Interviewer OK, well, so if first of all, if you just tell me about the system that you've got in your car and how it works and how long you've driven with it,

P13 yeah,.... as I say, it's the Mercedes Benz. It's called the Pilot Active Assist I think it is....so it's more or less the same as the.... the the ones that've been rolled out across the car manufacturing industry, at the moment. It's operated by er.... multifunction cameras in the front of the vehicle that pick up road signs as you're passing the traffic signs, be it..... most of them should be round, but you get the odd rectangular one or square one.... it brings up almost like a speed limit sign on the dash on the control cluster and there is an audible warning that'll give you a bing if you are going over it and whatnot. To be perfectly honest with you, I don't really use it. As I say, I'm I've been driving 40 odd years. I'm a trained police driver, so I don't really feel the need for it. As I said in my... survey when I was doing it, I can see the point. Say for the sake of argument, I come down into Liverpool, Manchester, London somewhere I would I would contemplate putting it on purely because there'll be different speed limits.... erm... and it's... if you're trying to concentrate on roads you don't know, sometimes you can miss a speed limit sign quite easily... because you are maybe focusing on three lanes, or two lanes or cycle lanes er.... also... the system I've got, is kind of linked in to my..... what do you call it... Autopilot... it's linked into the cruise control as well.... So if I have the limiter on and cruise control, that also kicks in.... it's almost like a dual system.... And it's it's a straightforward touch accelerator touch the brake....but as I say, I've disabled it to all intents and purposes....

Interviewer So the speed limiting system is part of your cruise control system?

P13 Yes, there's 2.....I've got... it almost links in, if you follow...., if I'm in an area where I've got a cruise control... which would be motorway driving... if I was on a 60 mile an hour or a 70 mile an hour limit, I sometimes put cruise control on...but you can put a limiter on that... which.... almost ties in....with the speed limit signs coming up on the pilot...pilot active assist I think it's called.... it's all done through this distronic system that Merc have got.....

Interviewer So that active assist system sounds like the system that we're interested in, which is the speed limiting system, which is the one that picks up the the road signs and then changes..... so it slows down your car. But it sounds like.... did you say that you don't tend to use that system....

P13 I tend not to, no....but, as I say, that's purely... I mean, I'm I'm an old dinosaur. I'm I like to be in full control of the car. I I've got a thing about.... software trying to manage roads in the 21st century that haven't been built for that.... there's cars on the road that don't have the same systems,.... you can never, ever take in the variables... like a child running out in front of you... a pedestrian walking out in front... somebody in front of you braking for no good reason. So I tend to.... because that would... sorry, I'm rambling on.... I have another.... feature on the car, but it's the safe distance monitor as well. And I really can't disable it and that drives me nuts because cars pull in front of you and.... I always drive at a safe braking distance... I know I'm sounding like a paragon of virtue here but I genuinely do.... and if a car comes within a certain distance, this red light comes on and a ping.... so I've got that going... so as you see, I'm not really keen on having too many..... bells and whistles all going on at the one time....

Interviewer Is that because you you find that distracting or....

P13 it can be a wee bit because..... until you get used to it..... it's like everything else.... it's Pavlov's dogs, once you're conditioned to these things going, you can almost subconsciously be aware of it.... But to be honest with you, I don't drive a lot now..... because I walk to my work..... I actually live in.... the building where I work, so I'm not commuting anymore. But that would drive me to distraction..... rattles noises, bings, bongs....

Interviewer So do you feel these systems make driving safer or less safe....

P13 This is the conundrum. Do they make it less safe erm.... I feel that..... at the moment, potentially, yes, because they can be distracting.... if... and I think I'm right in saying they're trying to roll it out across Europe... all cars are to be fitted with ISA....

Interviewer yes, that's right....the idea is that speed limiting system will start to be put in all new cars....

P13 Aye, yeah....So, I see the point of it. But I'm afraid I've always been of the opinion, it's virtually impossible to have an autonomous driving experience in a car because computers can't factor in.... a rational random human act. So I know I'm not answering your question here.... I'm really trying not to sit on the fence.... I can see, yes, once every card is designed that way.... and if it was on specific roadways... dual carriageways, motorways..., some of your bigger A-class roads.... not a problem. My issue is.... if you're in villages and towns....no..... at the moment, I think there's too many variables. That's the problem, and it's things you cannot ... that the software can't see....

