

## Motorway traffic related VACS – V2V systems

System	Description	Sources of info
<b>Cooperative Adaptive Cruise Control (CACC)</b>	V2V cooperation is necessary to perform its functions in full extent; in absence of V2V cooperation, it functions as ACC	VanderWerf et al, 2002, 2001, 2007; Maihöfer et al, 2004; Bishop, 2005; Visser, 2005; Popescu-Zeletin et al, 2010; Shladover et al, 2010, 2011; Arnaout and Bowling, 2011, 2013
<b>Cooperative Following and Merging (CFM)</b>	V2V cooperation is necessary to perform its following function, while V2V or V2I cooperation is necessary for the accomplishment of the merging function	Tampère et al, 1999
<b>Cooperative Merging (CM)</b>	V2V or V2I cooperation is necessary to accomplish the merging function	Tampère et al, 1999; Popescu-Zeletin et al, 2010
<b>Integrated Full-Speed Range Speed Assistant (IRSA)</b>	V2V or V2I cooperation is necessary so that speed limits are directly communicated to the vehicle, while V2V cooperation is necessary to perform its CACC similar function; in absence of V2V cooperation, it functions as ACC	Wilmink et al, 2006; van Arem et al, 2007
<b>Vehicle Platooning System (VPS)</b>	V2V cooperation suffices to form and maintain vehicle platoons; combination of V2V and V2I cooperation has also been used	PATH, 1997; Michael et al, 1998; Hedrick et al, 2001; Lee and Kim, 2002; Bonnet, 2003; Ehmanns and Spannheimer, 2004; Bishop, 2005; Hallé and Chaib-draa; 2005; van Arem et al, 2006; Alam et al, 2010; Alam, 2011; Tientrakool et al, 2011; Bergenheim et al, 2012a, 2012b; Kavathekar, 2012; Shladover, 2012a; Brännström, 2013; Davila, 2013; iMobility Forum, 2013; Kianfar, 2013; SARTRE, 2013; Tsugawa, 2014;