

Study Group on Apportionment of Responsibility Among Multiple Parties in Traffic Accidents Involving Advanced Cruise-Assist Highway Systems -Report (Summary)-

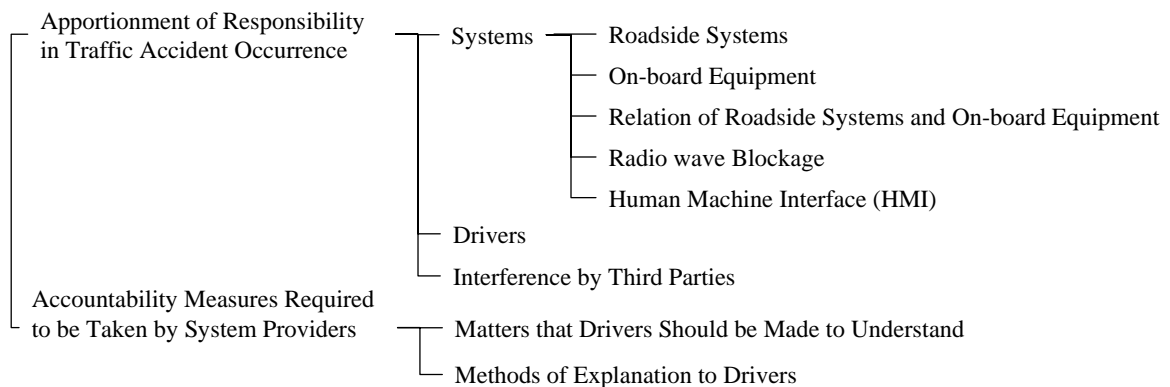
I . Purposes

- To organize the understanding of how civil responsibility and liability are to be apportioned among road administrators, on-board equipment manufacturers, and the driver in the event that an accident is caused by a driver using the advanced cruise-assist highway system
- To study measures for obtaining the understanding of drivers concerning the system characteristics and methods of use

II . Assumptions Underlying This Report

- It was assumed that systems would be installed at curves with poor visibility and other such locations prone to traffic accidents and offer a service that allows drivers a margin of time in which to perceive a situation and make a judgement.
- It was assumed that roadside systems would be developed by road administrators and that on-board equipment would be manufactured by private manufacturers and provided on the market.

III . Main Configuration



IV . Apportionment of Responsibility Among Multiple Parties in Traffic Accidents

1 . Responsibility of Road Administrators in Cases When Possible Contributory Factors are in Roadside Systems

(1) Factors and forms of traffic accidents studied

- Non-provision of information and provision of mistaken information due to performance

limits for design and technical reasons or due to deterioration of performance following installation

- In the Event of Non-Provision of Information: On-board equipment provides no information even though a dangerous condition actually exists and then traffic accident may occur in connection with that dangerous condition (includes dangerous conditions caused by location, speed, etc. of the subject vehicle; this explanation applies to all dangerous conditions below).
- In the Event of Provision of Mistaken Information: On-board equipment provides information that a dangerous condition exists even though a dangerous condition actually does not exist and then traffic accident may occur as a result.

(2) Conclusion

1) Related Measures (measures related to improvement of safety and to apportionment of responsibility)

Make it possible for drivers to understand in advance that advanced cruise-assist highway systems provide information first and foremost for reference in driving, and that drivers must take responsibility themselves for driving safely even when in a service zone.

Make it possible for drivers to understand in advance the possibility that non-provision of information and provision of mistaken information may occur, and to know when there is a higher likelihood of this happening.

Regarding provision of mistaken information: Make it possible for drivers to understand in advance that information provision is timed to allow adequate time for ordinary braking, and that it is therefore possible for drivers to respond without having to apply the brakes suddenly.

Regarding non-provision of information: Display signs to make drivers understand that a road section necessitates careful driving because of the possibility that dangerous conditions will arise, and that this is so even when the system has determined that no dangerous conditions exist.

2) Apportionment of Legal Responsibility

The responsibility for defect of road administrators exist when there is a defect in road establishment or management and a reasonable causation is found between the defect and the accident.

