
ITS ACTION PLAN

FRAMEWORK SERVICE CONTRACT TREN/G4/FV-2008/475/01

Public Consultation Report Priority Action C - Free Road Safety Traffic Information

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E X E C U T I V E S U M M A R Y

This document is the analysis of the responses to the online public consultation on “The provision of road safety related minimum universal traffic information free of charge to users under the ITS Directive” launched by the Commission in March 2012 on Your Voice in Europe.

In the public consultation, respondents indicate a strong belief that safety related traffic information contributes to road safety. They show broad support for action by the EC to ensure the provision of road safety related traffic information, free of charge, to users across Europe.

Respondents to the public consultation survey strongly support the harmonisation of the means of dissemination, and the definition of a uniform presentation of safety related traffic information to the end-user. There is strong support for RDS/TMC, variable message signs and on-board units, but also majority support for radio, navigation devices and smartphones, and low support for TPEG, mobile phones and specialised web sites. In free text responses to the survey co-operative technology was mentioned various times as a channel that should be included.

The public consultation survey showed that most stakeholders agree that TERN can be considered an appropriate minimum requirement for road network coverage, leaving open the option of coverage of other roads where safety related traffic information is available.

The public consultation survey showed broad consensus for making all private safety related traffic data available to end-users, although opinions differ on the co-operation model.

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1. Introduction

In March 2012, the EC launched a public consultation titled “The provision of road safety related minimum universal traffic information free of charge to users under the ITS Directive“, on Your Voice in Europe.

Your Voice in Europe is the European Commission’s “single access point” to a wide variety of consultations, discussions and other tools which enable citizens and stakeholders to play an active role in the European policy-making process.

The questionnaire contained 30 multiple choice questions, 6 open questions, 3 options to provide additional free text to multiple-choice questions, and the option to upload relevant documents.

The study team has analysed the results of the public consultation with the goal to achieve maximum insight in the results.

2. Methodology and approach

The EC provided the data to the study team in an Excel file, with basic statistics per question.

The analysis dealt with the weighting of the responses of different respondent groups, and representativeness of the responses, and how to take this into account into the analysis.

In the first step of the analysis, double entries were removed. Then all responses were split to the different 'capacities' (answer to question I.1 of the questionnaire) and 'roles' (question I.3) of the respondents. This provided better insight in the differences in opinions of the various stakeholder groups.

Based on the first analysis a regrouping of the responses based on the role was adopted, because:

- In the responses to the question on the role, some options were never selected
- There was quite a high number of 'other' responses (25) to the question on the role.
 - o Some of the 'other' could be allocated to the predefined categories (see column 'responses from 'other'' in the table below)
 - o Some new groups could be identified in the 'other' responses: 4 road safety associations, 6 national ITS associations.
 - o There were also 4 responses from ITS consultants; these were kept in the 'Other' category.
 - o The number of 'Other' responses was thereby reduced to about 8

The resulting classification based on 'role' was then as follows:

Table 1 Definition of roles for the analysis of the public consultation data

Group	Responses	Reponses from 'other'	Use as group
Road operator (public or private)	21	1 Romanian Road Authority	Yes
Service provider (private)	8		Yes
Data provider (public or private)	0		No
Telecommunication and broadcasting sector	1	2 public broadcaster	Yes
Automotive industry	4		Yes
Equipment manufacturer	0		No
Public administration (other than public road operator)	13		Yes
Research and development sector	6		Yes
Standardisation organisation	2		Yes
Certification body	0		No
Emergency and/or rescue service	0		No
Insurance company or association	2		Yes
Users association	17	3 Road transport operators associations 1 ANEC	Yes
Other - Please specify	25		Yes
- Road safety association		4	
- ITS organisations		6	
- ITS Consultants		4	

Results of all questions were then calculated per capacity, and the improved role grouping. The free text responses were analysed manually. Per question, findings were drafted. The most important findings were elaborated in the form of a graph.

3. Respondents

In total 132 people and organisations completed the questionnaire. Figure 1 presents the division of roles of the respondents after regrouping. It shows the sample population provides a good mix of all stakeholders in the traffic information value chain. It should be noted that some of the stakeholder groups identified in the sample population should not be considered fully representative for the full population. E.g. based on the feedback in the free text responses, it is clear that ‘citizens’ in general are ITS professionals that speak for themselves.

Figure 2 presents where organisations are established. The figure shows that in total 21 countries were covered; 19 Member States, plus Switzerland and Israel. 6 organisations responded that indicated they were companies with a European or global focus. It should be noted that various European associations indicated Brussels as the location where they are established. The results therefore are biased for Belgium.