Interviewer So that's a general thing around more automated driving not quite being there yet. So you have reservations about that....

P13 I genuinely do... and don't get me wrong..... I get the whole concept to reduce the speed for road safety purposes, I think..... off the top of my head...... if you reduce speed, you're cutting accidents, fatalities, casualties by something like 10, 15 percent. I get that, you know, I fully understand all that..... I just think there's..... I don't think the road infrastructure.... is just quite in sync with the.... the technical side of it and the vehicles.

Interviewer So you were saying you could see it being more useful on particular roads? Can you say a little bit more about where it would be good and why?

P13 Well, I definitely think motorways, dual carriageways, wherein you've got the 60 mile an hour, the 70 mile an hour limit or.... as is happening more and more often because of the conditions of the roads and the number of vehicles that are on them, you're probably at 50 and 40 miles an hour erm.....That, to me, is a benefit because it's straight roads. You don't have the imponderables, you've not got these.... random acts, you know, if somebody walks out in front of you on the motorway....that... it's just bizarre.... no driver in the world would say, I'm expecting a pedestrian to walk out in front of me, so I don't think it really affects autonomous driving. Certain streets.... areas...if road signs are badly kept... if the road, if the road signs aren't maintained... if they're obscured by graffiti...if they're broken by a previous accident or something....then you've got problems because you can be driving over the speed limit and not be aware of it because your system isn't recognising these speed limit signs..... so you're leaving youself open to being a danger to other road users and pedestrians... and you're liable to get a speeding ticket because.... you don't see it.

Interviewer So that's around the accuracy of the system and the reliance of the driver on it....

P13 Yeah. And I'll be perfectly honest with you, I don't know whether my system would... would not pick up .... overhead gantries on the motorways... you know it will say...road narrowing, roadworks, whatever.... reduce your speed to 50 miles an hour, 40 miles an hour.... lane shut, down to 20 miles an hour.... I really don't know whether it picks that up or not, because I've not tried it. If it didn't, that's a problem because there's an awful lot of people in the UK particularly, don't realise if the gantry says 50 mile an hour and you're doing 60 mile an hour, that's a speeding ticket, you know, you're over the speed limit....that's a regulatory road sign.... and folk just think it's an advisory or..... you know, so you're leaving yourself open if they don't.... and you know yourself, if you look at the gantry, sometimes the bulbs are out and that sort of thing.....

Interviewer So have you ever driven with the speed limiting system on in your car?

P13 I did a couple of times when I first got the car because I like to play with everything to make sure it all works. Erm... and as I say, yeah, it was.... to be honest with you, I've got park assist and I've never used that... I've never, ever... and I had it in my last car....and I have never even tried it because.... that's contrary to what I said about trying everything.... I just don't fancy the park assist because I can parallel park so.....

Interviewer So you feel like if you can already do something, you don't need that aspect.

P13 Yeah, I can perfectly well see though that.... if you weren't a confident driver...anything like that's going to help.... environmentally is it going to reduce emissions as well because you're reducing speed..... possibly.... so, you know, I... I genuinely do see the benefits...it's just... as I say I'm maybe.... a demographic that's erm..... how could I put it...stuck in my ways....

Interviewer So did you briefly try it and find it didn't give you enough of a benefit to make you want to keep it on.

P13 Just that....I've got it in the car, smashing it's a.... it's an optional extra that the... the previous owners had put on, you know, it didn't come as standard, he got it put on... and I thought, I'll give it a try anyway but....yeah.... and I hardly use cruise control, you know...it's only very, very long journeys that I use it so....

Interviewer so longer journeys where you're not looking out for lots of other things....

P13 Yeah.

Interviewer So when the system slows you down, there's the override feature. I don't know whether you've used that....

P13 No

Interviewer but what do you think of that override option.