【Elements of the Judgement of Defect】

- A judgement of defect is not necessarily made directly in the event of non-provision of information or provision of mistaken information. The surrounding environment is taken into account, including the specific road structures, road traffic conditions, and other such circumstances in the surrounding environment within the applicable service zone at the time an accident occurs, and the existence of defect is judged by the three measures of foreseeability (whether the road administrator could have foreseen that an

accident would occur), avoidability of the result (whether the road administrator could have taken measures to avoid occurrence of an accident), and expectability (whether establishment and management were at the level that should have been expected in terms of the possibility of avoidance of danger by the injured party).*

[Foreseeability and avoidability of the result]

- It is conceivable that a court would find it non-foreseeable or the result non-avoidable in cases when roadside systems have been appropriately maintained and managed, and when related measures have been adequately taken.

[Expectability]

- Judgement is likely to find lack of defect in cases when it is fully possible for drivers to recognize danger, make a judgement and avoid it for themselves in light of the specific road structures, road traffic conditions, and other such circumstances in the surrounding environment within the service zone in question at the time an accident takes place, so long as appropriate maintenance and management of roadside systems and measures to improve safety have been adequately implemented.

[System serviceability]

- It is also possible that a comparative weighing of the extent of the serviceability of systems and the risk of accidents that are extremely unlikely to occur would have an influence on the judgement as to the existence of a defect or otherwise.

【Reasonable causation】

- There will be a finding of no responsibility for defect if, regardless of whether defect exists or otherwise, it is judged that a reasonable causation does not exist between non-provision of information or provision of mistaken information and an accident. When reaching a judgement as to whether reasonable causation exists, it is likely that whether or not non-provision of information or provision of mistaken information had an influence on driver's recognition and judgement and that the circumstances of the driver's recognition, judgement, and maneuvers to avoid accident in the period before an accident occurs will be taken into account.

【Comparative Negligence】

- Even if a road administrator is judged to have responsibility for defect, the amount of compensation is considered subject to reduction according to comparative negligence, in the event the driver has been careless in some way in connection with the occurrence of an accident.

*According to the objectivity theory, the existence of defect or otherwise is judged only by the measure of expectability.

2 . Responsibility of On-board Equipment Manufacturers in Cases When Possible Contributory Factors are in On-board Equipment

(1) Factors and forms of traffic accidents studied

- Non-provision of information and provision of mistaken information due to performance limits for design and technical reasons or due to deterioration of performance following delivery
- In the Event of Non-Provision of Information: On-board equipment provides no information even though a dangerous condition actually exists and then traffic accident

may occur in connection with that dangerous condition.

- In the Event of Provision of Mistaken Information : On-board equipment provides information that a dangerous condition exists even though a dangerous condition actually does not exist and then traffic accident may occur as a result.

(2) Conclusion

1) Related Measures (measures related to improvement of safety and to apportionment of responsibility)

~ : Refer to . 1. Roadside Systems.

Make it possible for drivers to understand in advance how incorrect handling can cause malfunctions, deteriorated performance, and so on, of on-board equipment.

2) Apportionment of Legal Responsibility

Product liability of on-board equipment manufacturers arises when products are defective and reasonable causation exists between the defect and the accident.

【Elements of the Judgement of Defect】

- A judgement of defect is not necessarily made directly in the event of non-provision of information or provision of mistaken information. The judgement of defect will take into account (a) the special characteristics of the product in question, (b) the patterns of ordinary usage that are foreseen, (c) when the product was delivered, and (d) other circumstances.
- More specific elements of judgement include the following:
The labeling of that product, the probability of occurrence of damage and its extent, and the possibility of prevention of damage by the user of the product, and so on
[Perspective of Product Labeling and of the Probability of Damage and Its Extent]
 - The implementation of related measures can be expected to be taken into consideration when judging whether a defect exists or otherwise, so appropriate implementation of such measures is required as a result.
[Perspective of Possibility of Prevention of Damage by the Users of the Product]
 - Judgement is likely to find lack of defect in cases when it is fully possible for drivers to recognize danger, make a judgement and avoid it for themselves in light of the specific road structures, road traffic conditions, and other such circumstances in the surrounding environment within the service zone in question at the time an accident takes place, so long as measures to improve safety have been adequately implemented.

【Reasonable causation】

- There will be a finding of no product liability if, regardless of whether defect exists or otherwise, it is judged that there is no reasonable causation between non-provision of information or provision of mistaken information and an accident. When reaching a judgement as to whether reasonable causation exists, it is likely that whether or not non-provision of information or provision of mistaken information had an influence on driver's recognition and judgement and that the circumstances of the driver's recognition, judgement, and maneuvers to avoid accident in the period before an accident occurs will be taken into account.