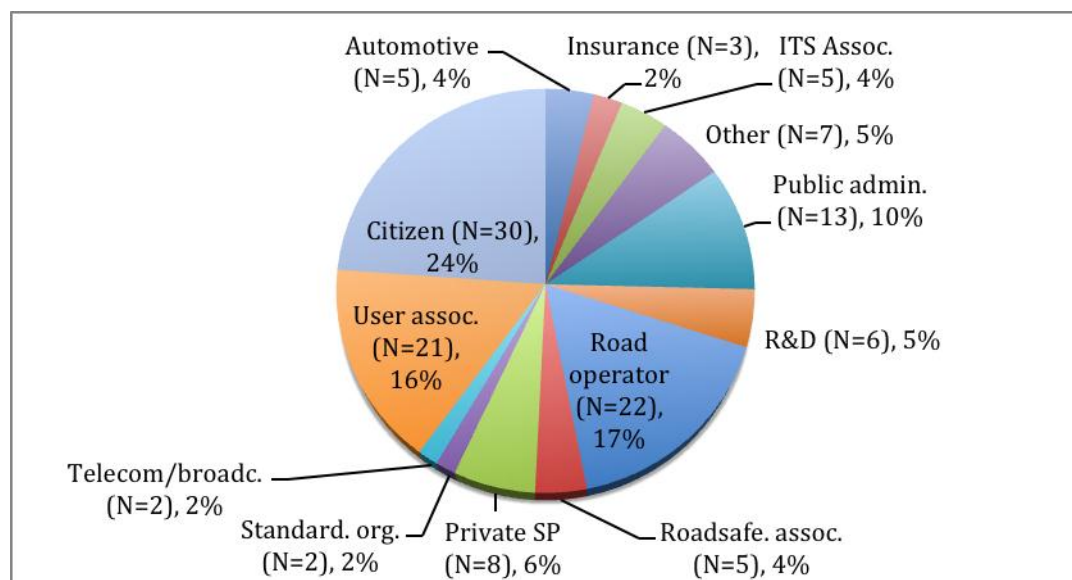


Figure 1 Roles of the respondents after regrouping

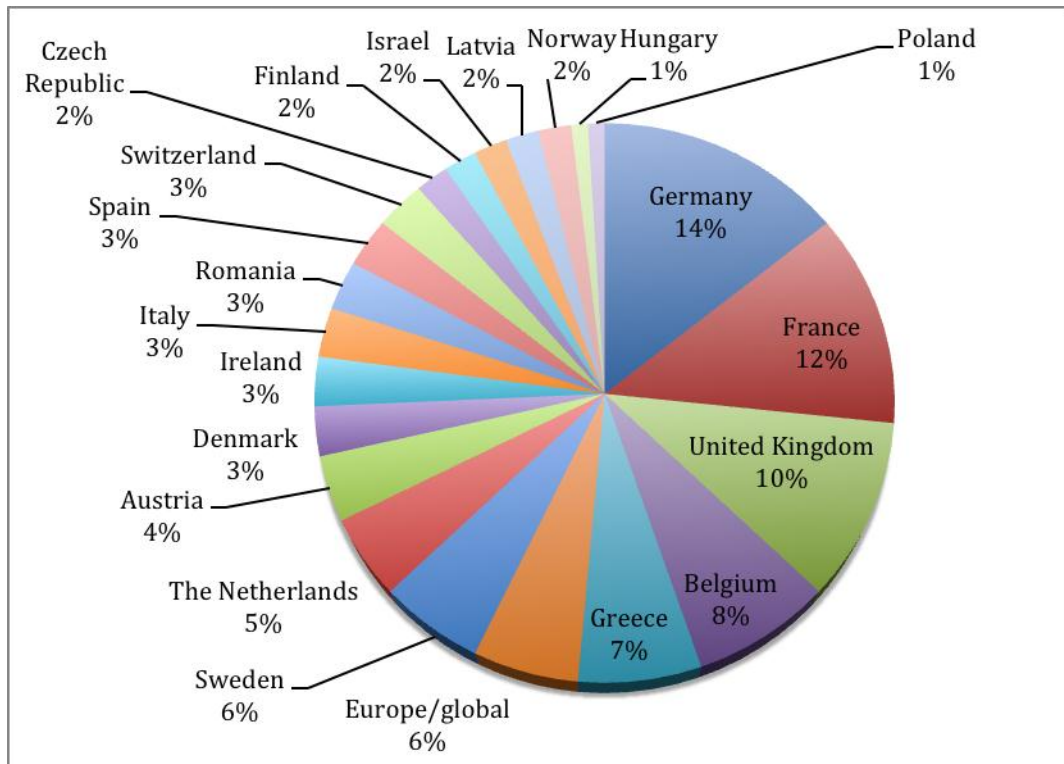


Figure 2 Origin of respondents

4. Results

4.1. Availability of Safety Related Traffic Information

Figure 3 indicates the responses to two questions on the current situation.

- The citizen was asked: “Where you usually drive, is safety related traffic information available today to all road users?”
- The road operators, emergency /rescue services, service providers, and the like were asked “Where you usually operate, is safety related traffic information available today to all road users?”
- All others were asked: “Is safety related traffic information available today to all road users?”

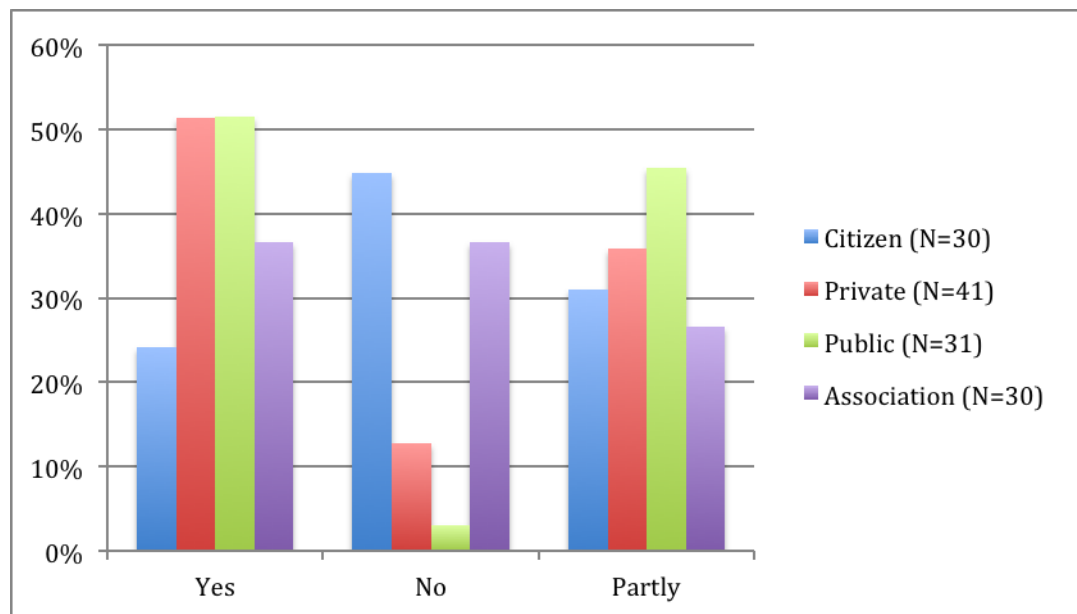


Figure 3 Availability of safety related traffic information.

The figure suggests a division between citizens and associations on the one hand, and private and public organisations on the other hand. Citizens and associations indicate much lower availability than the public and private organisations. Public and private organisations tend more towards ‘partly available’, probably because they are more conscious of the differences in coverage of the different road types in their area.

4.2. Characteristics of Current SRI

Figure 4 combines the results of the questions “Is safety related traffic information ...”

- “Reliable”
- “Easy to understand”
- “Useful”
- “Affecting your own driving / drivers behaviour”

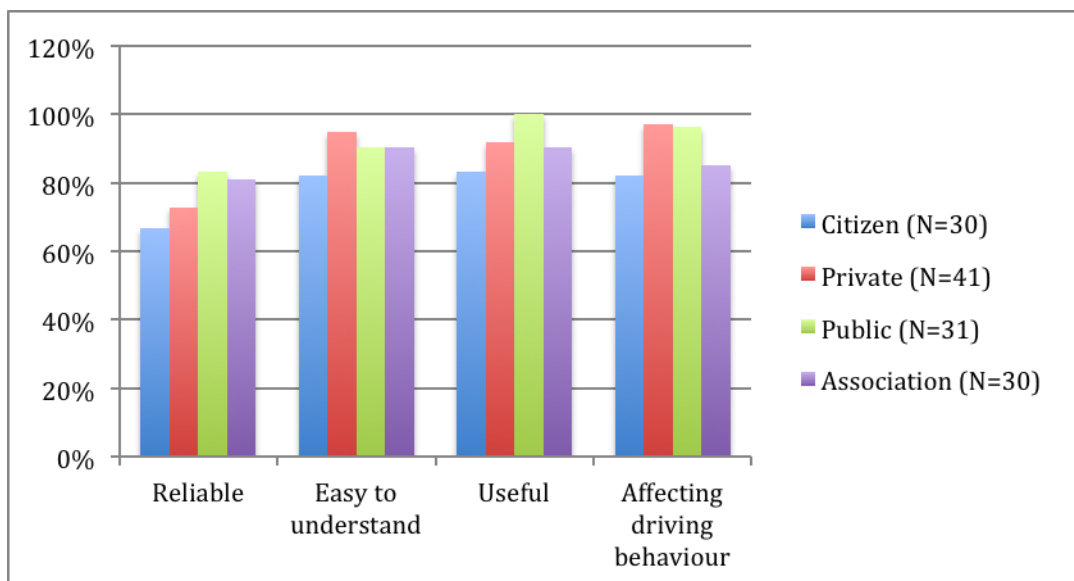


Figure 4 Characteristics of current SRI

The figure demonstrates broad consensus between all groups:

- Reliability needs to be improved
- SRI is easy to understand, useful and is affecting driving behaviour

4.3. Access to and Provision of Traffic Information

Figure 5 presents the response to the question ‘Do you generally have access to traffic information and/or services’? This question was open to all respondents but mainly answered by citizens (27 out of 30) and associations (23 out of 30).

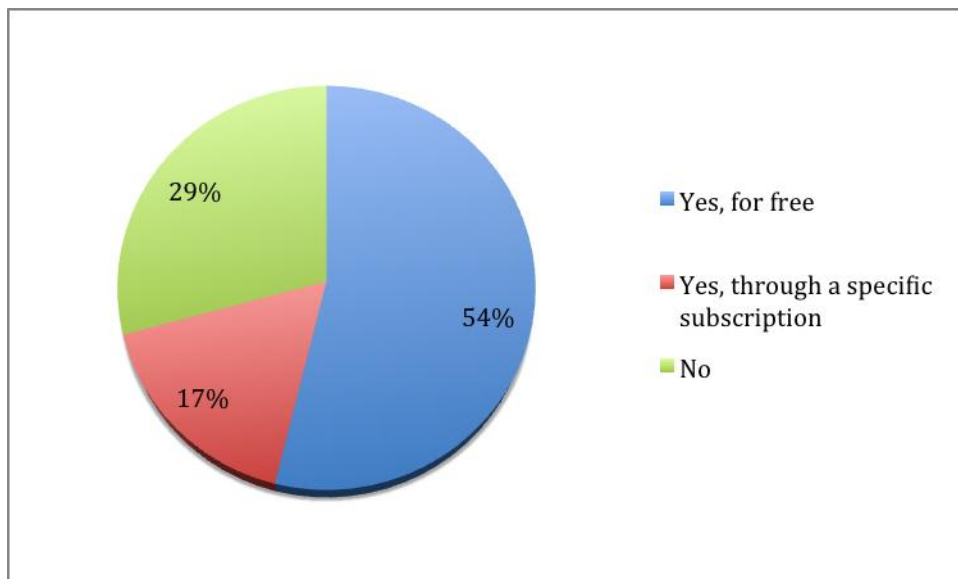


Figure 5 Access to traffic information

About one third of the respondents indicate they have no access to data, about half indicate they have free access to traffic information.

Figure 6 presents the response to the question ‘Do you provide traffic information and/or services’? This question was only open to organisations and not answered by all.

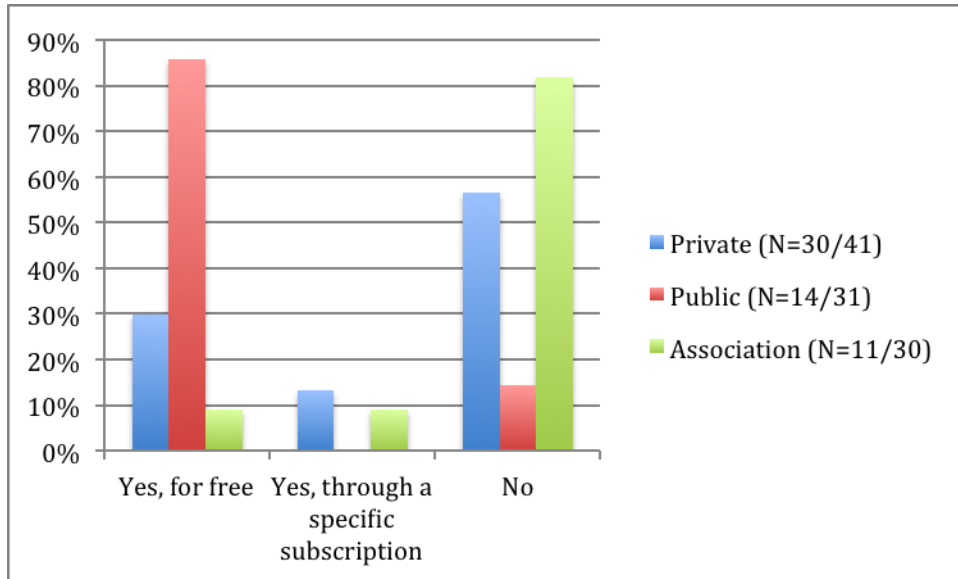


Figure 6 Provision of traffic information

The figure indicates that most traffic information is currently provided for free. Of the 21 road operators that responded, 7 indicate they do not provide traffic information, 14 indicated they provide traffic information for free. Of the 7 private service providers that responded, 4 indicated they provide traffic information for free.

4.4. Importance of Free SRI

Figure 7 indicates the response to the question: ‘It is important to provide free SRI to users across Europe?’

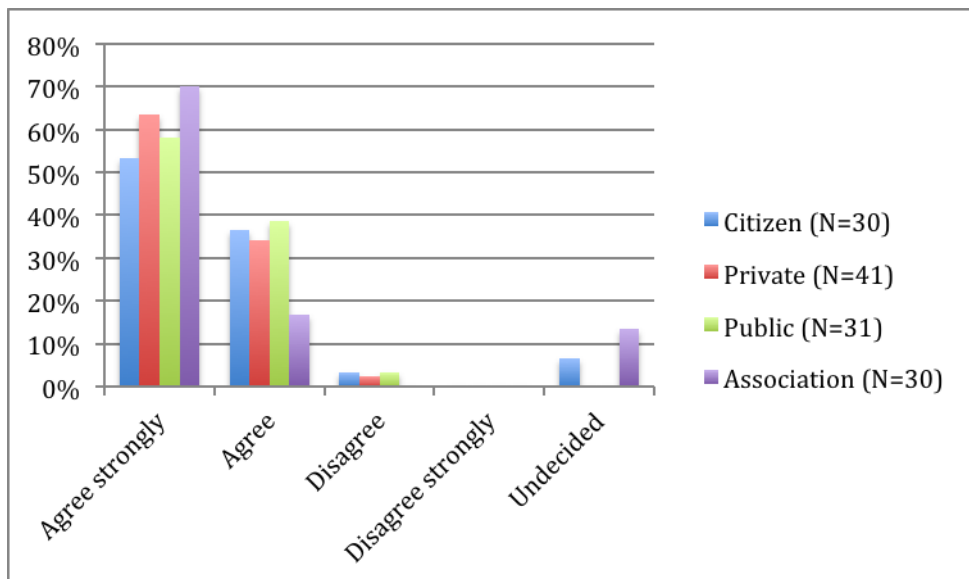


Figure 7 Importance of free SRI

The figure clearly demonstrates a strong support for making safety related traffic information available to EU citizens for free, from citizens, and both public and private organisations.