P13 I think you've got to have it because.... it sounds erm.... almost back to front but sometimes you need speed to be able to get out of a situation... rather than braking. It doesn't always... in a potentially hazardous situation it's going to be... solved by slamming the brakes on... sometimes you need to accelerate out of things.... Again, I don't think I was....don't think I had to do it, that I used it.... But it's good to know.... again...see I've got to think.... the car I've got's an automatic, so I've got a kick down feature on the accelerator anyway.... that drops it obviously, you know..... So I've got that there.... and I would be very, very wary of driving a car that I couldn't do that.... because it had a control box telling me that's the speed limit and I'm not giving you an override... So to me, the override's got to be there....

Interviewer So, it's an essential part of the system. You wouldn't use it if you didn't have that feature.

P13 Absolutely..... no, in fact it prob-.... it wouldn't put me off buying the car.... but I certainly wouldn't be comfortable driving it. I like to know I've got full control.... of the car and.... it's all very well having all these things, but if they don't work, that's when you've got problems so....

Interviewer So is there any way that the system could be improved or any extra benefits that it could give that would make you more likely to to use it?

P13 I genuinely don't know erm....

Interviewer because you mentioned the accuracy... if you knew it was completely accurate...

P13 ...the accuracy... I don't know how.....I tend to think erm.... if I'm using sat nav, for example, I think on the Mercedes Benz SatNav... I could switch that.... I think it's Garmin I've got..... So again, you're getting speed limit signs coming up on there..... But, what I'm getting at here is..... I think this system could be more accurate if.... the data was fed into it.... via maps, etc.. say the likes of Garmin, WAYS?? erm.... Tom Tom, that sort of thing, but..... you would be constantly updating the software to make sure that they were the right road signs.... Then you throw in.... temporary roadworks, temporary traffic orders.....and they're not going to there unless you've got one of the more advanced satnavs.... that's taking satellite information live....but that would be, I think.... if you can combine it all ....because at the end of the day I don't.... it's like human eyes... if the road signs are not there... if it's damaged, if you can't discern what it actually says.... the camera's not going to be able to do it..... you know and.... there's no AI that'll say, oh we can see through all these stickers or the paint or....so erm....

Interviewer so it's definitely around the accuracy of picking up road signs. If there was a system for doing that which could be completely accurate, by whatever means, would that affect what you think about the system?

P13 Yes, I would be more inclined to use it.... particularly in places I wasn't familiar with.... this is getting be back to my original point..., I can see.... I genuinely can see the benefits of it. If I was, as I say, if I went to Newcastle, Manchester, London wherever..... To be honest with you, if people were coming to (city name) to drive, it would be a benefit to them here..... because I don't know if you are familiar with the city centre of (city name), but they've got bus lanes everywhere... and if you're coming up side streets they don't tell you there's a bus lane when you come on to the main street. So people are forever getting tickets. It's the biggest money earning scam that (city name) City Council have got because people turn into streets and don't know there's a bus lane.... So if it could recognise or... but that would be incumbent on the City Council to put signs up saying.... you're turning into a bus lane.....

Interviewer So that sounds like a benefit is to avoid getting caught out with penalties and things did. Do you feel that that's the main benefit of the system or do you think this is more a safety thing...

P13 No, it's it's undoubtedly a safety thing because that's where it's coming from, you know.... speed... speed's a killer, there's no way of dressing that up.... so that has got to be addressed. But it has the.... almost equal benefit of stopping people getting into situations where they're going to end with a £60 or £120 fine or whatever.... plus it ensures, well I won't say ensure but it should help better traffic flow. If you've got better traffic flow, you've got less congestion, you've got less emissions. You know, it's like almost 3 facets to it, if I can put it that way.... I speak almost three facets to traffic, safety, personal er.... convenience and better traffic management and emission control.

Interviewer And so just thinking back to when you got the car that you've got at the moment. So did you go looking for a car with assistance features such as the speed limiter or was it just there? And how did you feel about them when you first got the car?

