



BP5: PTW Design and Protective Equipment

Reference: BP5 009	Title of Project:	Inter Vehicle Communication (V2V) Systems
Version: 1	Website:	http://www.saferider-eu.org/benchmark/ http://www.watchover-eu.org/
Brief Description of Project:	<p>Inter-Vehicle Communication allows automatic communication between vehicles exchanging details of type, speed, location and path. Inter-Vehicle Communication Systems vary in complexity from simple audible ‘warning of approach’ to sophisticated head up display and audio systems giving position, speed, stopping distance and navigation information.</p> <p>IVCS requires each vehicle to carry a receiver/processor/display unit and transponder, sending information to other vehicles. IVCS systems have been trialled by Honda and Yamaha on their ASVs.</p> <p>In principle IVCS could be an effective counter measure to urban junction collisions. The approaching PTW would be sending a signal giving its location and speed, providing a warning alert in other vehicles approaching the junction.</p> <p>The Saferider, ‘Watch Over’ and ‘Safespot’ projects are currently examining the potential of V2V communication systems.</p> <p>The effectiveness of IVCS depends on market saturation.</p>	
Monitoring Data:	IVCS has been tested to assess technical feasibility and operation but has not been evaluated in live traffic situations.	
Results:	The IVCS systems trialled by Honda and Yamaha appear to function satisfactorily in tests.	

Key Effective Conclusions:	<p>ICVS could provide an effective counter-measure to 'failure to see' junction collisions. If there were sufficient market penetration, with virtually all vehicles equipped with ICVS, drivers of vehicles approaching a junction would receive an alert of the presence of PTWs, increasing the chance of perception and recognition.</p> <p>Once in general operation, over-reliance may become an issue.</p>
Projects for Comparison:	<p>None.</p>
Justification:	<p>Although IVCS has great potential, this is emerging technology which will require considerable market saturation before becoming effective. In the medium term IVCS will not contribute towards the eSUM WP3 BP5 objectives but in the long term this could be a very effective counter-measure.</p>