4.5. Harmonisation

Figure 8 presents the percentage of respondents that either *agreed* or *strongly agreed* to the question “To this aim, it is desirable to:”

- “Harmonise the content of safety messages”
- “Harmonise their means of dissemination”
- “Define a uniform presentation (e.g. pictures, universal language...)”
- “Define a minimum level of reliability”
- “Define an homogenous geographical coverage”
- “Define an organisational framework”

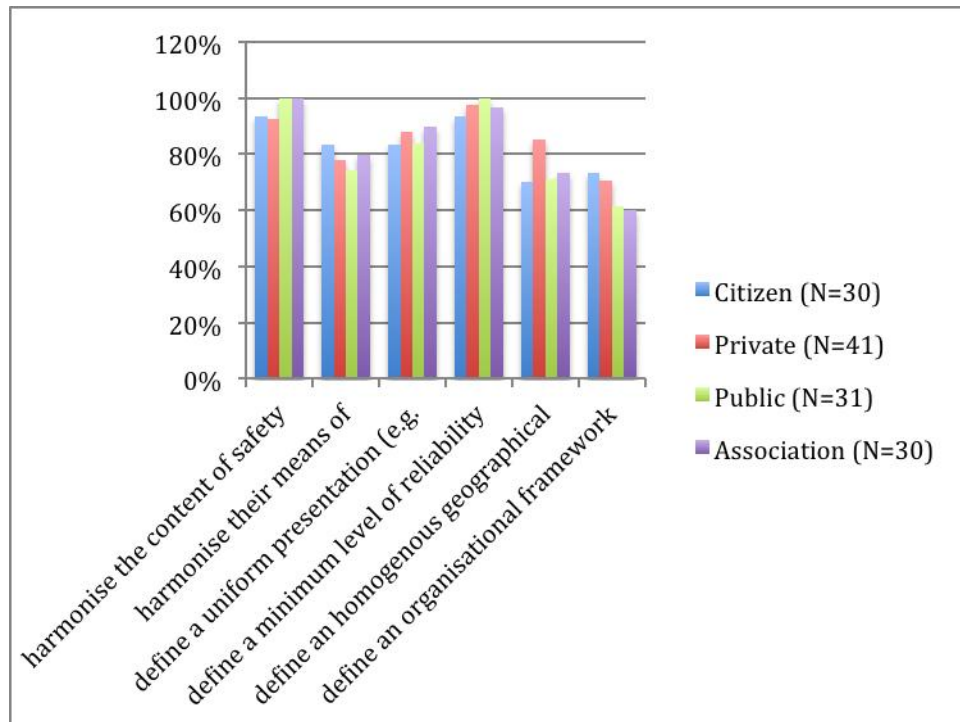


Figure 8 Desired forms of harmonisation

The figure suggests a general consensus on the desired approach towards safety related traffic information. It indicates:

- Very strong support for harmonisation of content and for defining a minimum level of reliability
- Strong support for the harmonisation of the means of dissemination, and the definition of a uniform presentation of SRI
- Support for the definition of a homogenous geographical coverage and organisational framework

4.6. Definition of SRI

Figure 9 presents the results to the question “What SRI should be provided to users in priority?”:

- “Ghost drivers (wrong way drivers)”
- “Dangerous road surface”
- “Danger due to reduced visibility”
- “Animal / people / debris on the road way”

- “Blockage of road / tunnel”
- “Unprotected accident area”
- “Temporary roadwork”
- “End of queue”
- “Adverse weather conditions (e.g. snow storm, flooding, strong wind...)”
- “Abnormal traffic”
- “Equipment or system failure”
- “Other(s) – please specify”

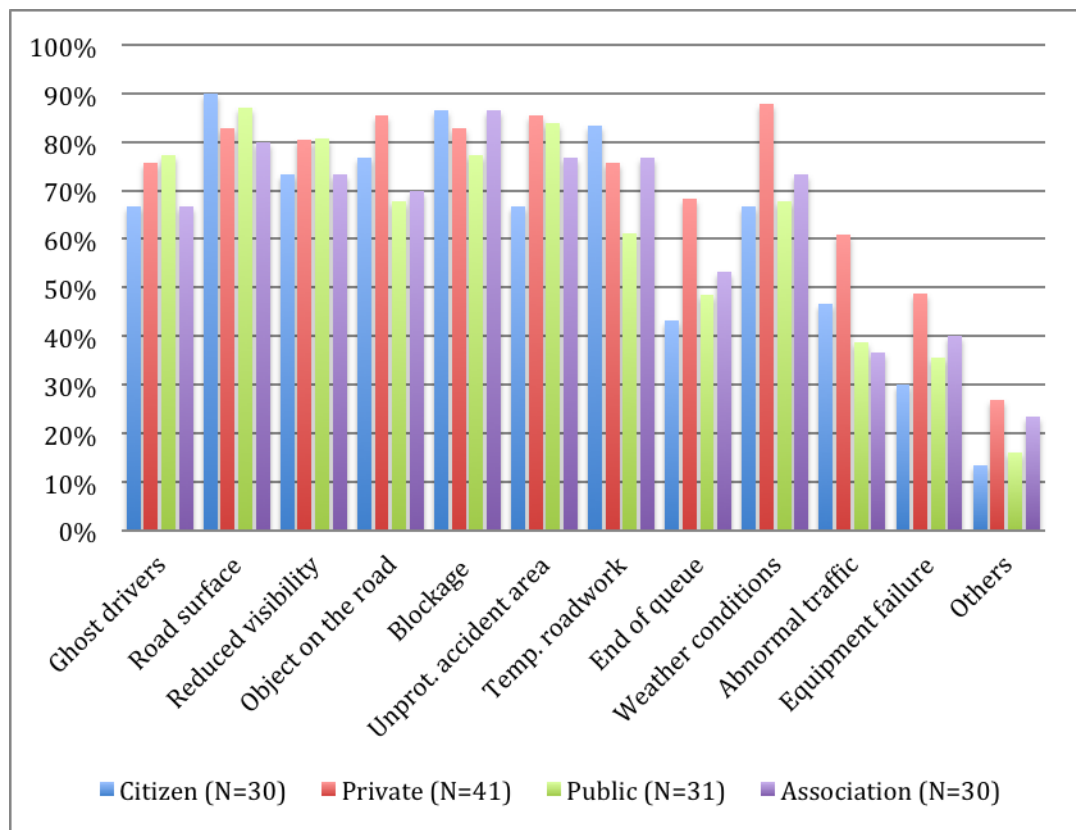


Figure 9 Definition of SRI

The figure suggests there is strong support for first 7 classes and ‘adverse weather conditions’, while the support for ‘end-of-queue’, ‘abnormal traffic’ and ‘equipment failure’ is much lower.

