
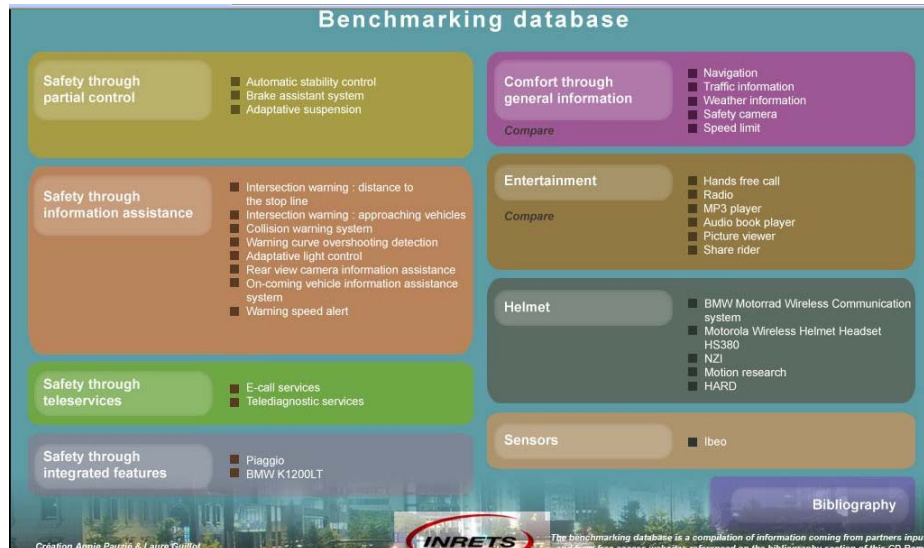




## BP5: PTW Design and Protective Equipment

<b>Reference:</b> BP5 016	<b>Title of Project:</b>	<b>SAFERIDER Project</b>
<b>Version:</b> 1	<b>Website:</b>	<a href="http://www.saferider-eu.org/index.html">http://www.saferider-eu.org/index.html</a>
<b>Brief Description of Project:</b>	<div style="display: flex; align-items: flex-start;">  <div> <p>SAFERIDER aims to study the potential of Advanced Driver Assistance Systems (ADAS) and In-Vehicle Information Systems (IVIS) integration on motorcycles for the most crucial functionalities and develop efficient and rider-friendly interfaces and interaction elements for riders comfort and safety.</p> <p>Specifically, SAFERIDER targets the following objectives:</p> <ol style="list-style-type: none"> <li>1. To develop priority Use Cases for ADAS/IVIS implementation on PTWs.</li> <li>2. To define the functionalities of the prioritised ADAS/IVIS for PTWs of different levels, based on accident analysis data and naturalistic driving studies.</li> <li>3. To design and develop ADAS/IVIS prototypes for the selected functionalities.</li> <li>4. To design an optimal HMI concept and develop warning/ information provision elements for the prototypes, as well as for potential combinations of their output.</li> <li>5. To technically verify the developed ADAS/IVIS and integrate them to different motorcycles and motorcycle simulators.</li> <li>6. To estimate the safety impact and user acceptance of the prototypes in a series of pilot applications.</li> <li>7. To develop a Design Guidelines handbook for ADAS/IVIS integration and HMI design for motorcycles.</li> <li>8. To develop rider training tools for optimal ADAS/IVIS usage.</li> </ol> <p>SAFERIDER is mostly looking at emerging technologies but one of the project's deliverables has been the creation of a benchmarking website <a href="http://www.saferider-eu.org/benchmark/">http://www.saferider-eu.org/benchmark/</a> which examines the developing ADAS/IVIS options for PTWs.</p> </div> </div>	



The systems benchmarked by SAFERIDER with a potential to contribute to a reduction in urban PTW collisions have been separately assessed as part of eSUM WP3, BP5.

SAFERIDER aims to design and develop four ADAS applications for motorcycles with road safety potential:

- Speed Alerts
- Curve Speed Warning
- Frontal Collision Warning
- Intersection Support

The project intends to integrate ADAS & IVIS applications in 3 simulators and 9 PTW demonstrators and then to use these to develop practical, rider friendly systems.

The Saferider consortium developed a survey to ask for riders' personal opinions regarding new safety technologies on motorcycles. The results of a user forum were presented at a meeting in June 2008:

[http://www.saferider-eu.org/documents/Annex\\_5\\_Saferider\\_User\\_forum\\_Baldanzini.pdf](http://www.saferider-eu.org/documents/Annex_5_Saferider_User_forum_Baldanzini.pdf).

There was diverse opinion on which systems were 'wanted' or 'needed' by the rider.

**Monitoring Data:**

The systems benchmarked by SAFERIDER have generally not been monitored using collision/casualty data, although the project objectives include the identification of collision situations where ADAS/IVIS could be effective as counter-measures. In some cases the systems considered are currently operative for research purposes only.

<b>Results:</b>	The SAFERIDER project has produced a useful website including benchmarking of some of the current and developing ADAS and IVIS systems available.
<b>Key Effective Conclusions:</b>	Several of the benchmarked systems, for example advanced braking systems, have a clear potential as counter-measures to the most common PTW collision types as identified by collision studies (MAIDS, DfT In-depth Study). Others are emerging technologies which may have long term potential but currently require considerable development.
<b>Projects for Comparison:</b>	ISA (BP5 008).
<b>Justification:</b>	The SAFERIDER project is currently progressing with the final report due at the end of 2010. Some of the ADAS/IVIS systems benchmarked already have the potential to contribute to eSUM objectives and others may develop that potential over the coming years.