canada;*
> *7 (g) to stimulate research and development in Canada in the field of telecommunications and to encourage innovation in the provision of*

[6]Canada Gazette, Her Majesty the Queen in Right of Canada, Notice No. DGTP-005-02**,** Published by the Queen's Printer for Canada, Saturday, June 22, 2002; Vol. 136, No. 25, p.1914

telecommunications services;
7 (h) to respond to the economic and social requirements of users of telecommunications services.

The CWTA reminds the Department that the North American automobile industry is closely linked by common standards, due to similar market needs and requirements and to realize economies of scale. A 'Canada only' approach would be ill-advised, and counter-productive to the industry.

The CWTA is further concerned that, Federal Government policy objectives may be cross-impacted by any such regulations, such as:

- Innovation: to foster innovation in recognition of the importance it will play in our knowledge-based economy.
- Connectedness: making Canada the most connected country in the world.
- Broadband Access: promoting the widespread availability of broadband facilities to Canadians.

In addition, the CWTA is concerned that, in the example provided above, a regulation that prohibits the use of open architectures and configurable interfaces, features that simplify or automate driver vehicle operation, such as voice recognition commands, which would contribute to safer driving, may never be developed. Or worst yet, such devices could be prohibited from entering Canada from a foreign nation. Thus, this would deny Canadians affordable and innovative safety-enhancing features and services.

In partnership with other leading safety organizations, we have long taken the initiative to educate Canadians about using their mobile devices responsibly.

However, this issue isn't simply about using a wireless phone while driving. It is related to a myriad of potential driver distractions. Definitive research dictates that the Department should advocate an educational approach to dealing with this issue.

For example, several recent studies have been conducted into the types of distractions that cause automobile collisions. These studies include comprehensive research investigations conducted by the State of Pennsylvania, the American Automobile Association (AAA) and Saskatchewan General Insurance (SGI).

These studies found that 20 to 30 per cent of driver distractions that cause accidents are external – meaning that an object, person, or an event outside of the car was the source of the distraction.

The specific sources of distraction among distracted drivers	Specific Distraction %of Drivers
Outside person, object or event	**29.4**
Adjusting radio, cassette,CD	**11.4**
Other occupant in vehicle	**10.9**
Moving object in vehicle	**4.3**
Other device/object brought into vehicle	**2.9**
Adjusting vehicle/climate controls	**2.8**
Eating or drinking	**1.7**
Using/dialing cell phone	**1.5**
Smoking related	**0.9**
Other distraction	**25.6**
Unknown distraction	**8.6**
Source: AAA Foundation for Traffic Safety / University of North Carolina 2001©	**100.0**

We feel the most important finding from this new research is the fact that it is an aggregate of all distractions that pose a risk to motorists. Educating drivers about ALL sources of distraction is the key to making our roadways safe.

As well, the Canadian experience with marketing programs designed to promote social responsibility – such as recycling and energy conservation – proves that Canadians, provided with the right information, will do the right thing – willingly.

PART II: CWTA RESPONSES TO THE CONSULTATION DOCUMENT

Section 8. Possible Strategies that the Department Might Undertake to Limit Driver Distraction

Section 8.2 Non-Regulatory Options

Section 8.2.1 Public Awareness Campaign Warning of the Dangers of Driver Distraction

<u>Question 1:</u> Is the *status quo* in dealing with this problem of driver distraction sufficient? We invite industry to provide us with a detailed description of their current and planned efforts to limit this problem of driver distraction from in-vehicle telematics devices.

RESPONSE:

The area of driver focus has attracted a great deal of attention in recent years, resulting in programs of research, education, and technology development designed to limit distraction and enhance safety. Indeed, while education is currently the most effective means of addressing the issue of distraction, ongoing research and technology development suggests that the future holds great promise for products that will assist drivers in avoiding distraction.