Support for category ‘End of queue’ is about 50%, with private organisations more in favour than public. Figure 10 presents the percentages per ‘role’ of the respondent. Interestingly, while:

- 75% of the private service providers, and 80% of automotive organisations, are in favour of including ‘end-of-queue’ in the definition of safety related traffic information,
- Only 40 to 50% of ITS associations, public administrations, road operators and road safety associations are in favour.

A possible explanation could be that automotive organisations and private service providers do not collect traffic data themselves, and therefore will benefit from more traffic information becoming available for free, allowing them to develop additional business by providing services to their customers.

The low scores for ITS associations, public administrations, road operators and road safety associations might be the result of their interest to protect companies that collect traffic data, and traffic information service providers.

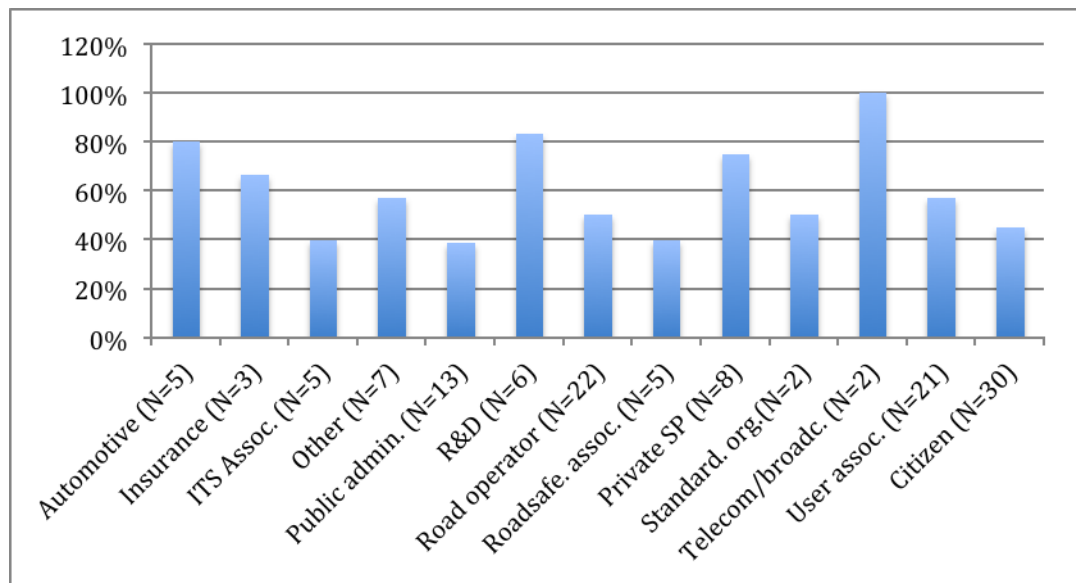


Figure 10 Support for inclusion of 'end-of-queue' in the definition of SRI

The free text responses to the 'other' option produced some interesting suggestions that could be considered as well:

- "Road congestion information, dynamic speed limits, traffic lights information (signal phase)" – car manufacturer
- "Dangerous air conditions (like chemical fire or heavy smog)" – DoT
- "Speed cameras" - citizen
- "Give way to emergency services, detour-information" – Automobile club
- "Overcrowded parking areas (important information for truck drivers)" – logistics company
- "Variable speed limits and lane information" – Public R&D Institute

4.7. Appropriate Channels

Figure 11 presents the responses to the question "What would be the most appropriate channels of communication to provide safety related traffic information to users:"

- "Radio (FM)"
- "Radio (RDS-TMC)"
- "Radio (TPEG)"

- “Variable Message Signs along the road”
- “Onboard unit / GPS”
- “Personal navigation device”
- “Mobile phone communication”
- “Smartphone applications”
- “Specialised websites”
- “Other(s)”

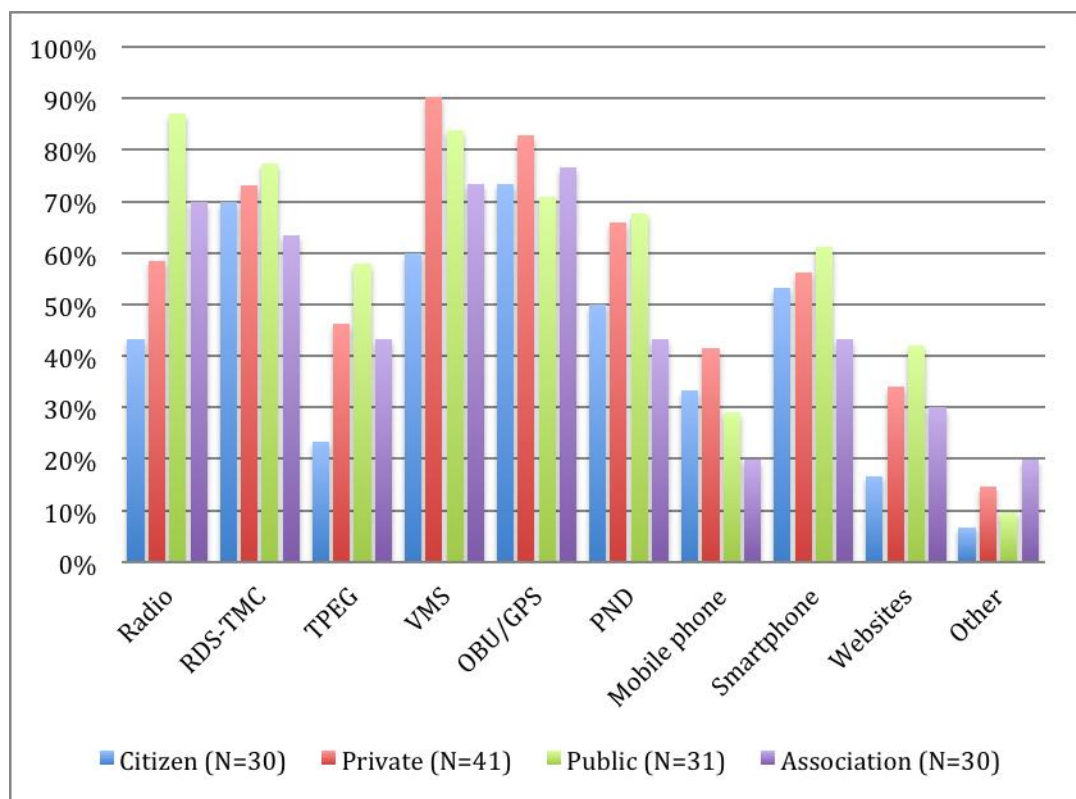


Figure 11 Most appropriate channels

The figure suggests:

- Strong support (>70% on average) for RDS/TMC, variable message signs and on-board units
- Majority support for radio, navigation devices and smartphones

- But with a strong support for voice radio by public organisations.
- Low support for TPEG, mobile phones and specialised web sites
 - The low popularity of TPEG is striking; it might be caused by unfamiliarity as suggested by Figure 12.
 - The distinction between (dumb) mobile phones and smartphones is interesting; the man-machine interface of smartphones probably is considered more suitable

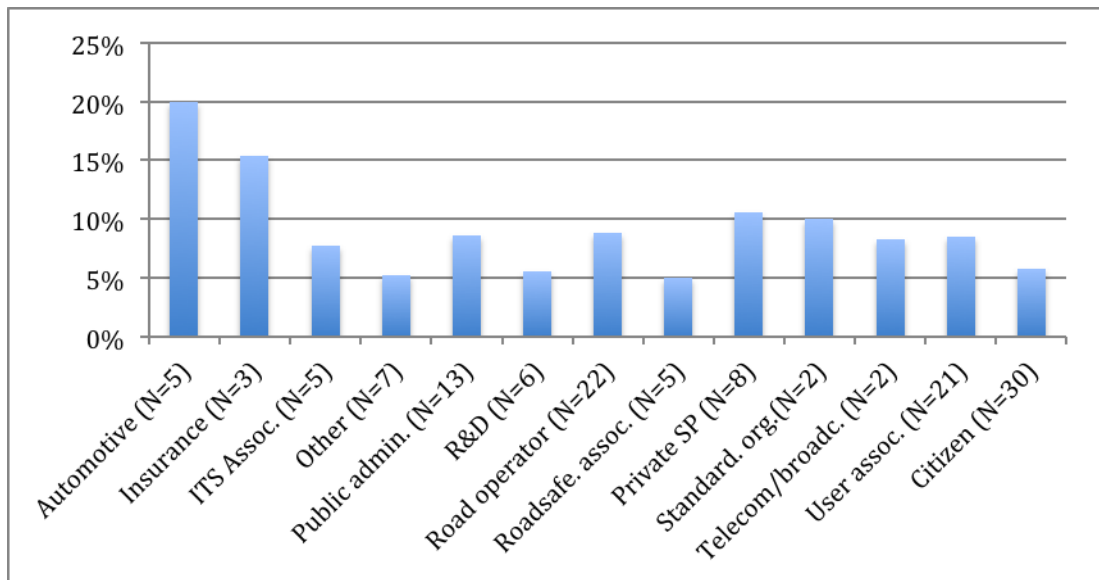


Figure 12 Differing opinions of stakeholders on suitability of TPEG as dissemination channel.

The free text responses to the ‘other’ option produced some interesting suggestions that could be considered as well:

- “RDS-TMC and DSRC” – car manufacturer
- “Car-to-car communication” – Various
- “Streaming internet radio” – ITS Association
- “All methods are appropriate and users should have a choice” – ITS Association, Public R&D Institute
- “The market will decide ...” – ITS Association, IT company

4.8. Preferred Road Type Coverage

Figure 13 presents the respondent’s view on “Where the provision of safety related traffic information to users would be the most valuable:”

- “Along motorways across Europe”
- “Along main roads and urban penetration axes across Europe”
- “Along typical rural roads across Europe”
- “Along urban streets in main European cities”

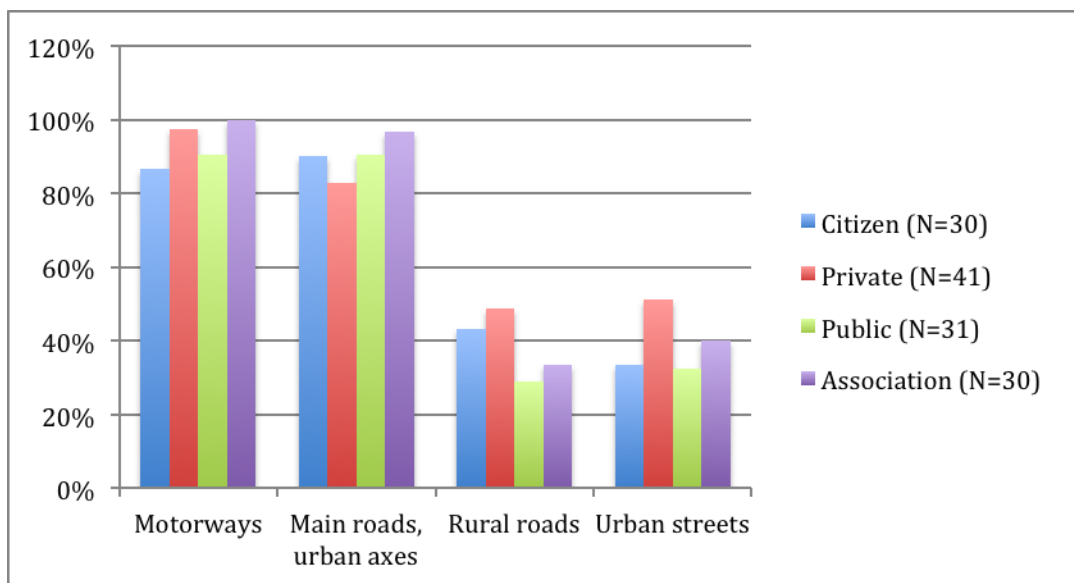


Figure 13 Road type coverage

The figure indicates a general consensus that safety related traffic information will be most valuable on motorways and other main roads and city arteries.

4.9. Disclosing of Safety Related Data

Figure 14 presents the responses to the statement: “Safety related data collected and/or processed by any service provider (public or private) should be made available to other service providers within a given area or along a given network”.