P13 To be honest with you, for the last.... since I retired from the police....virtually every car I've had since then...so it was 2008 when I retired... so every car I've had in the last 14 years has had some form of speed limiter, assisted braking, traffic manager... you name it. That's just the type of cars I buy, so I'm fairly familiar with everything. There are certain things I do look for.... a) I want cruise control... even though I don't use it that often.... I do want it... I want sat nav, obviously, which comes naturally now in most cars erm.... more or less everything else, I just... I just take it as an add-on.... and I'll fiddle with it, it's like, you know...the attention...is your attention drifting and you get a wee message up, stop and have a coffee... I would never have that on, you know, I wouldn't put it on....

Interviewer So there's some things that you look out for in the car, but the speed limiting system wasn't...

P13 No, no.... nowhere near the top of my list of priorities. In fact, I probably wouldn't even have.... realised when I got it until I... I'm one of these types.... if I get the car, I get the handbook out and I'll get the specs of the car I've got...and look at the handbook and go through....just to make sure everything works.... and if I'm interested in it I'll use it.....

Interviewer did you get told very much about the system when you were buying the car?

P13 No... no..... it wasn't a selling point, no. It was more the colour and... it's more mileage and... you know, very comfortable, all that sort of thing... which.... salesmen are salesmen, they'll pick up.... I mean, I suppose if I'd gone in there and said what's it got and what does this do... and if you're looking for a speed erm.... speed limiting system... I've no doubt they would have... given me chapter and verse... if they knew about it.....

Interviewer So you didn't get any information there. So how did you find out about it?

P13 it was just going through the handbook because of.... what I do is I just go through the various sections, and erm.... obviously modern cars nowadays everything's..... accessed through the control unit and you go through all the various functions... so, you know from.... setting the wing mirrors to fold down automatically.... all that kind of thing and it just comes up in the sections I was going through and I thought... Oh, ARC assist, speed limiter..... active distance control..... attention pilot, all that sort of stuff. And I just tried them, one by one.... bar, as I say, the park assist.... absolutely no interest in it.... but I did try the others...and coming back to, yeah....hundred percent, I see the benefit of it. But personally, I just think it's one of these things you've got and you don't need it.....

Interviewer So just thinking about the different options for the speed limiting system in the car. So you've said you wouldn't want a system with no override, that's a basic. So what would you think of a system where the it had the speed limiting system when you couldn't turn it off or it was very hard to turn the system off?

P13 No, definitely wouldn't be interested. And I come at this from a slightly different angle because.... if... if I'm finding it difficult. God only knows how my wife would find it, and that is not....no, I promise you that this isn't being in any shape or form sexist or saying she's not a good driver or anything, but it's just a technical thing....it's like working the tele.... that's what I do, and my wife will say can you fix that for me.... just in our family situation, if I was finding it difficult to switch it off, particularly if I was driving, you know, I was going somewhere and I needed it off....I don't know how (wife's name) would be.... I could see a good deal of frustration from that point of view. And I come back to the same thing.... it's one of these things.... and I know there's going to be a transition period. It doesn't happen overnight.... but until every car's like that... and the road structure has changed slightly. It's ..... I just... I have.... not.... doubt's a strong word but.... maybe just a wee niggle that....it's....... maybe not just the.... it's not going to be the answer.... right away....

Interviewer So you want the option to turn it off. So if it was a system you couldn't turn off, that would put you off.

P13 Oh, no, I wouldn't use it....

Interviewer So you mentioned getting an audible warning when you go over the speed limit earlier on. So that could be extended to the speed limiting system, so if you went over the speed limit it could either give an audible warning or you could get some feedback off the pedal.... what do you think of those sort of things....

P13 I would tend to go for an on.... an on screen display on the windscreen. That would be my suggestion to that because that way my eyes aren't drifting down from the road to the control console or..... a bing that's.... you know.... where's that coming from.... I would tend to do that, and I know some of them have got .....I haven't got it, but er..... I think you can get it..... where it displays on the one screen now anyway..... well, they do speedoes and all that on the windscreen so I don't see why that couldn't..... So that would be my.... sort of proviso for it.... if you could.... it was a direct, in your line of sight..... you saw it...and maybe.... not just a... maybe a soft....

Interviewer so not too distracting, but just an indication,

P13 aye....just muted so as that you know, oh....

Interviewer And what about if it was either a vibrating pedal or an alarm that went off when you went over the speed limit or if you were overriding the system.....

