Review of the World Bank Road Safety website

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Report documentation

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Summary

The Road Safety website of The World Bank needs to be redeveloped. The website should reflect the new developments in the work field and the IT policy of The World Bank and support its implementation.

Consulting services are being sought to assist this process, especially to review the current website and to recommend measures to be taken to improve its effectiveness and user appeal.

Redevelopment of the World Bank Road Safety website must be undertaken in the context of the *Internet Services Program* (ISP) which is the key enabler of the Bank's 'eBusiness' transformation strategy. This strategy aims "to use the Web as the primary tool for enhanced information sharing among Bank staff, donors, clients and public".

This document is meant as a brief business case, describing the target audience, purposes of the site, suggestions for the contents at the restart and the future as well as indicating the required resources for the migration and further maintenance of the site.

To give direction to the transformation, some topics have to be explored to make sure the right decisions are taken. The main questions are:
− What audience groups is the website aiming at?
− What functions should it cover?
− What kind of content meets the expectations of the audience groups?
− How can the content be made easily accessible and traceable?

Recommendations are given for the transformation stage, increasing accessibility and traceability, the maintenance stage and required resources, and the promotion of the new website.

Transformation stage
It is recommended to divide the redevelopment into at least two stages covering the different needs expected by the audience.
In the first stage required basic functions have to be realized like background information on the Bank's organization, its policy, best practices of projects executed, knowledge base with relevant research outcomes and data, and valued links to other institutes or website. To guide the user, important information or new releases are highlighted in special boxes to attract his attention.

In the second stage, features should be added that enable the transaction and interaction with and between the users. Users can be invited to subscribe to a mailing list that alerts them whenever a new item is posted on the website.
In addition, tools and guidelines for submitting projects for finance support facilitate both project managers within the different countries and task managers to review the proposals. If executing in the proper way, this feature will reduce workload on both sides.

In the future, the website can be extended with additional tools to create an interactive platform for the exchange of knowledge and experiences. Besides that, an interactive forum can be established to enable exchange of information on a tailor-made and demand-controlled basis.

Accessibility and traceability
To improve the access to the information on road safety, the site needs to be on a higher level, i.e. right under Transport. Cross-links with other sections within the World Bank website should be arranged; e.g. with other transport sections, urban development, health, law & regulations.

To improve traceability, it is recommended to adjust the search engine on the homepage of the World Bank website in such a way that searches on road safety lead directly to the Road Safety website.

Another precondition is that Road Safety acquires its own section code in the central document system Iris that can be added to any relevant document to categorize it. A central code enables other task managers to cross-link their documents and publications to Road Safety as well.

Short abstracts should be added to relevant documents and publications to reveal their content in the list of outcomes of searches. Important documents should be stressed by using highlight boxes to draw the user's attention.

Maintenance stage
After the new website has become available it has to be maintained. That stage, which will be ongoing, has to be considered as being equally important and difficult to execute. Only a well-maintained website, with up-to-date information and features that meet the user's interests, is worthwhile visiting frequently. Extra resources for the website development have to be made free to support the task manager in fulfilling The World Bank's ambition to improve road safety in developing countries. The establishment of an internal and external editing board that looks after the content guarantees the quality of the revealed information.

Promoting the new website
Promoting the new website is advisable as the current Road Safety website has been asleep for a while. Also due to the fact that it is very deeply embedded into the Bank's website structure, the audience groups have to be alerted to the new website.

To create awareness a special email can be sent off to signal the launch to represents of the target groups. In this email a direct linkage should be included to facilitate the traceability of the Road Safety site. The audience should be asked to bookmark the site at once to simplify the next visit. The target groups should also be offered to subscribe themselves to an email service that indicates whenever a new item has been posted.

The webmaster of the Bank's external and internal homepage should be asked to publish a small news item indicating the launch of the website to the whole staff of the Bank.

Presenting the website at an internal Bank meeting is a good way to inform and commit colleagues.

Contents

1.   Terms of reference

The Road Safety website of The World Bank (www.worldbank.org/transport/road&highways/roadsafety) needs to be redeveloped. It should reflect the new developments in the work field and the IT policy of The World Bank and support its implementation.

Consulting services are being sought to assist this process, especially to review the current website and to recommend measures to be taken to improve its effectiveness and user appeal.

Redevelopment of the World Bank Road Safety website must be undertaken in the context of the *Internet Services Program* (ISP; World Bank, 2003) which is the key enabler of the Bank's 'eBusiness' transformation strategy. This strategy aims "to use the Web as the primary tool for enhanced information sharing among Bank staff, donors, clients and public" (*Web Guidelines Background*; World Bank, 2004).

The objectives of the review are to:
–   Identify the functions of a redeveloped World Bank Road Safety website;
–   Specify the core contents of a redeveloped World Bank Road Safety website;
–   Appraise external road safety websites to identify potential linkages with a redeveloped World Bank Road Safety website;
–   Prepare an implementation plan for the redevelopment of the World Bank Road Safety website.
(*Terms of Reference*; Bliss, 2005)

1.1.   The World Bank – Background information

For a good understanding of the web environment some background information on the mission and policy of the World Bank organization is relevant (www.worldbank.org; June 2005).

1.1.1.   *Mission*

The World Bank Group's mission is to fight poverty and improve the living standards of people in the developing world. It is a development bank which provides loans, policy advice, technical assistance and knowledge sharing services to low and middle-income countries to reduce poverty.
The Millennium Development Goals (MDGs), agreed to by 189 nations in 2000 at the United Nations Millennium Summit, embody an unprecedented level of consensus on what is needed for sustainable poverty reduction. The Goals set specific targets toward which the entire development community – donors and recipients, alike – would work:

1. Eradicate extreme poverty and hunger
2. Achieve universal primary education
3. Promote gender equality and empowering women
4. Reduce child mortality
5. Combat HIV/AIDS, malaria, and other diseases

6. Ensure environmental sustainability
7. Develop a global partnership for development

1.1.2. *Strategy*

The breadth of the challenge requires The World Bank, in partnership with developing countries and the international development community, to scale up the impact of its work to achieve the development results needed.

1.1.3. *Sector Strategy*

A guiding framework for assistance applies not just country by country, but sector by sector. Sector strategies help shape the Bank's approach and activities in a given sector or thematic area, identifying aspects of relatively weak country performance for priority attention. They are completed – and revised every three years – after broad consultation, increasingly open to online participation as well.

1.1.4. *Role*

The Bank, as a partner in this scaling-up effort, has a unique role to play. It will leverage its knowledge and financial resources to play a catalytic role in development, concentrating on the twin pillars of the Strategic Framework building the climate for investment, jobs and sustainable growth, and investing in and empowering poor people to participate in development – as critical elements to achieving sustainable poverty reduction and helping clients meet the MDGs. Working with the principles of the Comprehensive Development Framework (CDF) and the Poverty Reduction Strategy Papers (PSRPs), the Bank will continue to apply its framework of selectivity to work most effectively within countries, across countries, and globally. In addition, the Bank will continue to improve and broaden client services to respond to evolving client needs.

1.2. **Road safety within The World Bank**

1.2.1. *Mission and goals*

The World Bank promotes the improvement of road safety outcomes in low and middle-income countries. Its mission is to assist countries accelerate their implementation of the recommendations of the World Report on Road Traffic Injury Prevention. The emphasis is on building their capacity to invest in road safety and mobilize global partnerships in support of this, to achieve measurable results.

1.2.2. *Strategy and policy*

The World Bank gives priority to execution of the recommendations stated in the *World Report on Road Traffic Injury Prevention* (Peden et al., 2004), which was produced in collaboration with the World Health Organization WHO and some other partners.
The Bank supports countries by conducting strategic studies to identify road safety priorities. Outcomes are used to develop a road safety policy and prioritize actions on a country level. The World Bank promotes country initiatives to generate funding and resources for the implementation.

2. Road Safety website

The Road Safety website needs to migrate to a new content management system which is known as the *Internet Services Program*. Besides this technical transformation, the website contents have to be updated. The current website is behind in topicality and technical design. The new website also needs to support the change in priority the Bank has given to activities in the work field of road safety. Another function of the website is to guide visitors to external website with valued information on road safety.

To give direction to the transformation, some topics have to be explored to make sure the right decisions are taken. The main questions are:
− What audience groups is the website aiming at?
− What functions should it cover?
− What kind of content meets the expectations of the audience groups?
− How can the content be made easily accessible and traceable?

After identifying these topics recommendations are given for:
− the transformation stage;
− the maintenance stage and required resources;
− the promotion and use of the new website.