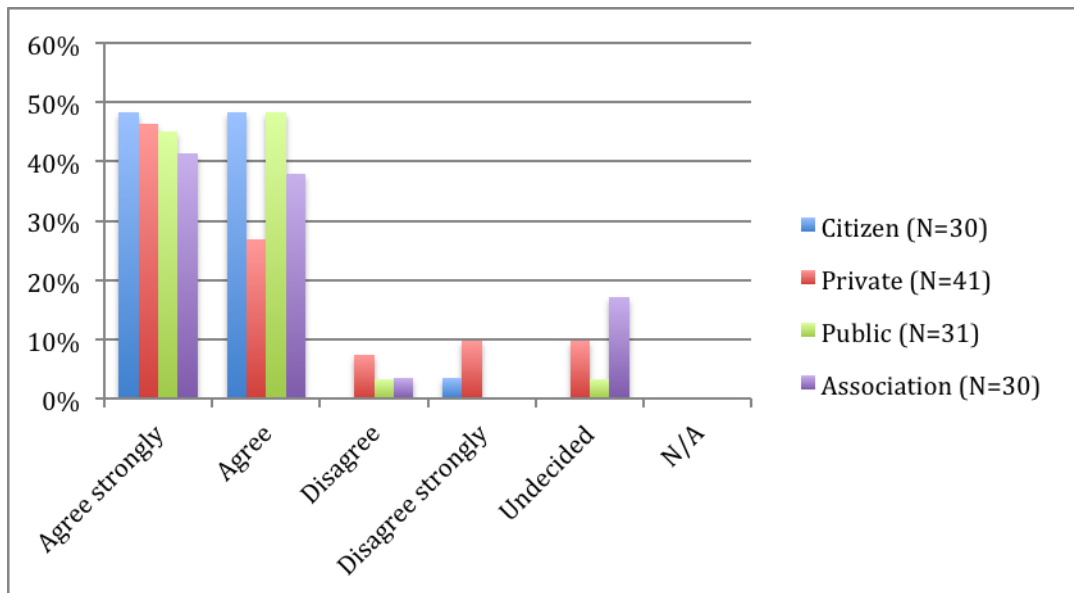


Figure 14 Disclosing of safety related traffic data by public and private service providers

The figure shows broad consensus for making safety related traffic data available. Interestingly, most private organisations are also in favour of making data available, although some strongly disagree. Of the private service providers 4 strongly agree, 1 agrees, and 3 strongly disagree, suggesting a divide.

4.10. Public or Private Lead

Figure 15 presents the responses to the statement: “Would you rather see the public or private sector in the lead for provisioning safety related traffic information to users?”

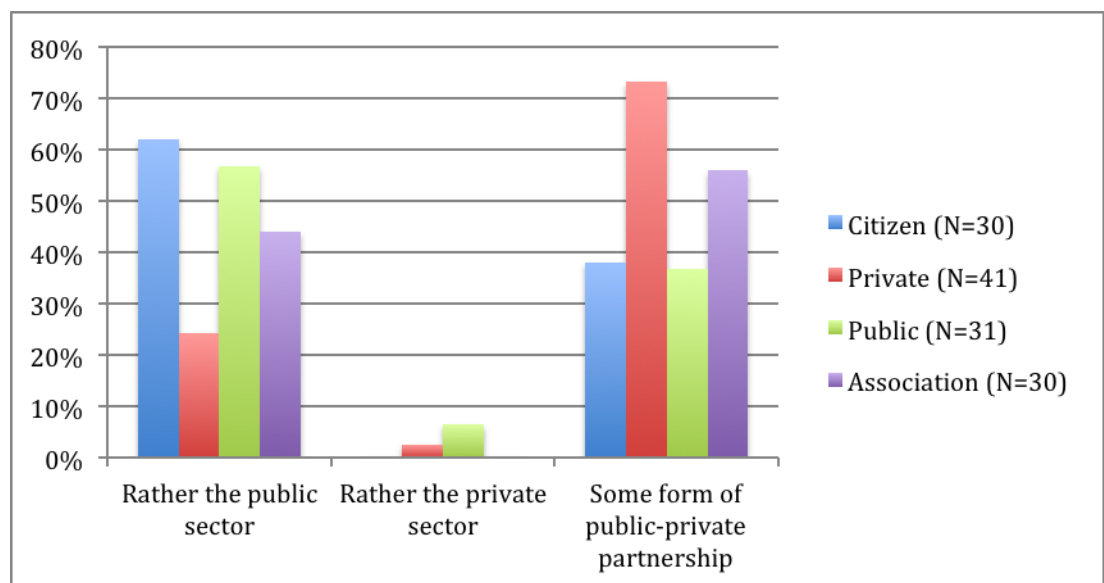


Figure 15 Public, private, or PPP in the lead

The figure shows there are mixed opinions, with both public sector and PPP supported. Figure 16 shows:

- A clear preference from the Automotive and Public organisations for a public sector lead
- No clear preference for either public sector or PPP by ITS Associations
- A clear preference for a PPP-model for Road Operators, Road Safety Associations and Private Service Providers

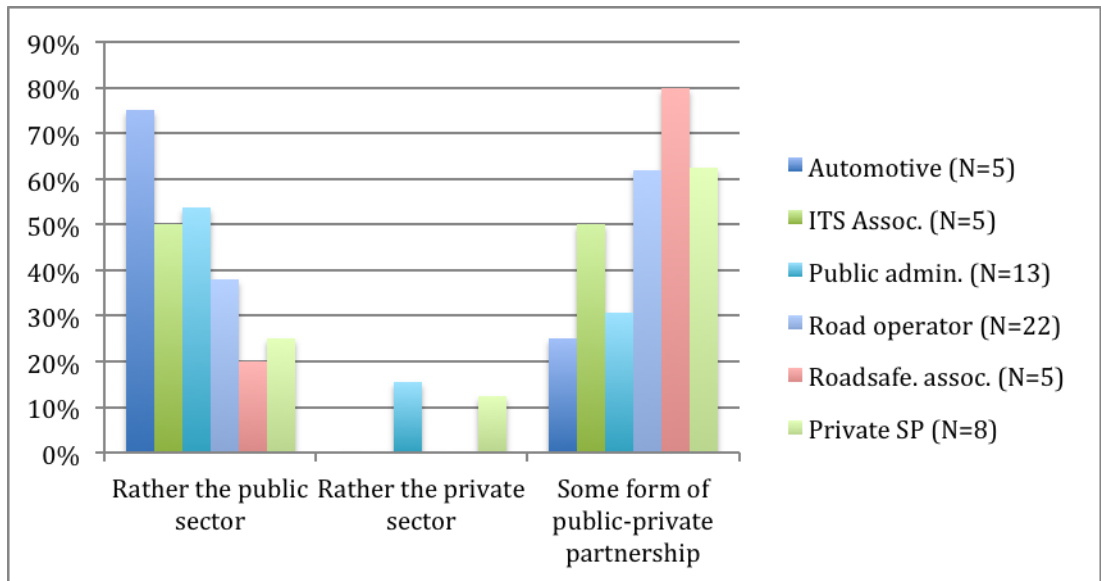


Figure 16 Public, private, or PPP in the lead for key roles

4.11. Impact of SRI

Figure 17 combines the results of the questions “What would be the impact of free SRI on”

- “Road safety (e.g. less accidents)”
- “Traffic conditions (e.g. less congestion)”
- “The environment (e.g. less pollution)”

The figure presents the percentages of respondents that indicated a ‘high impact’.