The area of research is burgeoning. Several institutions have undertaken research efforts into driver focus in order to assess the scope of the issues (*see, e.g.*, the recent AAA study titled, "Distractions in Everyday Driving" finding that many common driving distractions are more prevalent problems than cell phone use) and are investigating various aspects of the issue. To date, reviews of the research by expert groups in the U.S. have determined that cell phone legislation is not indicated as a solution. For example, policy makers have conducted reviews for the states of Pennsylvania[7], Texas[8], and Virginia,[9] and found that:

- Current data do not warrant restrictions;[10]
- "A potential alternative to legislating the use of cellular phones or other wireless technologies in automobiles is to expand the scope of existing legislation to include certain distracting actions (e.g. eating, reading, grooming) while driving;[11]
- "Particularly necessary is the collection of data from accidents, to gain a clearer picture of the relationship with driving and cellular telephone use."[12]

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[7] General Assembly of the Commonwealth of Pennsylvania Joint State Government Commission, *Driver Distractions and Traffic Safety* (Harrisburg, Pa., December 2001), 3.

[8] J.A. Crawford, M.P. Manser, J.M. Jenkins, C.M. Court, E.D. Sepúlveda, *Extent and Effects of Handheld Cellular Telephone Use While Driving* (2001) at http://tti.tamu.edu/product/product_details.asp?book_id=14992

[9] Virgina Dept. of Motor Vehicles Senate Doc. 14*, Distracted Driving: Review of Current Needs, Efforts and Recommended Strategies,* (2002) at http://leg1.state.va.us/ .

[10] See, e.g., NCSL, *Along for the Ride, Reducing Driver Distractions* (2001) at 26-21 http://www.ncsl.org/programs/esnr/drivdistract.htm, stating that "[c]urrent data do not warrant restrictions" and "[m]otorists are ultimately responsible to attend to their primary task of driving".

[11] See note 3, *supra*.

[12] See note 7, *supra* at 38.

Another type of research is underway: research into technology and products that will assist drivers in addressing the driver focus issue. These products, including workload managers, lane departure warnings, collision avoidance systems, and navigation systems tied into the traffic networks, are a logical extension of current telematics equipment and hold great promise for making highways safer.

The bridge between future technological solutions and the issues of today is education. CWTA has engaged in robust educational programs and is committed to educating Canadians about how to use mobile devices responsibly.

<u>Question 2:</u> Should a public awareness campaign be initiated to warn people of the dangers of driver distraction from telematics devices?

RESPONSE:

As an industry, we are committed to educating Canadians about how to use their mobile devices responsibly.

CWTA's Responsible Driving Committee, comprised of both wireless carriers and mobile phone manufacturers, continues to build strong partnerships with important safety stakeholders across the country. With their advice and input, the CWTA has developed national, industry-wide safety guidelines. And, in December 2001 during the Canada Safety Council's National Safe Driving Week, we launched our most comprehensive and far-reaching safety awareness program to date.

This program, a partnership between the Canada Safety Council and the CWTA, is called "Driven to Distraction". It addresses all aspects of driver distraction – from eating or fiddling with the radio/CD when you're behind the wheel – to talking with other passengers in the car – to taking in the sights instead of keeping your eyes on the road.

Designed to appeal to drivers of all ages and ranges of experience, this program helps drivers to better understand their limitations, the potential impact of distractions and how to manage these distractions effectively. In determining the content for this program, we consulted with Young Drivers of Canada, the Insurance Bureau of Canada, provincial Ministries of Transportation, the Insurance Corporation of British Columbia, Société de l'assurance automobile du Québec, the Driving School Association of Ontario, the Road Safety Educators Association and others.

The "Driven to Distraction" CD ROM includes a 10 minute video and an easy-to-use program guide that provides helpful safety tips for drivers. It was distributed – free of charge – to employers, driving instructors, safety associations, insurers, police, schools and others.

The Canada Safety Council continues to market the "Driven to Distraction" program to employers across the country as a valuable addition to their fleet training programs, defensive driving courses or on-line learning initiatives. Daimler-Chrysler Canada is now presenting the video in all of its 500 dealership showrooms or waiting areas. Schools are another target market for this program because it's an excellent addition to new driver

programs and activities that promote safety. We encourage communities as well to use "Driven to Distraction in settings such as shopping malls and community centres, or at public events, such as driving rallies and information sessions.