2.1. External audience groups

The site has the following primary external audiences:
− Ministerial policy makers at the national level, to ensure that they are aware of Bank activities related to road safety, and to provide them with information and tools that can support them improve road safety.
− Professionals at all levels in developing countries to acquaint them with background on the road safety, and to support them in making proposals to policy makers.
− Consultants actively working in the sector, to provide them with detailed project information and research, as well as to inform them of policy initiatives and provide them with current statistical data.
− Partners on Bank level concerned with the field of road safety to provide them with detailed information so efforts can be complemented and a framework of engagement can be built.

2.2. Internal audience groups

The site has the following primary internal audiences:
− Country directors, to inform them on the road safety policy of the Bank and to create an interactive platform for the exchange of views and strategy.
− Country managers, to inform them on policy and tools and to create an interactive platform for the exchange of best practices projects.
− Task managers, to illustrate the effectiveness of Bank operations in the field of road safety and to promote an exchange of views among acknowledged experts in the field.
− Sector managers, to explain the importance of the theme of development, to integrate information sharing across other Bank units and related

development agencies, and to promote distribution of information about reports, events, and related activities.

3.   Requirements of the new website

For the development of the new website, a distinction is made in functions that correlate with the expectations of the audience. Realizing all the requirements of the new website at once asks quite some developing time. With regard to the staff availability, it is recommended to divide the redevelopment into at least two stages covering the different needs expected by the audience. This will easy the transformation and speed up the migration and progress will be noticeable within a due time.

In general, the functions of a website can be divided into:
1. Supply of information (dissemination of knowledge)
2. Transaction (downloading of publications and documents or tools and guidelines)
3. Interaction (ordering tools and submission of questions, exchange of information and knowledge between users)
4. Integration of work flow (facilitating in appraisal process of project applications)

Function 1-3 are considered to be standard features of a modern website. For the new Road Safety website of The World Bank, it is recommended to focus on the realization of these functions and postpone the integration step to the near future.

3.1.   **First stage**

In the first stage the basic requirements of the target audience have to be met. The main function is to give information and facilitate the visitor on his exploration of the Road Safety website. Information needs to concern topics that give answer to questions like:
–   What are the World Bank activities in the field of road safety?
–   What is its goal and strategy?
–   How does the Bank work?
–   In which countries does The World Bank operate?
–   What kind of projects does it support? Are there similarities to my project?
–   How can I submit a project for financial support?
–   What background information is available?
–   Who do I contact for further information?

Required functions are: background information on the Bank's organization, its policy, best practices of projects executed, knowledge base with relevant research outcomes and data; valued links to other institutes or website. To guide the user, important information or new releases are highlighted in special boxes to attract his attention.

Note: slow internet connections in developing countries should be taken into account in the design and development of the site's features. Simple downloadables and use of standard software applications should simplify the access to the information.

3.2. Second stage

In the next stage, features should be added that enable the transaction and interaction with and between the users. Users can be invited to subscribe to a mailing list that alerts them whenever a new item is posted on the website (for details, see *Chapter 8*).

In addition, tools and guidelines for submitting projects for finance support facilitate both project managers within the different countries and task managers to review the proposals. If executing in the proper way, this feature will reduce workload on both sides.

Exchanging information between project managers suits the Bank's target to disseminate knowledge to developing countries and to strengthen the lines between countries within the same area or dealing with the same problems.

3.3. Future requirements

After meeting the first goals on informing and facilitating the target audience, the website can be elaborated in the near future with additional tools to create an interactive platform for the exchange of knowledge and experiences. Privacy conditions might have to be taken into account. Creating a special section on the website (extra web or member site) could solve this problem. Members who receive a special login find detailed project information and financial documents to support the work flow on this extra web. Besides that, an interactive forum can be established to enable exchange of information on a tailor-made and demand-controlled basis.

New development within the field of road safety such as the oncoming foundation of the Global Road Safety Facility and Fund easily fit in the flexible left navigation bars. To attract the attention of the users the highlight box gives extra notice to it.

4. Strategy for the Road Safety website

Information on the site will be targeted at the primary external and internal audiences mentioned in *Chapter 2*. Presentation of materials on the site will be designed to appeal to the interests of those audiences so that it is as helpful as possible to their professional priorities.

In addition, there will be an ongoing communication programme to enhance the message, e.g. by electronic newsletters, links to and from other sites. Mailing lists will be developed to alert key bank staff and outside audience members to postings that may be of interest. Their function is described in more detail in *Chapter 8*.

Partnerships and information-sharing relationships will be explored with other Bank units and with non-Bank organizations when they are mutually beneficial.

To meet the assumed differences in objectives at the audience groups, separate external and internal websites are recommended and also required by the technical surroundings. To ease the maintenance of the sites, the goal is to use the same content on both sections as much as possible.

4.1. Road Safety website contents

The contents of the website should meet the following features:
− The site will carry less time-sensitive background information, such as a summary of the Transport Note (April 2004) giving an impression on the urge of improving road safety in developing countries.
− The site's content has to meet the outstanding reputation of The World Bank being an impartial organization. The content has to be validated, free from commercial interests and esteemed by professionals.
− The tone of voice has to be professional and appealing.
− The site will express the view of The World Bank on the urgency of road safety improvements in developing countries. It will contain the model for policy makers to address the problem of road safety within their country.
− To support policy makers and professionals within the countries, tools and instruments will be made available in the near future.
− To inspire the audience groups, best practice project descriptions will be given and updated at least twice yearly.
− To guide the users to valued information, useful links are revealed to other websites and databases (listed by topic, kind of organization, country)

Other types of information, and their frequency, to be included should be:
− Current news, speeches and presentations by management, publications and other information sources as they become available
− Issue Briefs (if available twice yearly)
− Country Briefs (if available)
− Press Releases (as issued)
− Publications
− Contact information

Highlight boxes will attract special attention to certain information or topics, especially addressing the internal audience.

4.2. External homepage Road Safety

Taking the requirements of the website environment into account (according to the outline predicted by the Web Resource Centre), the new homepage could have the appearance shown beneath. Details on the contents for the diverse topics are explained in *Section 4.4*.

The topics mentioned meet the needs on information of the audience groups for the first stage. When activities grow, they can easily be added as either they fit in to one of the topics on the left navigation bar or another navigation topic can be submitted.

4.3. Internal homepage Road Safety

The internal homepage looks very similar to the external homepage. The main difference is made in titles of the left navigation buttons to adjust to the Bank's vocabulary. The contents are kept the same to make the maintenance of the website less hard to produce. Later, when activities grow, more difference can be realized between the external and internal site if required.

The World Bank Group						Contact Us • Help/FAQ • Index • Search				
About	Countries	Data	Evaluation	Learning	News	Opportunities	Projects	Publications	Research	Topics

Road Safety internal

Search [   ] [GO]
More Options

about us	
sector strategy	
our partners	
countries and regions we work with	
Global Road Safety Facility & Fund	
topics	
projects	
knowledge base	
documents & publications	
related external links	
related themes within World Bank	
resources	
contact Road Safety team	
subscribe to new releases	
subscribe to Newsletter	

Without interventions nearly 2 million people will be killed in traffic in 2020

Introduction to work field RS stating urgency (based on Transport Note 2004)

news

Key issues RS:
•Child Safety
•Commercial Vehicles
•Drink Driving
•Emergency Medical Services
•Novice Driving
•Road Environment
•Safety Belts and Helmets
•Speed Management
•Sustainable Safety
•Vehicle Safety

best practices

4.4. Detailed description of website topics

Left navigation bars	Description of contents
what we do/ about us	• Introduction on section, objectives, goals, target groups, links to relevant background information, information of what kind of projects can be submitted
how we work/ sector strategy	• Information on strategy, RS model, expectations on commitment partners
our partners	• Overview of associated partners, information on how to become a partner
countries and regions we work with	• Map with country websites and contact persons
how to finance your plan	• Instructions, guidelines, application forms, useful references, examples
projects	• Overview of active projects, overview of projects in preparation (how to contribute?); how to finance your project? How to submit a project plan? Criteria for project plans
Global RS Facility & Fund	• Introduction on GRSF, target audience, objectives, partners, strategy, contact information
topics	• Current issues in road safety policy or research that demand special attention now or in the near future
tools & guidelines	• Overview of all available tools & guidelines (short abstracts to explain relevance and use)
FAQ's	• All kind of questions from the audience point of view
knowledge base	• Topics differentiated thematically • Overview of relevant data
documents & publications	• Overview on relevant documents & publications (Link to corporate database or own library?)
related external links	• Divided by name, theme and country. Links to websites are introduced by short abstracts
related themes within World Bank	• Divided by relevance: main work field, special topics, kind of institute, countries (short abstracts and links to website)

4.5. Links to external websites

One of the websites objectives is to guide the user to valuable information and knowledge on road safety available on external websites. Many websites are available for this purpose.
Criteria have to be set to make a selection. Links are given to websites that represent:
− a worldwide operating organization aiming at helping developing countries to improve their road safety;
− a distinctive research institute giving access to valuable research results;
− a non-governmental organization offering funding for road safety projects to developing countries;
− information on research projects relevant to the website audience.

