Interviewer So I think you said that you do have an intelligent speed assistance system in your car. Is that right?

P20 That's correct.

Interviewer All right. Could you just start off by telling me a little bit about how the system works? You know, maybe whether you... if you know what it's called and how long you've been using it?

P20 OK, so it's... it'....s it's part of my vehicle. It came with my vehicle.... 2019, so I had a couple of.... kind of neat functions, if you like. So it's it's.... It has a clever camera system that picks up the speed limit on the road by using a camera. I also have a visual on the.... kind of... just about the dashboard... projects on the windscreen, and it alerts me if I'm going, I think it's plus or minus one mile an hour accuracy. So it's it's it's pretty accurate and it will.... It will.... It doesn't do it.... it doesn't limit the speed instantly. But if I stay there for a prolonged period of time, say.... I think it works if I if I if I keep at the same speed, it will then.... limit me completely. So there's a warning that comes up, you are in a.....you're above the speed limit.... it pre-warns me... then if I stay there, it will then limit my speed.

Interviewer So there's a camera on it, so it picks up the the road signs and things. Is that right?

P20 Yeah....

Interviewer And then it would pre warn you that you were going, you were changing speed limits and then it would slow you down. How long did you say it takes before it starts to slow you down?

P20 It's pretty... it's.... it's pretty instant. It's between 5 and 10 seconds. Yeah.... there's a little bit of a lag. But but then it sort of says, OK, it's sort of bleeps.... if I'm going over.... almost like it kind of like sort of flashes... and then it will just stop automatically.... not stop, but limit the speed....

Interviewer So it limits.... it puts you back down to below the speed limit.

P20 Correct. It's a speed limiter, yeah....

Interviewer So it's a system that works automatically. You don't have to click to say you want to change to that speed limit or anything.

P20 No, it's automatic.

Interviewer So is it a system that you can turn on and off in your car?

P20 Yeah, I have that ability to do that, yeah.... It's just.... just below the steering wheel. There's like an additional kind of like ... it's like seven o'clock, just just below the indicator... there's like an extra lever er.... that's also the same lever as the cruise control. So like a little toggle switch, I can activate and deactivate.

Interviewer So do you use the system on every journey or do you switch it on and off for different journeys? How do you use it?

P20 No, I keep it on because.... where I... I actually live in (city name), so we wouldn't have as..... I work in England as well, so I get the different route systems, but but we wouldn't have as.... an abundance of permanent speed cameras like in England. We have a lot more, kind of, I call them traffic assassins pulled up on the side of the road with erm.... with vehicles. And where I live, there's a lot of them. So er.... So my point being is they change their position quite frequently, so they're always trying to catch you. So I just prefer to have that intelligence that prevents me from from flirting with the speed limit, basically. So, yeah, so I live in quite a.... quite a suburban area three miles from the city centre so....it's not as if you can do high speed anyway reliably, you know.... we're in an era where traffic regulations, very high fines are imposed quite frequently. So I don't I don't want to take the risk, basically.

Interviewer So it's very much a system which is around avoiding speeding tickets by the sounds of what you're saying.

P20 For me, yes, that's a primary reason, yeah.

Interviewer Are there any safety benefits of the system or is it very much the speeding ticket for you?

P20 No, of course, I mean.... it's not just about the voluntary element, but yes for safety as well, not just for myself but other other other bystanders as well erm.....You shouldn't be doing 50 in a 30 mile an hour zone... that's a.... that's a difference between life and death in some cases. Typically when there's a lot of cyclists on the road, I'm a cyclist myself so I get it..... So er..... It's a great system. It really, really works. And it's er..... particularly in areas where I live, it's very easy to creep.... 5, 10% above the speed limit.... and no know you're doing it.....

Interviewer And you mentioned that you've got an allowance around the speed limit a little bit, did you say it was like one mile an hour or something like that?

P20 I reckon it's.... Yeah.... I'd say plus or minus.....yeah, one mile an hour..... I think that's the accuracy... I'm not 100 percent, but it's it's pretty, pretty on the money.....

Interviewer And do you think that's a good part of the system to have a little bit of an allowance around the actual speed limit?