The CWTA and its partners in this special program are extremely encouraged by the positive support that "Driven to Distraction" has received.

To reinforce the messages and sound advice provided by "Driven to Distraction", the CWTA and its members actively promote responsible driving behaviour in a number of other ways.

For example, with the Canada Safety Council, we have produced 30 and 60 second Public Service Announcements (PSAs) for radio and TV, advocating that drivers act responsibly when using their mobile phones on the road.

French and English versions of these PSAs were distributed to more than 500 television and radio station stations across the country. The PSAs have exceeded our most ambitious expectations, with some outlets airing the segment up to five times per day.

To complement these PSAs, we also produced and distributed a cell phone safety brochure, entitled "Safety – Your Most Important Call". We also launched a public Web site to promote responsible driving – www.driveresponsibly.ca .

Individual CWTA members also actively promote safe driving to their customers. Safety information is posted to each Web site of Canada's four major carriers. They provide customers with safety information at the retail level as well as mailing inserts and other initiatives.

Our members participate in a number of safety special events – from National Safe Driving Week to the industry's own Wireless Safety Week.

We also ensure that our customers know that technology can help. As special promotions for new customers, for example, carriers often offer hands-free devices at no extra cost. Carriers also market technology that allows mobile phone users to dial using voice-activation.

The wireless industry feels the issue of driver distraction isn't simply about using a wireless phone while driving. It's about a myriad of potential driver distractions. Educating drivers about all sources of distraction is the key to keeping our roadways safe.

Current research is very clear that distracted driving presents a threat to our highways. It is equally clear that the entire range of distractions must be addressed in order to address the threat. CWTA, therefore, endorses a public awareness campaign that is designed to address the myriad of distractions facing drivers and present them with the tools to recognize and avoid them. As noted above, this is an approach already undertaken by CWTA.

Section 8.2.2 Memorandum of Understanding with Automotive Manufacturers

<u>Question 3:</u> Should MOUs be negotiated to voluntarily commit the automotive industry in Canada to follow certain human factors design guidelines, provide telematics information on event data recorders, contribute to a vehicle features database and apply a driver-system integration process when designing telematics devices?

RESPONSE:

As noted above in Section I.5, there are ongoing activities underway within the automotive industry to establish meaningful guidelines. MOUs or other governmental steps appear to be premature at this stage. The industry should be permitted to complete its efforts before being asked to make commitments.

Section 8.2.3 Advisory on a Human Factors Design Process

<u>Question 4:</u> Should an advisory be issued to industry stating the need to follow strict safety guidelines and a driver-system integration process when designing telematics devices?

RESPONSE:

If such an advisory were released, it would have limited scope as it would affect only original manufactured automobile equipment. It would not affect after-market automotive add-ons, bringing to question the utility of such an advisory.

Section 8.3 Regulatory Options

Section 8.3.1 Regulate a Process Standard for Human Factors Design

<u>Question 5:</u> Should a regulation be made requiring manufacturers to follow a human factors process standard for designing telematics devices?

RESPONSE:

If such a regulation were imposed, it would have limited scope as it would affect only original manufactured automobile equipment. It would not affect after-market automotive add-ons, bringing to question the utility of such a regulation.

Section 8.3.2 Disable Access to Telematics Devices in Moving Vehicles

<u>Question 6:</u> Should a regulation be made requiring telematics devices to be automatically disabled when a vehicle is moving? What should be included?

RESPONSE:

The CWTA champions the interests of the more than 15 million Canadians who currently use wireless devices. Given the depth and breadth of our experience, we are fully aware of the important impact that wireless communications have had on the lives of Canadians.

Our own consumer surveys have shown time and time again that Canadians value the convenience provided by wireless communications. They believe that this technology enables them to be more productive. They feel safer knowing that their wireless phones enable them to stay in touch. For example, Canadians make more than six million calls each year to 9-1-1 using their wireless phones. Approximately 50 per cent of all 9-1-1 calls in Canada originate from a wireless phone. Not all local governments in Canada operate 9-1-1 systems but wireless carriers endeavour to route 9-1-1 calls to an appropriate call-taking agency (for example a local police Department) in areas where no 9-1-1 service exists. However, the decision about whether or not to accept these calls rests with local authorities. Also worthy of note is that calls made to 9-1-1 from mobile phones are free of airtime charges.