To increase accessibility the links should be ordered in different ways:
− by name (in alphabetical order of the organization);
− by theme (ordered by topic and in that way, easy to extend);
− by area (ordered by country or range of work field).

The same linkages might be submitted among different lists (e.g. both under name and area). Websites that meet these criteria are listed in *Appendix 2*.

5. Accessibility and traceability

5.1. Experiences of existing website

The existing website is well hidden in the World Bank website structure. Some attempts to get access to it, result in the following experiences:

1. Road Safety is embedded in the Transport section, below Road & Highways. From the homepages of the World Bank site one needs four clicks to reach the information (if the user is familiar with the structure of the site; most users are not and will need more clicks).
2. Visitors, who are unfamiliar with the structure, are likely to search by a keyword. 'road safety' given in as a keyword in the search engine at the home page, does not lead to the Road Safety site (but to a document and its relevance is unclear).
3. Road Safety is hardly cross-linked with other sections or themes at the site.
4. The keyword 'road safety' in the search engine of the Publication section leads to an overkill of reports not giving any indication on relevance.

5.2. Suggestions to improve accessibility

Recommendations for improving the access to the information on Road Safety are:

1. The site needs to be on a higher level, i.e. right under Transport.
2. Cross-links with other sections within the World Bank website should be arranged; e.g. with other transport sections, urban development, health, law & regulations. To realize this, the webmasters of these website can be asked to create a direct linkage to the Road Safety site.
3. Linkages to the site of partner organizations and other external related sites should be arranged in the same way. On request direct linkages can be created.
4. Other opportunities to feature the information on the site on the Bank's external or internal sites should be explored in consultation with the Central Web Team.

5.3. Suggestions to improve traceability

Recommendations to improve the traceability of Road Safety information influence the structure of some databases:

1. Searches on 'road safety' in the search engine on the homepage should lead directly to the Road Safety website. The Central Web Team has to be contacted to rearrange the database in a proper way.
2. Road Safety has to acquire its own section code in the central document system Iris. Any document related to the road safety field has to be categorized with this road safety code. A central code enables other task managers to cross-link their documents and publications to Road Safety.
3. Short abstracts should be added to relevant documents and publications to reveal their content in the list of outcomes of searches. Important documents should be stressed by using highlight boxes to draw the user's attention.

6.   Transformation stage

6.1.   Plan of action

The preparations for setting the site 'live' can be divided into several steps.

1. Approval of the requirement analyses
    The task manager has to review the analyses of the site's features covered by the first stage (see *Chapter 3*) and gives his approval or make adjustments.

2. Collection of the content
    After the approval of the content and appearance of the new website, information has to be collected to fill the navigation items. In this step the content of the existing website has to be reviewed in order to decide what information is still relevant. In *Appendix 1* the migration of the old content into the new website is worked out; please note the condition that the information is still up-to-date.

3. Editing the new content
    The collected information has to be edited to fit into to the new structure and to address the audience on the right level i.e. tone of voice.

4. Writing new content
    Information that is lacking has to be written meeting the target audience.

5. Approval of new content
    The Road Safety task manager has to review the new content and approve it or make adjustments. He might want to delegate this task to an editing board. For this purpose, it is useful to make a distinction between new organizational information on The World Bank and information with respect to road safety issues. An external editing group representing leading scientific institutes can judge content on road safety issues. Well-informed employees of the Bank itself should appraise new content on policy and procedures of the World Bank organization regarding road safety. The establishment of these editing board will guarantee the quality of the revealed content on the website.

6. Implementation of new content.
    The new content has to be implemented by the site manager using the e-Publish tool to meet the conditions for the World Bank web environment. Images have to be selected and adapted to the new look and feel.

7. Realization of cross-links
    Related task managers and their website manager have to be informed on the production of the new website. They should be requested to cross-link their sites to the new Road Safety website.

8. Agreement on hierarchy level and date of release
    The Web Resource Centre has to be informed on the oncoming release to make agreements on the hierarchy level (right under Transport) and on the date of publication.

9. Adjusting procedure of search engines
    The Web Resource Centre has to be contacted in order to change the way the search engines work. Adjustment according to solutions proposed have to be realized before the new website is released.

10. Testing the new website
    To make sure all the content appear in the right way some persons within the Bank should be asked to go through the test the new website.

Only those, who have access to the intranet of the Bank will be able to review the test site. Adjustments have to be made according to their experiences.

11. <u>Sign off & go live</u>
    After the last adjustments are made, the site has to be signed off and the Web Resource Centre has to switch the site to the external platform to make the website available for the target groups.

12. <u>Promotion</u>
    A mail with a direct linkage will be send to representatives of the target audience to inform them on the existence of the website and to encourage them to subscribe to the mail service on new postings.

13. <u>Coding Iris</u>
    Further improvements on the traceability of the content have to be made by creating a unique Iris code to go with every document related to road safety. The code has to be listed in the central overview with Iris codes.

6.2. **Timing and resources**

For the <u>initial development</u> of the new website (transformation stage), staffing and time required are the following:

Step	Responsible person	Capacity required	Duration
Approval of the requirement analyses	Task manager	2 days	1 week
Collection of content	Content provider/ Task manager	4 days 1 day	2 weeks
Editing new content	Editor	5 days	1 weeks
Writing new content	Editor	5-10 days	1 week
Approval of the new content	Task manager/ Editing board	2 days	1 week
Implementation of the new content	Website assistant/ Web manager	5 days	1-2 weeks
Realization of cross-links	Website assistants/ Web managers related sectors	2 days	1-2 weeks
Agreement on hierarchy level and date of release	Task manager/ Web manager	1 day	1-3 weeks
Adjusting procedure of search engines	Web Resource Centre	5 days	1-3 weeks
Testing the new website	Bank colleagues	1 days	1-2 weeks
Sign off & go live	Web manager & Web Resource Centre	1-3 days (depending on adjustments)	1-2 weeks
Promotion	Web manager/ Project assistant/ Task manager	2 days	1 week
Coding Iris	Web managers & Web Resource Centre	Ongoing	Continuous

7.   Maintenance stage

7.1.   Maintaining the website

After the website has become available it has to be maintained. That stage, which will be ongoing, has to be considered as being equally important and difficult to execute. Only a well-maintained website, with up-to-date information and features that meet the user's interests, is worthwhile visiting frequently. This is a condition for building long-lasting and valued relationships with the target audience.

The maintenance stage of a website consist of the following tasks:

1. Current content has to be brought up-to-date frequently:
   o Every change has to be implemented in the website (organization changes, change in contact information, etc.).
   o Linkages have to be checked on a regular basis to ensure they work in a proper way.
2. New content has to be added as quickly as possible:
   o New information has to be implemented after it becomes available (documents, publications, press releases, new tools, guidelines).
3. Users have to be encouraged to check the website on a regular basis:
   o Users should have the feeling of checking the website frequently to avoid being behind in information. To increase this feeling, highlight boxes should change every week or fortnight, pointing out new issues in road safety worldwide.
   o Alerts by an email service support the changes on the website and create the feeling of ongoing updates.
   o New tools meeting the needs of the target audience make the website a valued source of information.

Every change or additional item of information has to be collected and edited to make it suitable for the website.

7.2.   Review and monitoring

Systematic evaluations of the site should be a regular part of site operations to ensure the site fulfils the expectations of the audience groups and the intended objectives. The first evaluation should be done after the site is completely operational (1-2 years after the transformation). Measurement can be done in various ways. Usually, targets are set using statistical criteria such as page views, type of users, downloads. Additional criteria might include partnerships facilitated by the site, evidence of increased interest on publications or news items highlighted on the site.

A review can also be used to ensure that material is formatted appropriately for the site, that the content is current, relevant and web-ready. It may conduct usability tests to ensure the information architecture functions are as intended. The review can also be used to identify areas of improvements and innovations.