【Comparative Negligence】

- Even if the manufacturers of on-board equipment are judged to be subject to product liability, the amount of compensation is considered subject to reduction according to comparative negligence, in the event the driver has been careless in some way in connection with the occurrence of an accident.

3 . Relation of Roadside Systems and On-board Equipment

(1) Responsibility of On-board Equipment Manufacturers in Cases When Possible Contributory Factors are in Roadside Systems

- Information is provided to the driver by means of the on-board equipment, so that this is not considered to mean that on-board equipment manufacturers will at once be found to be not responsible for the reason that the causal factors are not in the on-board equipment itself. However, it is conceivable that product liability will be judged not to apply if the related measures are adequately implemented in light of the possibility of non-provision of information or provision of mistaken information due to possible contributory factors in the roadside systems.
- When it is judged that the road administrators and the manufacturers of on-board equipment bear responsibility, both parties are considered to bear joint responsibility to the injured party.
- In this case, their apportionment will be determined by the extents of their respective negligence and the extents to which they contributed to the damages incurred. Even if a driver claims payment from one of the parties committing the unlawful act for compensation in excess of that party's negligence or contribution to the damages, that party must comply. In that case, however, the party will be able to file for recovery of that portion that was in excess from the other party that committed the unlawful act.

(2) Responsibility of Road Administrators in Cases When Possible Contributory Factors are in On-board Equipment

- Information displayed by on-board equipment could be considered to be information related to road management in the same way as the information displayed on road information boards, which are public installations. It is thought, therefore, that road administrators will not necessarily be at once found not responsible for the reason that causal factors are not in the roadside systems themselves. However, it is conceivable that product liability will be judged not to apply if the related measures are adequately implemented in light of the possibility of non-provision of information or provision of mistaken information due to possible contributory factors in the on-board equipment.
- When it is judged that the road administrators and the manufacturers of on-board equipment bear responsibility, both parties are considered to bear joint responsibility to the injured party.
- In this case, their apportionment will be determined by the extents of their respective negligence and the extents to which they contributed to the damages incurred. Even if a driver claims payment from one of the parties committing the unlawful act for compensation in excess of that party's negligence or contribution to the damages, that party must comply. In that case, however, the party will be able to file for recovery of that portion that was in excess from the other party that committed the unlawful act.

(3) Responsibility of Both Parties in Cases When It is Not Determined Whether the Factors Related to Occurrence of an Accident are in Roadside Systems or in On-board Equipment

- In the event that an accident occurs as the result of some kind of influence on a driver exerted by non-provision of information or provision of mistaken information, but it is not determined whether the possible contributory factors for the non-provision of information or provision of mistaken information are in roadside systems or in on-board equipment, then the joint unlawful act provided for in Article 719, Paragraph 1 of the Civil Code will be considered to apply and both parties will be considered to bear joint responsibility. However, in the event that appropriate maintenance and management of roadside systems and related measures were adequately implemented, it is considered to be judged not to bear responsibility for defect and not to subject to product liability.
- When apportioning responsibility between the road administrators and the manufacturers of the on-board equipment in cases when it is not determined whether the possible contributory factors are on one side or the other, it is not considered possible to decide the respective amounts of negligence and the respective contributions to the damages incurred. Therefore, the responsibility will be apportioned equally. Even if a driver claims payment from one of the parties committing the unlawful act for compensation in excess of an equal proportion of the responsibility, that party must comply. When this happens, however, the party will be able to file for recovery of that portion that was in excess from the other party that committed the unlawful act.

4 . Responsibility of Road Administrators and On-board Equipment Manufacturers in Cases When Radio Wave Blockage occurs

(1) Related Measures (measures related to improvement of safety and to apportionment of responsibility)

Make it possible for drivers to understand in advance that cruise-assist systems provide information first and foremost for reference in driving, and that drivers must take responsibility themselves for driving safely even when in a service zone.

Make it possible for drivers to understand in advance the possibility that non-provision of services may occur due to radio wave blockage, and to know when there is a higher likelihood of this happening.

Make drivers aware when the system status allows reception of services by displaying an indication of some kind when radio waves reach the on-board equipment (make it clear that the absence of any display does not mean that there is no danger, but rather that the system status does not allow reception of services), and also make it possible for drivers to understand that display scheme in advance.