The CWTA believes that it would be unwise to require telematic devices to be automatically disabled when a vehicle is in motion. The explosive growth in the popularity of wireless phones is a major contributor to enhanced public safety. Also, the broad impact of automatically disabling such a system, in terms of current and future safety-enhancing systems, may not be fully understood at this time. Further research is required to determine all benefits of telematics operating while a vehicle is in motion.

As the Canadian Automobile Association has recommended in Policy 4.11.1 regarding the usage of cellular phones: "...[C]ellular phones can improve mobility safety by allowing motorists to call for emergency assistance or report disabled vehicles, collisions, hazardous road conditions, medical emergencies and crimes in progress. …."[13]

This is also why we dedicate considerable resources to ensuring the safety of our customers and Canadians in general. In partnership with other leading organizations, we have long taken the initiative to educate Canadians about using their mobile devices responsibly.

But again, this issue isn't simply about using a wireless phone while driving. It's about a myriad of potential driver distractions.

The CWTA notes that the Department is concerned with the potential adverse consequences of in-vehicle telematics and that the Department wants to explore intervention strategies for limiting the risk of crashes associated with their use. The CWTA also notes the Department's categorizations of automotive telematics into two groups: driver assistance systems and infotainment systems.

As the paper references, cellular phones and other electronic devices (including entertainment systems such as DVD players and positioning and mapping equipment) are currently available as after-market equipment and can be used by passengers with minimal risk. We understand that the Department is seeking feedback on various scenarios, which may include regulatory initiatives that could require the disabling of access to entertainment systems, telecommunication or other telematics devices while one's vehicle is in motion. Unfortunately, it is not clear how such a restrictive scenario could be proposed to regulate

[13] Canadian Automobile Association, Statement of Policy 2002-2003, Recommendation 4.11.1, (O-89,R-01) , p.13

after-market telecommunications equipment such as cellular phones. Furthermore, the CWTA submits that use of telematic devices by passengers would likely not affect driver distraction and therefore questions the practicality of such a restriction.

We would caution the Department in considering proposals that would contravene existing Federal regulations such as Industry Canada's public policy statement published in the Canada Gazette[14] announcing that it will no longer authorize the use of jamming devices. Industry Canada held a public consultation on this issue in order to determine the public interest in broadening the use of radio frequency jamming devices. "Jammers" or "cellphone silencers" are capable of interfering with, or blocking cellular, radio and personal communications services. They can also eliminate the ringing and/or operation of cellphones in a variety of public and private environments.

Some of the major reasons behind Industry Canada's conclusion included public concerns that the use of these "jammers" or "cellphone silencers" could affect public safety, such as 9-1-1 calls; impede personal freedoms (for example, the inability to receive important phone calls); and impair communications for law enforcement and security agencies.

Transport Canada's study does, however, highlight that further research and education initiatives should be implemented to learn more about driver distraction and to sensitize Canadians to this important issue. **CWTA supports these recommendations.**

Section 8.3.3 Regulate the JAMA Guidelines

Question 7: Should a regulation be made requiring manufacturers to follow JAMA guidelines?

RESPONSE:

JAMA guidelines include the concept of limiting moving pictures or images, scrolling displays and quantity of display characters. This may help reduce driver distraction, but this assumes that technology is static and new enhancements such as text-to-speech and speech recognition do not become readily available. As such, if JAMA guidelines were converted into mandatory requirements, future technology enhancements that may actually increase traffic safety and convenience may be barred from entering vehicles. As well, as noted earlier, there would appear to be no potential safety risk associated with functionality that is utilized by passengers and, therefore, passenger-related functionality should not be precluded by any restrictions that may be imposed by the Department.

Section 8.3.4 Regulate Safer Limitations on Visual Distraction

Question 8: Should manufacturers be required to limit the total glance time away from the road and maximum glance duration for in-vehicle tasks?