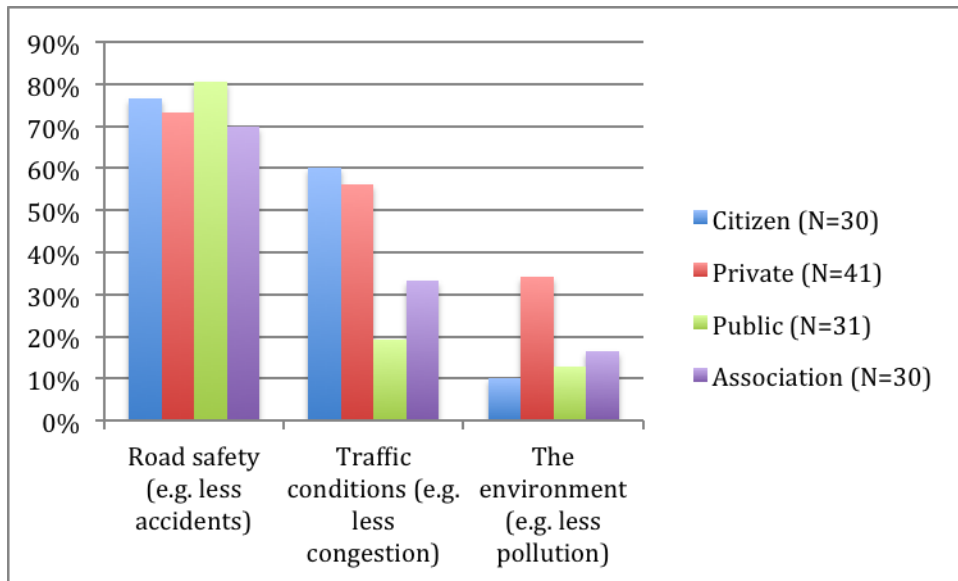


Figure 17 Impact of SRI on road safety, traffic conditions and the environment

The figure suggests a strong belief in a high impact of safety related traffic information on road safety, but mixed opinions about the impact on traffic conditions. Interestingly, only 19% of public authorities believe safety related traffic information will have a high impact on traffic conditions, 65% think it will have a low impact. All respondents indicate that the environmental impact is expected to be low.

4.12. Need for EU Action

Figure 18 presents the responses to the statement: “It is desirable that the EU takes action to ensure the provision, where possible, of road safety related minimum universal traffic information free of charge to users across Europe”.

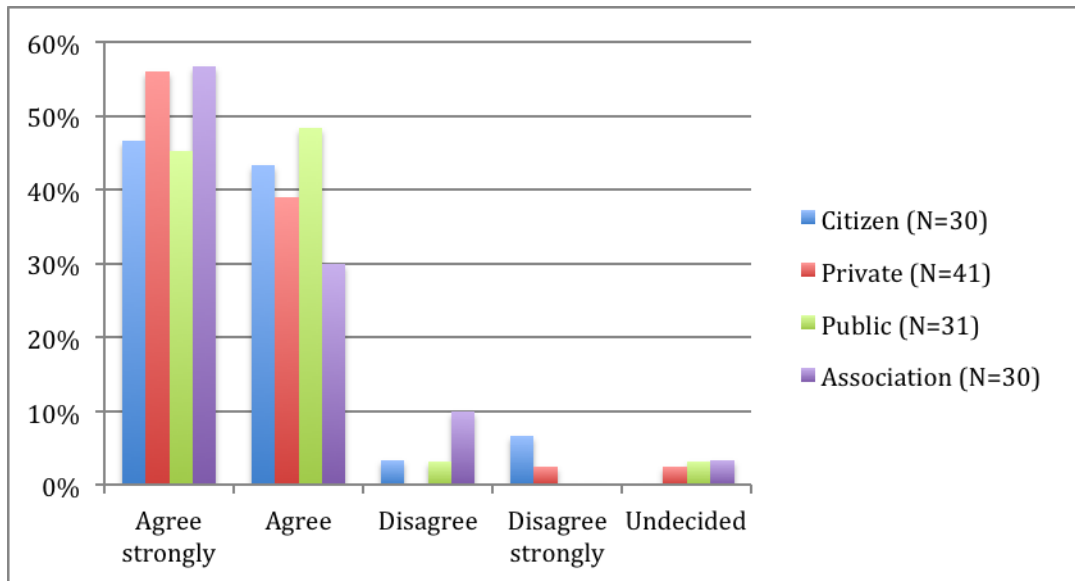


Figure 18 Support for EC action

The figure suggests a broad support for action by the EC, to ensure the provision of road safety related traffic information, free of charge, to users across Europe.

5. Conclusion

In total 132 people and organisations completed the questionnaire, well covering all roles in the traffic information value chain, and representing 19 Member States.

Respondents believe safety related traffic information can have a high impact on road safety, and show broad support for action by the EC to ensure the provision of road safety related traffic information, free of charge, to users across Europe.

Respondents very strongly support the harmonisation of content, in particular for information on ghost drivers, dangerous road surfaces, danger due to reduced visibility, objects on the road, blockages of roads and tunnels, unprotected accident areas, temporary roadwork and adverse weather conditions. The support for harmonisation of content on end-of-queue, abnormal traffic and equipment failure is much lower.

Respondents strongly support the harmonisation of the means of dissemination, and the definition of a uniform presentation of safety-related traffic information to the end-user. There is strong support for RDS/TMC, variable message signs and on-board units, majority support for radio, navigation devices and smartphones, and low support for TPEG, mobile phones and specialised web sites. In free text responses co-operative technology was mentioned various times as channel that should be included.

A small majority supports definition of a homogenous geographical coverage and organisational framework, with general consensus that safety related traffic information will be most valuable on motorways and other main roads and city arteries.

The survey showed broad consensus for making all private safety related traffic data available to end-users, although opinions differ on the co-operation model. A co-operation with the public sector in the lead, and a public-private partnership are equally supported.

List of Acronyms

DAB	Digital Audio Broadcasting
DoT	Department of Transport
DSRC	Dedicated short-range communications
EC	European Commission
EU	European Union
ITS	Intelligent Transport Systems
MS	Member State
PPP	Public Private Partnership
R&D	Research and Development
RDS	Radio Data System
RTTI	Real-time traffic information
SRI	Safety related traffic information
TERN	Trans-European Road Network
TISA	Traveller Information Services Association
TMC	Traffic Message Channel
TPEG	Transport Protocol Experts Group
UK	United Kingdom
VMS	Variable message sign