Inside Line...

Automatic speed limiters – coming to your bike soon?

ISA – Intelligent Speed Assistance – is a system that is now quite highly developed for cars and vans and has been the subject of very extensive trials in Sweden involving thousands of drivers.

It comes in various forms, the simplest being a warning device that lets the driver know he or she is "over the limit" – the driver being quite free to ignore the warning. Other versions involve a bit more technology and the accelerator pedal will become a little heavier to use – but again this is something the driver can override if desired. All these systems fall into the category of "assistance."

Nobody agrees completely on the terms used, but the next stage is better described as "Intelligent Speed Adaptation," a system of external control that cannot be overridden. This is where the insurance industry gets very nervous! It is one thing giving a driver a warning (or a rider – we will come to bikes soon I promise) but quite another to take away all control of speed. You can imagine the legal disputes that would arise. "No, the accident could have been avoided if I had been in a position to accelerate away – but the car took control out of my hands!" This would be followed by many class action law suits in the USA in which drivers band together to sue motor manufacturers for fitting such dangerous systems and causing accidents!

If I were to guess on how the immediate future will pan out, I think the combined power of the car industry and the insurance companies will hold off compulsory speed control for many years yet. The key change will come when the insurance industry thinks it can make more profit by the change. Motor insurance brings some returns but they are patchy. A lot of our premiums are reinvested by the companies in other more profitable lines.

The other factor is climate change. Compulsory speed control could drastically reduce fuel consumption. Finally it might actually improve journey times for the majority of drivers. At the moment it is only being discussed in policy think tanks remote from the public.

Some efforts have been made to produce an adapted motorcycle and one was developed here in the UK. The speed "warning" was delivered via a vibrating saddle once the posted limit was exceeded. No, I promise you I am not making this up! It really did happen, and if you don't believe me contact the BMF and MAG as their representatives got to try it out. The boys have not reported on whether they enjoyed having their crotch and backside vibrated as they rode along, and whether it tempted them to continue to override the system in order to carry on the experience. It certainly sounds interesting and might make speeding more attractive to some – but probably even more distracting too!

On a more serious note, a 2008 report by the European Transport Safety Council goes into the issue in a lot more detail. It points out that everything so far (vibro saddles excepted) has been developed with cars and vans in mind. It goes on to stress that simply transferring this technology to a motorcycle could have very adverse consequences on safety. This is perhaps best explained by expert riding instructor Duncan MacKillop.

"Throttle control is not all about speed, there appears to be a mistaken belief that the throttle on a motorcycle only makes bikes go faster and therefore safety can be improved simply by closing the throttle and slowing things down."

He adds: "The primary function of the throttle is to turn our bikes from something that is statically unstable to something that is statically and dynamically stable. The secondary function of the throttle is to control our suspension. Most riders know that the forks extend when we open the throttle. Few riders appreciate that the rear suspension also extends when we open the throttle. This extension of the suspension when we open the throttle gives us lots more ground clearance which is essential in any corner as well as putting the suspension in its sweet spot.

"Finally, the throttle does the relatively simple job of changing the speed of the bike. With an open throttle, a bike is more stable, has better ground clearance and has improved suspension function. With a closed throttle a bike is less stable, has less ground clearance and reduced suspension function. Of these two states, which is the safest?"

Duncan MacKillop and Ian Lee (training expert from the BMF) both gave preliminary advice to a new European project called "Saferider." The "Saferider" project partners include the Federation of European Motorcyclists Associations (FEMA) to which our own BMF and MAG both belong. Of course this project is free to investigate whatever it likes. It is however a pity to learn that despite advice from Duncan and Ian that it is pursuing the idea of throttle related ISA by simply transferring ideas developed for cars and vans. I am grateful to former FEMA Research officer Dr Elaine Hardy for giving the Digest the heads up on this issue via the regular technical briefings she sends to the press. If you want to know more detail and add your thoughts to the Facebook campaign she is running against this nonsense take a look at: www.righttoride.co.uk