RESPONSE:

[14]Canada Gazette, Her Majesty the Queen in Right of Canada, Notice No. DGTP-005-02**,** Published by the Queen™s Printer for Canada, Saturday, June 22, 2002; Vol. 136, No. 25, p.1914

The CWTA wonders if this may be possible, given different people take different amounts of time to accomplish in-car tasks. More research is required into this and other driver actions. It is up to the driver to maintain concentration on the road ahead, as promoted in CWTA-sponsored consumer messages.

Section 8.3.5 Regulate Open Architectures, Configurable Interfaces and Multifunction Interfaces.

Question 9: Should Transport Canada make a regulation requiring manufacturers to prohibit the use of open architectures and configurable interfaces and set limits on the design and number of functions available through multifunction interfaces on telematics devices?

RESPONSE:

A regulation that requires manufacturers to prohibit the use of open architectures and configurable interfaces, and set limits on the design and number of functions available through multifunction interfaces on telematics devices, would possibly not help the objective of limiting driver distraction. Such prohibitions of use of open architectures and configurable interfaces would prevent the safety benefits of such architectures and interfaces developed internationally from entering Canada. For example, "sudden stop" sensors, environmental controls, weather and environment warnings, and road friction sensors may be consequentially barred. Further, such prohibitions would hinder economies of scale, further limiting the roll-out of such safety devices. Also, a prohibition or limit of technology may not be applicable to driver distraction. For example, passengers that are not engaged in driving the vehicle may be distracted from watching the road, without negative consequences. Passengers engaged with an infotainment or a navigational device may be less likely to distract the driver with conversation, and may indeed assist with the process of operating a motor vehicle. Further, drivers may benefit from tasks completed by automatic devices that utilize open architectures, configurable interfaces, and multifunction interfaces.

Section 8.4 Other Regulatory and Non-Regulatory Initiatives

Question 10: Are there any suggestions for other regulatory initiatives, including provincial/territorial restrictions on driver behaviour, or non-regulatory initiatives that could be explored to limit the risk of collisions caused by driver distraction from telematics devices?

RESPONSE:

Driver safety is an objective that our industry has always made a top priority. It is a goal that is challenged by a broad range of driver distractions. As an industry, we are always willing to discuss the important issues the Department has raised and we are also interested in the views of other stakeholders on this issue.

We believe that legislating a ban on a particular distraction is not in the public's best interest, and unlikely to increase road safety. We believe that existing provincial Highway Traffic Acts allow police to charge drivers who are driving without due care and attention, which helps to mitigate such behaviour. As noted above, CWTA strongly supports a

comprehensive educational campaign that would address the full range of distractions facing drivers and provide useful tools for dealing with them. We believe that initiatives that focus on such education will ultimately be the most practical and most effective measures for reducing driver distraction.

Distractions have always been a factor in the safe operation of motor vehicles and they were actually discussed as early as 1913 with the invention of the windshield wiper, when people argued that their rhythm would hypnotize drivers.

During the past century, a host of innovations designed to enhance motorists' comfort, safety and convenience drew negative response until their benefits were understood and people learned to incorporate them in a responsible manner. Mobile phones and telematics devices are only two of many activities that may play a role in driver distraction. The challenge before us is to maximize the benefits and reduce the possible distractions associated with their use.

As noted above, definitive research is one of the reasons why the CWTA has long advocated an educational approach to dealing with this issue. Various academic and safety institutions, such as the University of Montreal's Centre for Transportation Research, the Canada Safety Council, the American Automobile Association (AAA) Traffic Foundation, and various police organizations across the country, advocate education or further law enforcement of existing driver distraction legislation for delinquent drivers.

In section 8.4 - *Other Regulatory and Non-Regulatory Initiatives* of the consultation document - the Department references Canadian legislation currently in place or being considered for limiting driver distraction from in-vehicle telematics devices. The paper proposes the introduction, within provincial/territorial jurisdictions, of restrictions that would focus on driver behaviour. The Department references the example of specific driver distraction legislation that is specifically tailored to restrict/ban drivers from using handheld and hands-free cellular phone apparatus while driving. As we have stated earlier, we question the appropriateness of the consultation paper's linkage to cellular phones while defining in-vehicle telematics.