P13 I would take the beep before I would take the vibrating pedal.... because I don't.... again..... that's that's all down to how.... how in-tune you are with the car.... how sensitive you are.... your feet are. etc., etc..... And let's not kid ourselves some folks drive with thicker soled shoes on than they should and....I think there's going to be a stand-off thing you know....a bit of reluctance... to have any sort of.... I tend to think as well, you could have a reaction.... if there was a pedal vibrating that you... you know, you might take your foot off the accelerator and brake sharply... or you might go the other way and.....

Interviewer So these kinds of things can be a bit of a distraction and then you're reacting to them rather than the road...

P13 Yeah. Yeah....

Interviewer So in terms of the speed limiting system, as you said, they're starting to roll these systems out. But if they decided to go for a compulsory system of putting the speed limiters in all new cars, do you think that they should do that or they shouldn't do that? What do you think about a compulsory rollout?

P13 Depends whether I speak to you as a civilian or as a policeman erm.... I don't know.... I think.... Because you live in a sort of free democratic society, it's very difficult to impose.... that particular erm..... statutory requirement that you must have it..... Possibly, certain areas or certain towns....,cities... it might.... I don't know how it would work. I don't... I don't see how you could enforce it, that's the other thing, you know, it's.... Until.... you know, there would have to be what.... regardless of when.... even if manufacturers start rolling it out in every new car..... you've got so many cars on the road that'll not have it at the moment... how long do you give it....5 years,10 years, I don't know erm... don't get me wrong... I can see it becoming compulsory because the... I just feel the number of vehicles that are on the road, particularly in the UK, our roads aren't built for the number of vehicles.

Interviewer Do you think it makes a difference, the fact that some cars would have it in and some cars wouldn't have it in? Does that have safety implications, do you think....

P13 I do because you..... it's a personal thing, and I'm not suggesting everybody would think this, but I would, if I was out on the road, I'd be wondering.... has that got a speed limiter on it or has it not? And if they're coming to a junction... you know... just to me, it's throwing another variable into what is an already overcrowded mix.... with things that can happen on the road erm.... And if I.... I mean, mine was fairly smooth with the transitions if I went over the speed limit it did smoothly slow down but...if that fails..... And it's a.... you know, the car stops, for example, I mean that.... I don't... it just seems to me, there has to be an awful lot of technology built into this... to make it 100 percent effective.

Interviewer So you would want more reassurance about the technology being effective before you could see it as being.....

P13 Yeah, because I remember, maybe..... 20 years ago.... maybe even longer.... the idea was they were bringing out.... every car was going to have the... this, the distance control.... basically you could have a convoy of cars on a motorway, maybe 30 vehicles length... all driving at the same speed.... which is all good and well because they've got sensors and whatnot but it just takes one car to have a puncture... and the whole thing's thrown out... you know, it's..... I robot, if you ever watch it, with the automatic, the autonomous driving cars... it's smashing if you've got the roads and you've got the cars built for it and its got all the technology and every car's the same....

Interviewer It sounds like you see it as an intermediate step moving towards that technology, but you need more to be there before you would have trust in these systems....

P13 Aye.... I think that's a fair comment. As I say, I'm I'm not convinced we've got the road structure and I'm not convinced that.... I can't see that any technology is going to be 100 per cent effective, so.... it's going to come down to margins of.... they might not work...very, very occasionally, and that's that's just life.... and if it does, if that reduces.... if it takes your reduction in fatalities from...by 15%, down to 14% or a....it's still 14 percent better than it is just now so.....maybe there is a.....

Interviewer So if you saw that the system worked and it did have an impact on safety, do you think that would be more encouraging for using these things...

P13 och aye, a hundred percent, yeah...yeah... because it's going to be, you know, it's.....

Interviewer Are there any other things that you think would encourage people to use these kinds of speed limiting systems... so that could be incentives or it could be seeing the benefits.... or any other information you could give people....