7.3. Resources

For the maintenance of the <u>initial website</u>, staffing should consists of the following:

Position	Responsible person	Time
Content provider	Researcher	15-20 hours per month
Content approver	Task manager/ Editing board	10 hours per month
Poster/Publisher	Project assistant, analyst, researcher	10 hours per week
Webmaster	IT manager	10 hours per month

In consideration with the priority of The World Bank to road safety improvements, it is expected that activities will rapidly expand. It is the Bank's policy (*Internet Services Program*; World Bank, 2003) that the website is used as the primary tool for enhanced information sharing among bank staff, donors, clients and public. Due to this ambition, it is foreseen that resources have to be extended to keep up with the increase of activities.

For <u>extending</u> the website required staffing resources are as follows:

Position	Responsible person	Time
Content provider	Researcher(s)	30-40 hours per month
Content approver	Task manager/ Editing board	20 hours per month
Poster/Publisher	Project assistant, analyst, researcher	20-25 hours per week
Webmaster	IT manager	15 hours per month

8.   Creating awareness of the new website

Promoting the new website might seem redundant. The brand of the Bank is considered to be a drawing force on its own. This might be true for the homepage of The World Bank and its general reputation. However, if we take into account that the Road Safety website has been asleep for a while and due to the fact that it is very deeply embedded into the Bank's website structure, the main audience may appreciate some alert of the new website. The launch of the updated site is probably the right moment for some promotional efforts.

After these, regular alerts to new postings make the audience groups aware of new releases and these efforts will tighten the contacts with important business partners.

In the near future, especially when activities and projects increase, the production of a special newsletter might be worthwhile considering.

These three steps can be extended at any time with all kind of activities. The necessity to develop extra means depend on the growth of Road Safety activities and the availability of communication staffing.

8.1.   Promoting the launch of the website

When the date of going live has been set, partners and members of the primary audiences have to be informed.

Efforts to create awareness are:

1. Sending out a special email to attract interested relations on the launch. In this email a direct linkage should be included to facilitate the traceability of the Road Safety site. The audience should be asked to bookmark the site at once to simplify the next visit. They should also be offered to subscribe themselves to an email service that indicates whenever a new item has been posted. In preparation to this notification, email addresses of relevant business connections should be collected in advance and stored in a special database.
2. The webmaster of the Bank's external and internal homepage should be asked to publish a small news item indicating the launch of the website to the whole staff of the Bank.
3. Relevant newspapers and magazines should be notified on the launch and asked to pay some attention to the existence of the site in their next edition.
4. Presenting the website at an internal Bank meeting is a good way to inform and commit colleagues.

8.2.   Tighten the contact

After the launch the audience groups should be encouraged to visit the site on a regular basis. They will do so if:
– they know that the site is kept up-to-date;
– they find reliable information/ knowledge of their interest and expect the site to be the first source to find it or to guide them;
– they find tools that can help them in their daily work;

- they can interact with a well-informed contact person who promptly responds to their requests.

Maintenance of the website is the way to fulfil the users expectations. A mail service to alert subscribers to new items is a tool with little additional effort.

To enable this service, a button to subscribe to it has to be offered at the site. The entries have to be stored in a special database that can easily generate a mailing list.

8.3. **Newsletter**

If activities within Road Safety increase, it will become profitable to issue a free electronic newsletter. Such a newsletter consists of new topics, updates, background information on relevant research outcomes, documents and other publications. The content can also be reused to update the website on a regular basis and commit new users. A subscription option on the website should be offered to increase the membership file. Of course, the newsletter should be issued on a certain frequency (e.g. once a quarter) that may require extra communication staff.

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Appendix 1   Migration of existing website items to new structure

Existing topic	moves to...	Existing topic	moves to...
Road Crash Problem	*Outdated?* *Partly to:* **Introduction**	Driver Training and Testing	*New topic?:* Education
Economic Perspective on Traffic Safety		Traffic Law and Enforcement	*Topic:* **Law & Regulation**
Developing a Road Safety Plan	**Tools & guidelines**	Vehicle Safety Standards	*Topic:* **Vehicle Safety**
Institutional Responsibility of Road Safety	*Still up-to-date?* **How we work?**	Emergency Medical Services	*Topic:* **Emergency Medical Services**
Monitoring and Evaluation	*Still up-to-date?* **How we work?** *and:* **Tools & guidelines**	Road Safety Research	*Topic:* **RS Research**
Data Systems and Analysis	**Data & statistics**	The Role of NGOs	**Our partners**
Financing Road Safety	**How to finance a project**	Sample Terms of Reference	**Tools & guidelines**
Designing Roads to Improve Road Safety	*Topic:* **Road Environment**	Bibliography	**Documents & Publications**
Road Safety Audits	*Topic:* **Road Environment**	Linkage to Construction Safety Web page	**Related external linkages**
Children's Traffic Education	*Topic:* **Child Safety**	Linkage to Global Road Safety Partnership	**Our partners**
Public Programmes	*Topic:* **Public Campaigns**		

Plain phrases: current topic titles; **Bold phrases**: new topic titles; *Italic phrases*: remarks from the author.

Appendix 2   Overview of relevant linkages to external websites

One of the websites objectives is to guide the user to valuable information and knowledge on road safety available on external websites. Many website are available for this purpose.
Criteria have to be set to make a selection. A website should represent:
- a worldwide operating organization aiming at helping developing countries to improve their road safety;
- a distinctive research institute giving access to valuable research results;
- a non-governmental organization offering funding for road safety projects to developing countries;
- information on research projects relevant to the website audience.

To increase accessibility the linkages should be ordered in different ways:
- by name (in alphabetical order of the organization);
- by theme (ordered by topic);
- by area (ordered by country or range of work field).

The same linkages might be submitted among different lists (e.g. both under name and area).

Websites that meet these criteria are listed on the following pages.

By name

Asian Development Bank = www.adb.org

The ADB wants to encourage and promote safety in road infrastructure projects in Asia and the Pacific region. By adopting an integrated multi-sectoral approach, the ABD's objective is to assist its member countries in developing and implementing comprehensive approaches to enhance road safety, as well as to provide funding for such activities.

Australian Transport Safety Bureau (ATSB) = www.atsb.gov.au

The Australian Transport Safety Bureau (ATSB) undertakes best-practice 'no blame' transport safety investigations. The bureau is an operationally independent multi-modal body, as it has to independently investigate, analyse and report on transport safety. It maintains a clear organizational separation from transport regulators and other parties that may be investigated, and operates within a defined legal framework within the Commonwealth Department of Transport and Regional Services (DOTARS).

AVV Transport Research Centre = www.rws-avv.nl

The AVV Transport Research Centre (part of the Rijkswaterstaat organization) makes an active contribution to improving the Dutch transport system by supplying knowledge for the formulation and implementation of Dutch transport policy.

Belgian Road Safety Institute (BIVV) = www.bivv.be

The Belgian Road Safety Institute BIVV wishes to promote road safety and traffic liveability by: campaigns and education, research and advice. Other tasks are: advising and accompanying, representing and coordinating, and implementation of government assignments.

Canada Safety Council = www.safety-council.org

The Canada Safety Council is a national, non-government, charitable organization dedicated to safety. Its mission is to lead in the national effort to reduce preventable deaths, injuries and economic loss in public and private places throughout Canada. They serve as a credible, reliable resource for safety information, education and awareness in all aspects of Canadian life – in traffic, at home, at work and at leisure.

Denmark's Road Safety and Transport Agency = www.fstyr.dk

Denmark's Road Safety and Transport Agency is an independent administrative body within the Danish Ministry of Transport.
The agency's areas of responsibility are principally:
– to enforce Danish legislation regarding commercial transport;
– to promote environmentally-friendly road transport.

European Commission, Directorate-General for Energy and Transport =
http://europa.eu.int/comm/transport

> Of all modes of transport, transport by road is the most dangerous and the most costly in terms of human lives. For this reason, the Road Safety Action Programme (2003-2010) proposes a series of measures such as stepping up checks on road traffic, deploying new road safety technologies, improving road infrastructure and measures to improve road users' behaviour. The ultimate objective is to halve the number of people killed on the roads by 2010.

European Conference of Ministers of Transport (ECMT) = www.cemt.org

> The ECMT is an intergovernmental organization established by a protocol signed in Brussels on 17 October 1953. It comprises the Ministers of Transport of 43 full Member countries, 7 Associate countries and 1 observer country.
> Establishing a joint OECD/ECMT Transport Research Centre has reinforced the activities in the transport sector. The ECMT's role primarily consists of helping to create an integrated transport system throughout the enlarged Europe that is economically and technically efficient, meets the highest possible safety and environmental standards and takes full account of the social dimension. It also provides a forum for analysis and discussion on forward looking transport policy issues for the countries involved.