In partnership with other leading safety organizations, we have long taken the initiative to educate Canadians about using their mobile devices responsibly.

But this issue isn't simply about using a wireless phone while driving. It's about a myriad of potential driver distractions. For example, several recent studies have been conducted into what types of distractions causes automobile crashes. These include comprehensive research investigations conducted by the State of Pennsylvania and the American Automobile Association (AAA) and Saskatchewan General Insurance (SGI).

A report prepared and published in December 2001 by the Commonwealth of Pennsylvania Joint State Government Commission on Driver Distractions and Traffic Safety found that of all crashes in Pennsylvania reported to police during 1999-2000, only 0.4% of these crashes involved cell phone related distraction. With this extensive data in hand, members of the Pennsylvania State Senate and House of Representatives abandoned proposed legislation that promoted a ban on the use of cellular phones while driving.

Furthermore, the AAA commissioned a study (Phase I) to the University of North Carolina that found that drivers were most frequently distracted by something outside their vehicle (29.4%), followed by adjusting a radio or CD player (11.4%). Other specific distractions included talking with other occupants (10.9%), adjusting vehicle or climate controls (2.8%), eating or drinking (1.7%), cell-phone use (1.5%) and smoking (0.9%).

Both studies found that 20 to 30 per cent of driver distractions that cause accidents are external – meaning that an object, person or incident outside of the car was the source of the distraction.

Cellphone use was identified as a minimal source of overall total driver distractions in both the AAA and the State of Pennsylvania studies.

In August 2003, the AAA and researchers at the University of North Carolina released "Phase II" of the study, entitled *Distractions in Everyday Driving*[15], which used in-vehicle mini-video cameras to record the driving habits of 70 drivers for one week. In brief, two cameras were aimed inside the vehicle at the driver and front seat area, while a third was aimed outward straight ahead of the vehicle. The cameras were connected to a VCR, and as the driver engaged in various activities while driving, the cameras and VCR recorded any effects on driver performance - such as whether one or both of the driver's hands ever left the steering wheel and for how long, whether the driver's eyes were directed outside or inside the vehicle, and whether the vehicle wandered in the travel lane or braked suddenly. The researchers randomly selected three hours to view these drivers' behaviour and found that all 70 motorists studied were distracted at some point during the three-hour period. Researchers estimated that drivers were distracted 16.1 per cent of the time while their vehicles were in motion.

Moreover, the results were consistent with those of Phase I in terms of the comparative position of cellular phones as a potential source of driver distraction, relative to other activities. In short, drivers spent the most time eating and drinking while driving (including preparing to eat and drink, and holding food in one's hands). The drivers spent significantly less time using cellular phones while driving.

The study found that most drivers fiddled with their radios or were engaged in other distracting behaviour, even when they knew that they were being watched as part of a study on distracted drivers. The study considered a wide range of behaviours to be distracting, including talking to passengers. Seventy-seven per cent of drivers were seen having conversations while driving. The study did find that cell phones were not the major distraction. Only 30 per cent of the subjects used a cell phone while their vehicle was moving, compared with 97 per cent who leaned over to reach for something and 91 per cent who fiddled with radio controls.

Perhaps even more important than these findings, the study also found that the occurrence of driver distractions varied depending upon whether the vehicle was stopped or

[15] Jane Stutts, John Feaganes, Eric Rodgman, Charles Hamlett, Thomas Meadows, Donald Reinfurt, Distractions in Everyday Driving, University of North Carolina at Chapel Hill Highway Safety Research Center, AAA Foundation for Traffic Safety, June 2003

moving. That is, drivers were more likely to limit their engagement in certain potentially distracting activities to a time when their vehicle was stopped. Such activities included reading and writing, manipulating vehicle controls, and dialling on cellular phones and conducting cellular phone conversations.