P13 I think information is the big thing that is key in every walk of life. You know, if you tell people about things and explain it to them in terms you can understand....I mean, there's no point...as I say, I've waded through that er.... handbook trying to understand it and.... it makes sense to the engineer that devised it and it makes sense to the the copyrighter that's reading it because he's an engineer and copyrighter but.... until you actually take the car out.... if you haven't that technical knowledge, until you take the car out and actually use it and get a feel for it.... then that's when you'll understand it so.... I think....it's got to be promoted.... it's good for you, it's good for the society, it's good for the environment erm.... encourage people to try it, but the information has got to be there and it's got to be in layman's terms.....

Interviewer I think the the handbooks don't necessarily work for everybody, do they? And cars are going quite techy, aren't they? So you have to be quite motivated, I think, to find out about how all the systems work....

P13 yeah.... it's like everything in the modern society. People just want to go, buy it and get out and see how it works.... and if it's got all....bells and whistles... as long as they work and they're not failing on you..... I don't know what the percentage would be, of people that actually ever go into a car showroom and say.... I need to know about this, that and the next thing...down to the nth degree....... you know, I think, they know before they go in....

Interviewer What do you think is the best way that people can find out about the benefits, and how to use it and things....

P13 that's got to come from.... I would imagine your.... government and major.... maybe the AA....RAC.... Society for the Prevention of Accidents, these kind of people.... getting information out there.... and having maybe a..... big posters, not.... not wee handouts, not wee flyers but big...so you can't miss them, signs...., and car showrooms put them... put them in garage forecourts...petrol filling station forecourts.... you know, this is the future we're trying to move towards. It's all about getting the information out and trying to persuade people to do it and....

Interviewer Do you think there's groups of people who, regardless of how much information there was, wouldn't want these kinds of things....

P13 oh, 100%....you're always going to get them and I'm not.... I'm not talking about boy racers or anything else, I'm talking about, you get people, petrol heads, for want of a better term... that will want their car to be as pure a car as it can be.... They want to hear it revving....They want to hear the exhaust, you know, and they want.... if my car can do... 80 mile an hour on a 70 mile an hour limit, I want it to be able to do 80 mile an hour in a 70 mile an hour limit.... without having..... flashing lights and bing bongs telling me I'm over the speed limit, you know... they just want pure driving experiences....

Interviewer And do you think there is anything you could do to encourage those people to feel differently about speeding or speed limiters....

P13 You can take a horse to water but you can't force it to drink it's just....people will do it.... People do it, absentmindedly.....I mean, I'll I'll be perfectly honest with you, my son.... received 5 speeding fines.... in the space of two or three months.... because he was turning on to a road... and this is coming back... this affects the limiter as well.... the whole process.... He was turning onto a road that was a 40 mile an hour road... turning right onto what was a 30 mile an hour road... that had a speed camera about 500 yards, half a mile down the road from where he turned on....but nowhere between where he turned on and the speed camera was there a 30 mile an hour speed limit sign.... Now, not withstanding, he was doing more than his 10 percent over the speed limit that's a separate issue...he was speeding, I'm not making any suggestions that he wasn't. But that is an issue.... you know, it's.... and people do it.... they think they're familiar with roads.... I used to do it... I was coming home from my work..... I worked in... (place name).... stayed in (place name)...there was a stretch of dual carriageway.... that every single day..... I was coming home from my work... I was doing 60, 70, maybe 80 miles an hour, I'm not going to lie.... and it was a 40 mile an hour limit for a stretch of about a mile. And I didn't know....I genuinely didn't know.

Interviewer So do you think that kind of thing would be helped by the speed limiter then, because, presumably that....that sort of time where you you've sped through inattention....

P13 yes that would... absolutely, it's complacency and familiarity breeding contempt...you just... because you're on a certain stretch of road all the time, you know, you could virtually drive with your eyes shut and you don't know it, that's....so, that would be a benefit yeah and that... that counters my argument that it's places you don't know but it is.... it's when I think about it.... that...you know... I was in the horrors when I discovered it....I've been going up and down that road for years....

Interviewer Great, that's all of my questions. Did you have anything else that you'd thought of about the speed limiting system that we haven't covered?

P13 No, not at all.... no, I hope I haven't rambled on too much, I've thoroughly enjoyed it....

Interviewer No, not at all....thank you very much for talking to me. It's been really helpful.