European Road Safety Charter = http://europa.eu.int/comm/transport/roadsafety/charter_en.htm

> The European Road Safety Charter is one of the main European Commission initiatives to reach the overall objective of halving the number of road fatalities by 2010 by means of encouraging actions on a European Community level.

EuroNCAP = www.euroncap.com

> Euro NCAP provides motoring consumers with a realistic and independent assessment of the safety performance of some of the most popular cars sold in Europe. Established in 1997 and now backed by five European Governments, the European Commission and motoring and consumer organizations in every EU country, EuroNCAP has rapidly become a catalyst for encouraging significant safety improvements to new car design.

French National Institute for Transport and Safety Research INRETS = www.inrets.fr

> INRETS is a state-financed scientific and technological body under the dual administrative supervision of the Ministry of Research and the Ministry of Transport. INRETS has the following tasks:
> − to organize, execute and assess technological research and development concerned with the improvement of the means and systems of transport and of traffic from technical, economic and social viewpoints;
> − to carry out evaluative and advisory studies within these domains;
> − to promote the results of these research and study programme, to contribute to the dissemination of scientific knowledge, and participate in training by and for transport research both in France and abroad.

German Federal Highway Research Institute BAST = www.bast.de

> BASt is a technical and scientific institute responsible to the Federal Ministry of Transport, Building and Housing (BMVBW). The scope of work is considerable, ranging from replying at short notice to incoming enquiries to the coordination and carrying out of research projects over a period of several years. Another task is to act as scientific adviser to the state highway authorities which administer federal interstate highways and autobahns on behalf of the federal government.

Global Road Safety Collaborative = www.globalroadsafety.org

> The mission of this collaborative is to help raise awareness and bring people together to address the global road safety crisis in developing countries. This includes advocacy, facilitating collaboration and organizing inclusive stakeholders' forums both regionally and globally. At the moment GRSC addresses road safety for all ages.

Global Road Safety Partnership (GRSP) = www.grsproadsafety.org

> GRSP is a global partnership between business, civil society and government, dedicated to the sustainable reduction of death and injury on the roads in developing and transition countries. By creating and strengthening linkages between partners, GRSP aims to increase awareness of road safety as an issue affecting all sectors of society.

Hellenic Institute of Transport = www.hit.certh.gr

> HITs main objective is the conduct and support of applied research activities in the field of transportation in Greece. More specifically on issues relating to organization, operation, planning and development of infrastructure, and standardization, economic analysis, management, vehicle technology, and impact assessment of land, maritime, air, and multi-modal transport services. Also training and education activities in related fields, dissemination of research activities and the representation of Greece, in Transport Research and other relevant scientific fora abroad.

International Cooperation on Theories and Concepts in Traffic Safety = www.ictct.org

> ICTCT is an association developed out of an international working group of safety experts with the aim to identify and analyse dangerous situations in road traffic on the basis of criteria other than past accidents, analogous to the methods of air and industrial safety.
> The aim of ICTCT is to achieve a deeper understanding of problems in the area, to harmonize future research activities, and to provide for means for an optimal utilization of research results from different countries.

Injury Research Centre = www.irc.uwa.edu.au

> The Injury Research Centre is an exciting new initiative built on an outstanding research reputation of the Department of Public Health at The University of Western Australia. It evolves from the Road Accident Prevention Research unit that was established in the Department in 1989. The Unit has conducted leading research directed towards minimizing the

frequency and consequences of road traffic crashes in Western Australia and developed a reputation as one of the lead agencies for road safety research in the state and nationally. This excellence provides the foundation for the Injury Research Centre. In July 2001, the Road Accident Prevention Research Unit extended its expertise in the study of road traffic-related injury to all areas of unintentional and intentional injury and was renamed the Injury Research Centre.

Institute of Transport Economics (TØI) = www.toi.no

TØI wants to carry out applied research on issues related to transport and to promote the application of research results by advising authorities, the transport industry and the public at large. TØI's activities cover most current issues in road, rail, sea and air transport, including road safety.

Institution of Highway and Transportation = www.iht.org

Originally established in 1930 as the Institution of Highway Engineers before changing its name in 1987 in recognition of sector developments. The IHT is the foremost learned society in the UK concerned specifically with the design, construction, maintenance and operation of sustainable transport systems and infrastructure. It aims to provide a forum for the exchange of technical information and views on highways and transport policy; to produce practical technical publications; to provide specialist advice to government and other bodies; to make roads safer for the travelling public; and to encourage training and professional development to meet today's requirements.

Insurance Institute for Highway Safety = www.iihs.org

The Insurance Institute for Highway Safety is an independent, nonprofit, scientific and educational organization dedicated to reducing the losses – deaths, injuries, and property damage – from crashes on USA highways.

International Road Transport Union (IRU) = www.iru.org

IRU seeks to reduce the frequency and severity of road collisions involving buses, coaches, lorries and taxis by promoting the systematic integration of road safety practices in everyday activity of transport enterprises and by providing high-level training to road transport operators and their staff.

Department for Transport (UK) = www.dft.gov.uk

The UK Department for Transport's objective is to oversee the delivery of a reliable, safe and secure transport system that responds efficiently to the needs of individuals and business whilst safeguarding our environment.

Land Transport Safety Authority = www.ltsa.govt.nz

New Zealand's Land Transport Safety Authority (LTSA) is a Crown Entity charged with promoting land transport safety at reasonable cost. The LTSA works closely with several road safety partners at a national, regional and local levels. Road safety activities undertaken by the police, the LTSA, community groups and regional and local authorities are planned and funded

primarily through the New Zealand Road Safety Programme (NRSP), which is prepared and managed by the LTSA.

Liikenneturva = www.liikenneturva.fi

Liikenneturva's task is to improve traffic safety by influencing people's traffic behaviour and values and attitudes concerning traffic throughout society. The means for achieving this are publicity and education. The goal is to reduce the number of dangerous situations, risk factors and accidents in traffic and to alleviate their consequences.

National Highway Traffic Safety Administration = www.nhtsa.dot.gov

NHTSA wants to reduce death, injury and associated costs attributable to motor vehicle crashes. It aims to reduce USA's traffic fatality rate to 1 per 100 million vehicle miles travelled by 2008 and the national rate of impaired driving related traffic fatalities to 0.53 per 100 million vehicle miles travelled by 2005. Besides these objectives, it wants to increase the national safety belt usage to 80-85% by 2005.

National Road Authority = www.nra.ie

The Authority's primary function is "to secure the provision of a safe and efficient network of national roads" in Ireland. For this purpose, it has overall responsibility for planning and supervision of construction and maintenance works on these roads.

National Safety Council = www.nsc.ie

The National Safety Council (NSC) promotes Road Safety and Fire Safety in Ireland. The NSC implements education programmes, media campaigns and community activities to positively influence public attitude and behaviour in relation to Road and Fire Safety issues.

National Society for Road Safety NTF = www.ntf.se

The National Society for Road Safety is a non-governmental organization that works to improve road safety. NTF rouses public opinion of everyone's right to safe road traffic in which fatalities and serious injuries are considered unacceptable. It increases both people's will to call for and their ability to contribute to safe road traffic. NTF promotes awareness of the importance of road safety to public health.

Organisation for Economic Co-operation and Development = www.oecd.org

The OECD groups 30 member countries in an organization that, most importantly, provides governments a setting in which to discuss, develop and perfect economic and social policy. Their exchanges may lead to agreements to act in a formal way – for example, by establishing legally-binding codes for free flow of capital and services, agreements to crack down on bribery or to end subsidies for shipbuilding. But more often, their discussion makes for better-informed work within their own governments on the spectrum of public policy and clarifies the impact of national policies on

the international community. And it offers a chance to reflect and exchange perspectives with other countries similar to their own.

Organisation for Economic Co-operation and Development / European Conference of Ministers of Transport (OECD/ECMT) = www.oecd.org / www.cemt.org

The ECMT is an intergovernmental organization established by a protocol signed in Brussels on 17 October 1953. It comprises the Ministers of Transport of 43 full Member countries, 7 Associate countries and 1 observer country.

Establishing a joint OECD/ECMT Transport Research Centre has reinforced the activities in the transport sector. The ECMT's role primarily consists of helping to create an integrated transport system throughout the enlarged Europe that is economically and technically efficient, meets the highest possible safety and environmental standards and takes full account of the social dimension. It also provides a forum for analysis and discussion on forward looking transport policy issues for the countries involved.