(2) Apportionment of Legal Responsibility

- Even granting that an accident occurs as the result of some kind of influence on a driver exerted by non-provision of service, road administrators will be found not to bear responsibility for defect and the manufacturers of the on-board equipment will be judged not subject to product liability if it is determined that related measures have been adequately taken.

5 . Responsibility of Road Administrators and On-board Equipment Manufacturers in Connection with Human Machine Interface

- According to the condition (understandability of text or voice, timing, etc.) of the information provided by the system, it is possible that this may be a possible contributory factor in the occurrence of a traffic accident even when non-provision of information or provision of mistaken information do not occur. Therefore, adequate consideration is required during the system design process in terms of assuring the level of safety that should ordinarily be provided.
- If, provisionally, the capability for recognition, reaction, and so on of the driver is markedly impaired due to illness or other such reasons, even though consideration of the above kind has been given, and that impairment becomes the possible contributory factor in the occurrence of an accident, then it is thought that the road administrators will be found not to bear responsibility for defect due to failure to take such special circumstances into consideration, and the manufacturers of the on-board equipment will be judged not subject to product liability due to failure to take such special circumstances into consideration

6 . Responsibility of Road Administrators and On-board Equipment Manufacturers in Connection with Misperception or Lack of Knowledge Concerning the Content of the Services on the Part of the Driver

(1) Related Measures (measures related to improvement of safety and to apportionment of responsibility)

Make it possible for drivers to understand in advance that advanced cruise-assist highway systems provide information first and foremost for reference in driving, and that drivers must take responsibility themselves for driving safely even when in a service zone.

Make it possible for drivers to understand in advance the content of the services, such as the scope of the road traffic circumstances and so on concerning which information is provided.

(2) Apportionment of Legal Responsibility

- Even granting that an accident occurs in connection with misperception or lack of knowledge concerning the content of the services, it is thought that the road administrators will be found not to bear responsibility for defect and the manufacturers of the on-board equipment will be judged not subject to product liability if it is determined that related measures have been adequately taken.

7 . Responsibility of Road Administrators and On-board Equipment Manufacturers in Connection with Interference by Third Parties

- This basically means that the malicious third party will be found responsible for committing an unlawful act. However, in the event that security measures such as encryption of information and so on have not been taken at all. then it is conceivable

that the responsibility for defect of the road administrators and the product liability of on-board equipment manufacturers will be queried. Therefore, it is required that security measures be devised in terms of assuring the level of safety that should ordinarily be provided.

V . Accountability Measures Required to be Taken by System Providers

1 . Matters that Drivers Should be Made to Understand

Types		Subject Matter Headings Conceivable at the Present Stage
Positioning of services and how to use them		<ul style="list-style-type: none"> • That advanced cruise-assist highway systems provide information first and foremost for reference in driving • That drivers must take responsibility themselves for driving safely even when in a service zone
Content of services		<ul style="list-style-type: none"> • Scope of dangerous conditions for which information is provided, etc.
Performance limits of services	a. Possibility of non-provision of services	<ul style="list-style-type: none"> • Possibility that services will not be provided due to radio wave blockage • When there is a particularly high likelihood of radio wave blockage • Regarding radio wave blockage, how to judge whether system status allows reception of services in service zones
	b. Possibility of non-provision of information	<ul style="list-style-type: none"> • Possibility that information will not be provided due to failed detection by sensors, etc. • When there is a particularly high likelihood of non-provision of information
	c. Possibility of provision of mistaken information	<ul style="list-style-type: none"> • Possibility that mistaken information will be provided due to mistaken detection by sensors, etc. • When there is a particularly high likelihood of provision of mistaken information • That information provision is timed to allow adequate time for ordinary braking, and that it is therefore possible for drivers to respond without having to apply the brakes suddenly
Mistaken use causing malfunction		<ul style="list-style-type: none"> • Specify mistaken uses that lead to malfunction of on-board equipment

2 . Methods of Explanation to Drivers

- Methods of explanation to drivers include documentation in instruction manuals and marking on the body of the equipment.
- Instruction manuals for VICS-compatible car navigation systems, ETC on-board equipment, ACC, and ABS contain the explanation, while portions of the manual contents are also marked on the body of the equipment. These may prove useful references when considering methods of explanation to use with advanced cruise-assist highway systems.