Some observers have publicly stated that studies, such as the ones undertaken by the AAA and University of North Carolina, were critical to better grasp the extent of driver distraction. The study also suggested in its conclusions that States begin including a section dedicated to distracted driving in driver education manuals. It should be noted that various provincial driver education manuals already include such sections.

Activity	Percent of subjects	Percent of total time
Reaching, leaning	97.1 %	3.8
Fiddling with radio	91.4 %	1.4
Conversing	77.1 %	15.3
Eating, drinking	71.4 %	4.6
Grooming	45.7 %	0.3
Dealing with passengers (including children)	44.4 %	0.9
Reading, writing	40 %	0.7
Using cell phone	30 %	1.3
Smoking	7.1 %	1.6

Source: AAA Foundation for Traffic Safety

Canadian Perspective:

From a Canadian perspective, a recent report published by Saskatchewan General Insurance (SGI) - which examined 16,183 police-reported accidents from January 1, 2000 until December 31, 2001 where the police cited inattention or distraction as a contributing factor - stated that 17% of those accidents were accounted to driver distraction.

Like the two US studies referenced earlier, this SGI study highlighted that an outside object or person accounted for approximately 32 % of accidents in which driver distraction played a role. Individuals who were attempting to use or were using a cellular phone accounted for only one per cent of these incidents.

Therefore, we feel the most important finding from this new research is the fact that it is an aggregate of all distractions that pose a risk to motorists. Educating drivers about ALL sources of distraction is the key to keeping our roadways safe.

As referenced in the Consultation Document, in the spring of 2002 cell phone restricting legislation was presented before the Provincial Legislative Assembly of Alberta, was debated and voted against by members of the Legislature. After the outcome of this vote, Alberta's Premier Ralph Klein raised his concern over the debate and outcome of the vote and asked the Department of Transportation to review the status of legislation in the Province as it relates to cell phone use while driving. The Premier was reassured by government officials that current Alberta laws dealt with the issue of driver distraction, of which the usage of cellular phones was deemed a possible contributory distraction.

Therefore, with this new reassurance, Premier Klein stated publicly his comfort with the current status quo.

We would also note that provincial Highway Traffic Acts across the country allow police officers to charge drivers who are driving without due care and attention.

Ontario's former Minister of Transportation, the Honourable Norm Sterling, announced on February 24, 2003 that recently compiled statistics indicated that Ontario now ranked as having the safest roads in North America. The 2001 Ontario Road Safety Annual Report (ORSAR) determined that Ontario had a steady and positive downward trend in fatal collisions for the 13th year in a row, despite an increasing number of drivers and vehicles. This decrease is of further significance, having occurred during a period with a dramatic increase in the number of wireless phone users. As Minister Sterling publicly stated: "This success is a result of determined efforts by the government and our many road safety partners to continuously improve driver behavior, enforce the law and enhance highway infrastructure."[16]

Since 1995, the Ministry of Transportation of Ontario has worked with more than 100 groups and has invested over $6.3 million on road safety public education initiatives to raise awareness about the dangers of speeding, following too closely, making frequent and improper lane changes, etc. CWTA would suggest that public awareness campaigns can change driver behavior and improve safety on our roads. That is what we have chosen to do: educate and create awareness of potential dangerous driver behavior.

As well, the Canadian experience with marketing programs designed to promote social responsibility – such as recycling and energy conservation – proves that Canadians, provided with the right information, will do the right thing – willingly.

As the Department can appreciate, Canada's wireless industry has indeed made safety our most important call. Making sure that Canadians know and understand the importance of driving responsibly is a serious issue to us.

We have taken an active role in partnering with other safety and transport organization to address this issue. We have put our resources to excellent use by investing in a comprehensive education and communications program about all aspects of driving responsibly.

Most important of all, our efforts are paying off. Based on the feedback we have received from our customers, they're taking notice, heeding our advice and driving responsibly.

A combination of existing laws, increased driver education and proper usage and application of emerging technologies will surely make a real difference and improve safety. CWTA believes that distracted driving is one of those issues that would benefit from the combination approach.

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[16] The Honourable Norm Sterling, Press release, Ministry of Transportation of Ontario, Queen's Printer for Ontario, February 24, 2003