Royal Society for the Prevention of Accidents = www.rospa.co.uk

The Royal Society for the Prevention of Accidents (RoSPA) in the United Kingdom has a website on child car restraints which has been created with funding from the British Government. The website provides:
−   Advice on choosing, fitting and using child car restraints
−   The legal requirements for using child restraints.

Swedish National Road Administration SNRA = www.vv.se

The SNRA is the national authority assigned the overall sectoral responsibility for the entire road transport system. The SNRA is also responsible for drawing up and applying road transport regulations. In addition, the SNRA is responsible for the planning, construction, operation and maintenance of the state roads.

SWOV Institute for Road Safety Research = www.swov.nl/uk

SWOV wants to make a contribution to promoting road safety by means of knowledge from scientific research. SWOV is an independent, scientific institute. SWOV's knowledge is public information and is made available to anyone who wants it, and is professionally involved in traffic and road safety in the Netherlands. SWOV is a leading institute, both in the Netherlands and abroad, thanks to its knowledge and its high-quality research.

Technical Research Centre of Finland (VTT) = www.vtt.fi

VTT Communities and Infrastructure is one of the nine research institutes of VTT, the Technical Research Centre of Finland. The business idea of VTT Communities and Infrastructure is to provide information on communities and physical infrastructures for the needs of industry and commerce as well as public authorities.

Traffic Injury Research Foundation TIRF = www.trafficinjuryresearch.com

> Traffic Injury Research Foundation is a Canadian, independent road safety institute. The mission of TIRF is to reduce traffic related deaths and injuries. It achieves its mission by designing, promoting and implementing effective programmes and policies, based on sound research.

Transit New Zealand = www.transit.govt.nz

> Transit New Zealand's vision is to be "a world leader in roading solutions". Five goals have been adopted to realize Transit's vision: Goal 1: to operate a safe and efficient state highway system, Goal 2: to improve the level of customer satisfaction, Goal 3: to develop and sustain a centre of excellence in roading solutions, Goal 4: to offer services to other road controlling authorities, and Goal 5: to be recognized in the international market place.

Transport Accidents Commission = www.tac.vic.gov.au

> The Australian TAC is unique among personal injury insurers, in that in addition to its core activity of paying accident compensation, it actively seeks to help change attitudes and behaviours towards road safety. By changing road user behaviour the TAC aims to reduce the incidence and cost of road accident trauma to premium payers and the Victorian community in general.

Transport Canada = www.tc.gc.ca

> Transport Canada's mission is to develop and administer policies, regulations and services for the best transportation system for Canada and Canadians – for which the Minister of Transport is responsible.

Transport Research Laboratory = www.trl.co.uk

> TRL is an independent, internationally recognized centre of excellence in surface transport issues in the United Kingdom. The organization provides research-based technical help, which enables customers to obtain improved value for money, generate competitive advantage and a better understanding of transport problems. TRL employs around 500 staff with a wide range of professional disciplines, among them mathematicians, physicists, psychologists, engineers, geologists, computer experts and statisticians. Facilities include a state of the art driving simulator, a new indoor impact test facility, a 3.8 km test track, a separate self-contained road network, a structures hall, an extensive library and a conference centre.

United Nations Economic Commission for Africa (UNECA) = www.uneca.org

> UNECA aims to provide policy assistance towards the development of an efficient, safe, affordable and well-managed regional transport system that would facilitate region integration in Africa. Accordingly, UNECA plays a key role in the implementation of the 2002 Plan of Action of the Conference of African Ministers of Transport and Communication.

United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) = www.unescap.org

UNESCAP promotes more effective policies and programmes by governments, civil society and the private sector to enhance transport logistics and public-private partnerships in transport, and the social and environmental aspect of transport.

United Nations Economic and Social Commission for Western Asia (UNESCWA) = www.unescwa.org

UNESCWA aims to assess and improve the road safety situation in member countries. In particular, it is planning to prepare a comprehensive study on the status of road crashes in the Asia region. The study team will assess the situation of road safety in member countries, hold discussions with concerned parties and develop relevant recommendations.

United Nations Economic Commission for Latin America and the Caribbean (UNECLAC) = www.cepal.cl

The overall objective of UNECLAC is to contribute to the socioeconomic development of Latin America and the Caribbean, as well as to promote integration both between member countries and between them and the outside world. Activities in the field of road safety should be seen in this general context. Road crashes retard socioeconomic development and have serious consequences in terms of human suffering.

VTI Swedish National Road and Transport Research Institute = www.vti.se

VTI conducts applied research, commissioned by the transport sector, in the fields of infrastructure, traffic and transport. Its expertise covers traffic engineering, traffic safety, economics of transport, environmental aspects of transport systems, railway engineering, road user behaviour, vehicle engineering, human factor, collision safety and the planning, design, construction, maintenance and operations of highways and railways.

World Health Organization (WHO) = www.who.int

WHO aims to integrate road safety into public health programmes around the world in order to reduce the unacceptably high levels of road traffic injuries. A public health approach is used, combining epidemiology, prevention and advocacy. Special emphasis is given to low and middle-income countries.

World Road Association (PIARC) = www.piarc.org

For many years, the Road Safety Committee of the World Road Association (PIARC) has been working on collision prevention in the areas of road safety engineering, road safety politics, and road users' behaviour. The issues to be tackled are defined by an executive committee of the heads of road administrations, comprising about 110 national governments.

By theme

Bank

Asian Development Bank = www.adb.org

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Governmental and non-governmental organizations

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Partnership

Global Road Safety Partnership (GRSP) = www.grsproadsafety.org

GRSP is a global partnership between business, civil society and government dedicated to the sustainable reduction of death and injury on the roads in developing and transition countries. By creating and strengthening linkages between partners, GRSP aims to increase awareness of road safety as an issue affecting all sectors of society.

Research

European Commission Transport Research Centre = http://ec.europa.eu/transport/extra/web

Through this website, the European Committee aims at offering a platform for dissemination of the results of European Transport Research programmes (e.g. Framework Programme 4, 5 and later 6). It offers information on how to develop guidelines and innovative tools to support sustainable mobility.

Research projects

Advisors = www.advisors.iao.fraunhofer.de

> Research and development have created a range of Advanced Driver Assistance Systems (ADAS) that may facilitate the tasks of drivers in the growing complexity of traffic conditions. Based on test site demonstrations, ADVISORS will develop a methodology to assess the impact of different types and different levels of penetration of ADAS in terms of the safety, efficiency and environmental performance of the road transport system. Furthermore, ADVISORS will develop implementation scenarios in order to help introducing appropriate ADAS.

CARE = http://europa.eu.int/comm/transport/care

> CARE is a community database on road accidents resulting in death or injury (no statistics on damage-only accidents). The major difference between CARE and most other existing international databases is the high level of disaggregation, i.e. CARE comprises detailed data on individual accidents as collected by the member states. This structure allows for maximum flexibility and potential with regard to analysing the information contained in the system and opens up a whole set of new possibilities in the field of accident analysis.

CHILD =www.lboro.ac.uk/research/esri/vsrc/research/child%20web%20site

> CHILD aims to increase the knowledge in areas specifically regarding children, and to use the information in applications of child restraint systems design, testing and regulation.

ESCAPE = http://ec.europa.eu/transport/extra/web

> The aim of ESCAPE is to identify important areas of traffic and driver non-compliant behaviour and to assess the potential of enforcement tools, both traditional and innovative, to improve compliance and thus contribute to safety on European roads. ESCAPE will prepare the groundwork for implementing European-wide demonstration projects in enforcement within the 5th Framework Programme.

PENDANT = www.vsi.tugraz.at/pendant

> The project will provide new levels of crash and injury data to support EU vehicle and road safety policy making by developing two new European data systems. The first will be collected in eight countries and will contain in-depth crash and injury data relating to over 1100 injured car occupants and pedestrians. The second information system will utilize hospital injury data relating to all road user types that already exists in three EU countries.

SafetyNet = http://safetynet.swov.nl

> This project will bring together all of the most experienced organizations within the EU to assemble a coordinated set of data resources that together will meet the EC needs for policy support. The Road Safety Observatory will enable the Commission to monitor progress towards targets, identify best

practice, and ensure that new regulatory and other safety actions will result in the maximum casualty reduction. All data assembled or gathered within the project will be available over the web to the entire road safety community.

SARTRE = http://sartre.inrets.fr

The SARTRE project was initially conducted at the beginning of the 90s. Scientist researchers from the main national road safety research bodies in Europe, cooperated to explore attitudes and reported behaviour of car drivers in their respective countries, with help of FERSI and support from EC. Representative surveys were carried out in each country on the basis of an identical questionnaire with the same methodological criteria. SARTRE III presented its results in 2004.

SUNFLOWER+6 = http://sunflower.swov.nl

The SUNflower+6 project aims to identify differences in the road safety performance of different European countries, by a comparative study of the development of road safety. In the SUNflower project this approach has been applied successfully for the 'SUN' countries (Sweden, United Kingdom and the Netherlands) that have safety records that are among the best in the world. Using the SUNflower methodology, the study is continued and extended with three Southern European countries or regions (Greece, Portugal and Spain/Catalonia) and three Central European countries (Czech Republic, Hungary and Slovenia).

IRTAD = www.oecd.org

IRTAD is an international database that gathers data on traffic and road accidents from 28 out of the 30 OECD Member countries. To assess national developments in the area of traffic safety more accurately, it is necessary to view them in an international context. IRTAD represents an indispensable tool for all national road administrations, road safety research institutes, car manufacturers, automobile clubs and insurers. IRTAD operates within the framework of the Joint OECD/ECMT Transport Research Centre. Most OECD countries are represented by National Co-ordinating Centres. IRTAD participation is also open to non-OECD countries. The main part of the database, with around 500 data items, includes aggregated data on injury accidents, road fatalities, vehicle population, network length, vehicle kilometrage from 28 countries (for 1965 and for every year since 1970).

By area

AFRICA

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AMERICA

Canada

Canada Safety Council = www.safety-council.org

> The Canada Safety Council is a national, non-government, charitable organization dedicated to safety. Its mission is to lead in the national effort to reduce preventable deaths, injuries and economic loss in public and private places throughout Canada. They serve as a credible, reliable resource for safety information, education and awareness in all aspects of Canadian life – in traffic, at home, at work and at leisure.

Transport Canada = www.tc.gc.ca

> Transport Canada's mission is to develop and administer policies, regulations and services for the best transportation system for Canada and Canadians – for which the Minister of Transport is responsible.

Traffic Injury Research Foundation TIRF = www.trafficinjuryresearch.com

> Traffic Injury Research Foundation is a Canadian, independent road safety institute. The mission of TIRF is to reduce traffic related deaths and injuries. It achieves its mission by designing, promoting and implementing effective programmes and policies, based on sound research.

Latin America

United Nations Economic Commission for Latin America and the Caribbean (UNECLAC) = www.cepal.cl

> The overall objective of UNECLAC is to contribute to the socioeconomic development of Latin America and the Caribbean, as well as to promote integration both between member countries and between them and the outside world. Activities in the field of road safety should be seen in this general context. Road crashes retard socioeconomic development and have serious consequences in terms of human suffering.

United States

Insurance Institute for Highway Safety = www.iihs.org

> The Insurance Institute for Highway Safety is an independent, nonprofit, scientific and educational organization dedicated to reducing the losses – deaths, injuries, and property damage – from crashes on the nation's highways.

National Highway Traffic Safety Administration = www.nhtsa.dot.gov

> NHTSA wants to reduce death, injury an associated costs attributable to motor vehicle crashes. It aims to reduce the traffic fatality rate to 1 per 100 million vehicle miles travelled by 2008 and the national rate of impaired driving related traffic fatalities to 0.53 per 100 million vehicle miles travelled by 2005. Besides these objectives, it wants to increase the national safety belt usage to 80-85% by 2005.

ASIA & PACIFIC

Asian Development Bank = www.adb.org

> The ADB wants to encourage and promote safety in road infrastructure projects in Asia and the Pacific region. By adopting an integrated multi-sectoral approach, the ABD's objective is to assist its member countries in developing and implementing comprehensive approaches to enhance road safety, as well as to provide funding for such activities.

Australia

Australian Transport Safety Bureau (ATSB) = www.atsb.gov.au

> The Australian Transport Safety Bureau (ATSB) undertakes best-practice 'no blame' transport safety investigations. The bureau is an operationally independent multi-modal body as it has to independently investigate, analyse and report on transport safety. It maintains a clear organizational separation from transport regulators and other parties that may be investigated, and operates within a defined legal framework within the Commonwealth Department of Transport and Regional Services (DOTARS).

Injury Research Centre = www.irc.uwa.edu.au

> The Injury Research Centre is an exciting new initiative built on an outstanding research reputation of the Department of Public Health at The University of Western Australia. It evolves from the Road Accident Prevention Research unit that was established in the Department in 1989. The Unit has conducted leading research directed towards minimizing the frequency and consequences of road traffic crashes in Western Australia and developed a reputation as one of the lead agencies for road safety research in the state and nationally. This excellence provides the foundation for the Injury Research Centre. In July 2001, the Road Accident Prevention Research Unit extended its expertise in the study of road traffic-related injury to all areas of unintentional and intentional injury and was renamed the Injury Research Centre.

Transport Accidents Commission = www.tac.vic.gov.au

> The TAC is unique among personal injury insurers, in that in addition to its core activity of paying accident compensation, it actively seeks to help change attitudes and behaviours towards road safety. By changing road user behaviour the TAC aims to reduce the incidence and cost of road accident trauma to premium payers and the Victorian community in general.

New Zealand

Land Transport Safety Authority = www.ltsa.govt.nz

> New Zealand's Land Transport Safety Authority (LTSA) is a Crown Entity charged with promoting land transport safety at reasonable cost. The LTSA works closely with several road safety partners at a national, regional and local level. Road safety activities undertaken by the police, the LTSA, community groups and regional and local authorities are planned and funded primarily through the New Zealand Road Safety Programme (NRSP), which is prepared and managed by the LTSA.

Transit New Zealand = www.transit.govt.nz

> Transit New Zealand's vision is to be "a world leader in roading solutions". Five goals have been adopted to realize Transit's vision: Goal 1: to operate a safe and efficient state highway system, Goal 2: to improve the level of customer satisfaction, Goal 3: to develop and sustain a centre of excellence in roading solutions, Goal 4: to offer services to other road controlling authorities, and Goal 5: to be recognized in the international market place.

United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) = www.unescap.org

> UNESCAP promotes more effective policies and programmes by governments, civil society and the private sector to enhance transport logistics and public-private partnerships in transport, and the social and environmental aspect of transport.

United Nations Economic and Social Commission for Western Asia (UNESCWA) = www.unescwa.org

> UNESCWA aims to assess and improve the road safety situation in member countries. In particular, it is planning to prepare a comprehensive study on the status of road crashes in the Asia region. The study team will assess the situation of road safety in member countries, hold discussions with concerned parties and develop relevant recommendations.

EUROPE

EU

European Commission, Directorate-General for Energy and Transport = http://europa.eu.int/comm/transport

> Of all modes of transport, transport by road is the most dangerous and the most costly in terms of human lives. For this reason, the Road Safety Action Programme (2003-2010) proposes a series of measures such as stepping

up checks on road traffic, deploying new road safety technologies, improving road infrastructure and measures to improve road users' behaviour. The ultimate objective is to halve the number of people killed on the roads by 2010.

European Conference of Ministers of Transport (ECMT) = www.cemt.org

The ECMT is an intergovernmental organization established by a protocol signed in Brussels on 17 October 1953. It comprises the Ministers of Transport of 43 full Member countries, 7 Associate countries and 1 observer country.
Establishing a joint OECD/ECMT Transport Research Centre has reinforced the activities in the transport sector. The ECMT's role primarily consists of helping to create an integrated transport system throughout the enlarged Europe that is economically and technically efficient, meets the highest possible safety and environmental standards and takes full account of the social dimension. It also provides a forum for analysis and discussion on forward looking transport policy issues for the countries involved.

European Road Safety Charter = http://europa.eu.int/comm/transport/roadsafety/charter_en.htm

The European Road Safety Charter is one of the main European Commission initiatives to reach the overall objective of halving the number of road fatalities by 2010 by means of encouraging actions on a European Community level.

EuroNCAP = www.euroncap.com

Euro NCAP provides motoring consumers with a realistic and independent assessment of the safety performance of some of the most popular cars sold in Europe. Established in 1997 and now backed by five European Governments, the European Commission and motoring and consumer organizations in every EU country, EuroNCAP has rapidly become a catalyst for encouraging significant safety improvements to new car design.

Belgium

Belgian Road Safety Insitute (BIVV) = www.bivv.be

The Belgian Road Safety Institute BIVV wishes to promote road safety and traffic liveability by: campaigns and education, research and advice. Other tasks are: advising and accompanying, representing and coordinating, and implementation of government assignments.

Denmark

Denmark's Road Safety and Transport Agency = www.fstyr.dk

Denmark's Road Safety and Transport Agency is an independent administrative body within the Danish Ministry of Transport.
The agency's areas of responsibility are principally:
− to enforce Danish legislation regarding commercial transport;
− to promote environmentally-friendly road transport.

Finland

Technical Research Centre of Finland (VTT) = www.vtt.fi

> VTT Communities and Infrastructure is one of the nine research institutes of VTT, the Technical Research Centre of Finland. The business idea of VTT Communities and Infrastructure is to provide information on communities and physical infrastructures for the needs of industry and commerce as well as public authorities.

Liikenneturva = www.liikenneturva.fi

> Liikenneturva's task is to improve traffic safety by influencing people's traffic behaviour and values and attitudes concerning traffic throughout society. The means for achieving this are publicity and education. The goal is to reduce the number of dangerous situations, risk factors and accidents in traffic and to alleviate their consequences.

France

French National Institute for Transport and Safety Research INRETS = www.inrets.fr

> INRETS is a state-financed scientific and technological body under the dual administrative supervision of the Ministry of Research and the Ministry of Transport. INRETS has the following tasks:
> – to organize, execute and assess technological research and development concerned with the improvement of the means and systems of transport and of traffic from technical, economic and social viewpoints;
> – to carry out evaluative and advisory studies within these domains;
> – to promote the results of these research and study programme, to contribute to the dissemination of scientific knowledge, and participate in training by and for transport research both in France and abroad.

Germany

German Federal Highway Research Institute BAST = www.bast.de

> BASt is a technical and scientific institute responsible to the Federal Ministry of Transport, Building and Housing (BMVBW). The scope of work is considerable, ranging from replying at short notice to incoming enquiries to the coordination and carrying out of research projects over a period of several years. Another task is to act as scientific adviser to the state highway authorities which administer federal interstate highways and autobahns on behalf of the federal government.

Greece

Hellenic Institute of Transport = www.hit.certh.gr

> HITs main objective is the conduct and support of applied research activities in the field of transportation in Greece. More specifically on issues relating to organization, operation, planning and development of infrastructure, and standardization, economic analysis, management, vehicle technology, and

impact assessment of land, maritime, air, and multi-modal transport services. Also training and education activities in related fields, dissemination of research activities and the representation of Greece, in Transport Research and other relevant scientific fora abroad.

Ireland

National Safety Council = www.nsc.ie

The National Safety Council (NSC) promotes Road Safety and Fire Safety in Ireland. The NSC implements education programmes, media campaigns and community activities to positively influence public attitude and behaviour in relation to Road and Fire Safety issues.

National Road Authority = www.nra.ie

The Authority's primary function is "to secure the provision of a safe and efficient network of national roads". For this purpose, it has overall responsibility for planning and supervision of construction and maintenance works on these roads.

Netherlands

AVV Transport Research Centre = www.rws-avv.nl

The AVV Transport Research Centre (part of the Rijkswaterstaat organization) makes an active contribution to improving the Dutch transport system by supplying knowledge for the formulation and implementation of Dutch transport policy.

SWOV Institute for Road Safety Research = www.swov.nl/uk

SWOV wants to make a contribution to promoting road safety by means of knowledge from scientific research. SWOV is an independent, scientific institute. SWOV's knowledge is public information and is made available to anyone who wants it, and is professionally involved in traffic and road safety in the Netherlands. SWOV is a leading institute, both in the Netherlands and abroad, thanks to its knowledge and its high-quality research.

Norway

Institute of Transport Economics (TØI) = www.toi.no

TØI wants to carry out applied research on issues related to transport and to promote the application of research results by advising authorities, the transport industry and the public at large. TØI's activities cover most current issues in road, rail, sea and air transport, including road safety.

Sweden

VTI Swedisch National Road and Transport Research Institute = www.vti.se

VTI conducts applied research, commissioned by the transport sector, in the fields of infrastructure, traffic and transport. Its expertise covers traffic engineering, traffic safety, economics of transport, environmental aspects of

transport systems, railway engineering, road user behaviour, vehicle engineering, human factor, collision safety and the planning, design, construction, maintenance and operations of highways and railways.

Swedish National Road Administration SNRA = www.vv.se

The SNRA is the national authority assigned the overall sectoral responsibility for the entire road transport system. The SNRA is also responsible for drawing up and applying road transport regulations. In addition, the SNRA is responsible for the planning, construction, operation and maintenance of the state roads.

National Society for Road Safety NTF = www.ntf.se

The National Society for Road Safety is a non-governmental organization that works to improve road safety. NTF rouses public opinion of everyone's right to safe road traffic in which fatalities and serious injuries are considered unacceptable. It increases both people's will to call for and their ability to contribute to safe road traffic. NTF promotes awareness of the importance of road safety to public health.

Switzerland

International Road Transport Union (IRU) = www.iru.org

IRU seeks to reduce the frequency and severity of road collisions involving buses, coaches, lorries and taxis by promoting the systematic integration of road safety practices in everyday activity of transport enterprises and by providing high-level training to road transport operators and their staff.

United Kingdom

Department for Transport (UK) = www.dft.gov.uk

The UK Department for Transport's objective is to oversee the delivery of a reliable, safe and secure transport system that responds efficiently to the needs of individuals and business whilst safeguarding our environment.

Transport Research Laboratory = www.trl.co.uk

TRL is an independent, internationally recognized centre of excellence in surface transport issues. The organization provides research-based technical help which enables customers to obtain improved value for money, generate competitive advantage and a better understanding of transport problems. TRL employs around 500 staff with a wide range of professional disciplines, among them mathematicians, physicists, psychologists, engineers, geologists, computer experts and statisticians. Facilities include a state of the art driving simulator, a new indoor impact test facility, a 3.8 km test track, a separate self-contained road network, a structures hall, an extensive library and a conference centre.

Royal Society for the Prevention of Accidents = www.rospa.co.uk

> The Royal Society for the Prevention of Accidents (RoSPA) in the United Kingdom has a website on child car restraints which has been created with funding from the British Government. The website provides:
> – advice on choosing, fitting and using child car restraints;
> – the legal requirements for using child restraints.

Institution of Highway and Transportation = www.iht.org

> Originally established in 1930 as the Institution of Highway Engineers before changing its name in 1987 in recognition of sector developments. The IHT is the foremost learned society in the UK concerned specifically with the design, construction, maintenance and operation of sustainable transport systems and infrastructure. It aims to provide a forum for the exchange of technical information and views on highways and transport policy; to produce practical technical publications; to provide specialist advice to government and other bodies; to make roads safer for the travelling public; and to encourage training and professional development to meet today's requirements.

Worldwide

International Cooperation on Theories and Concepts in Traffic Safety = www.ictct.org

> ICTCT is an association developed out of an international working group of safety experts with the aim to identify and analyse dangerous situations in road traffic on the basis of criteria other than past accidents, analogous to the methods of air and industrial safety.
> The aim of ICTCT is to achieve a deeper understanding of problems in the area, to harmonize future research activities, and to provide for means for an optimal utilization of research results from different countries.

Global Road Safety Collaborative = www.globalroadsafety.org

> The mission of this collaborative is to help raise awareness and bring people together to address the global road safety crisis in developing countries. This includes advocacy, facilitating collaboration and organizing inclusive stakeholders' forums both regionally and globally. At the moment GRSC addresses road safety for all ages.

Global Road Safety Partnership (GRSP) = www.grsproadsafety.org

> GRSP is a global partnership between business, civil society and government dedicated to the sustainable reduction of death and injury on the roads in developing and transition countries. By creating and strengthening linkages between partners, GRSP aims to increase awareness of road safety as an issue affecting all sectors of society.

World Health Organization (WHO) = www.who.int

> WHO aims to integrate road safety into public health programmes around the world in order to reduce the unacceptably high levels of road traffic injuries. A public health approach is used, combining epidemiology,

prevention and advocacy. Special emphasis is given to low and middle-income countries.

World Road Association (PIARC) = www.piarc.org

For many years, the Road Safety Committee of the World Road Association (PIARC) has been working on collision prevention in the areas of road safety engineering, road safety politics, and road users' behaviour. The issues to be tackled are defined by an executive committee of the heads of road administrations, comprising about 110 national governments.