P20 Yeah, everything needs a tolerance... everything does because erm.... environmental factors can be a consideration erm..... they could.... when the street sign is relative to the accuracy of the camera, there could be some erm.... latency in the system..... with the camera accuracy so.....I'm an engineer, so I understand tolerances....so everything I design has to have that put into it.... to cope with the real world so..... yeah, there has to be a small tolerance but..... but yeah, not too much....

Interviewer And how have you found the accuracy of the system? Has that been ok?

P20 Yeah. I mean, the other slightly different function is erm.... it's it's.... so if I didn't have the automatic speed limiting function er..... active.... it still tells me.... it still tells me that I am encroaching the speed limit, but it won't do anything. So it's telling me and it's saying, Hey, you're above the speed limit.... it first of all tells me, it tells me erm.... probably most cars do this nowadays.... but it tells me.... you're going from a national speed limit to a 30. So it tells me that on the dashboard erm....but with this intelligent system, it goes one step further and physically limits the speed, which I think is fantastic. It really, really is....

Interviewer So that's 2 slightly different systems. The advisory system, which is useful, but it sounds like you like the the system that then acts on that rather than just having the advisory....

P20 Yeah. Yeah, I mean, the other function, there's a there's another intelligence speed function actually.... it's an emergency braking system, which I also have.... So if I'm getting.... because I've got full sensory erm.... control, so front, side and rear, if I.... if my speed.... speed relative to distance is over... it's obviously there's some kind of..... calculation done, I guess. But if I'm approaching a fixed object or it could be a moving object and that space is is gradually getting shorter at the same speed. My car will physically apply emergency braking... and I've actually tested it, and it's... it's it's scary, but also reassuring at the same time..... it will just lock the car erm.... and I've experienced, when I'm getting too close to a fixed object before... it will actually bleep... and it will...it will do it within a couple of seconds. So it's.... it is nerve wracking at first, but once you.... once you get used to that, it's reassuring that you've got that... an added layer of safety protection....

Interviewer Do you find the the speed limiter more useful on particular journeys? Do you find it not so useful on others? How does it relate to the journey type that you're doing?

P20 Er.....yeah..... shorter.... multiple speed changes, suburban areas, areas where there's erm.... stationary traffic. So, yeah... built-up areas where you're constantly moving between different speed zones and that coupled with the high scrutiny of speeding tickets.... spreading awareness and imposing fines, I think it's really important erm..... motorways, not so much because it's.... you're transitioning from point A to point B at higher speed. I don't see it as being as beneficial. Not saying it's not beneficial. Just it's.... you're not stop, starting constantly.....

Interviewer So do you keep it on the whole time.

P20 I do....

Interviewer So have you found any disadvantages to using the system.... anything bad about it?

P20 Only when I first got used.... only when I first had the system because I wasn't used to it.... it's having that element of control taken off you erm.... we're all creatures of comfort...we like to be in control erm.... but it's like anything it's.... it's practice makes perfect.... time behind the wheel, getting used to it. I mean, traction control was a relative new thing 10 years ago. I also use that.... I think it's a wonderful thing erm.... again there's an option to turn it off. I keep mine on... particularly in more adverse conditions.... but, yeah... it's a bit unnerving at first when you're not used to it but erm.... I think you just have to trust the technology sometimes

Interviewer because I think sometimes from talking to some people who don't have the system, the thing that does worry them about it is not having that control over the car and not trusting the technology....

P20 Yeah, only time.... erm.... only only sort of spending time with this, can you then trust.... I think everyone, when they first experience it.... I was certainly a little bit wary. But I understand the the the technology erm.... that helps me to process it probably a bit quicker than other people.

Interviewer Do you think that helps with you, as you were saying, you were an engineer, so you've got a bit more understanding of the tech?

P20 Yeah, yeah. Yeah, definitely.

Interviewer And have you used the override system? I presume you've got that in your car where you can press down hard on the accelerator?

P20 Yes, yes....

Interviewer So the in this car with your system because you're driving with it on all the time how often do you find you need the override?

P20 Not very.... I'm quite a cautious driver, so I'm not really pushing the boundaries.... I don't do a lot of driving cos I'm in the city so.... I don't erm.... I don't tend to override it that frequently.... kind of.... because the other.... the other option is as well, if I really didn't want to use this, I would just stick on the speed limiter.... the problem with that is I'm constantly having to manually adjust the speed limit. So this this this takes that control away from it.... but in terms of erm.... pressing the accelerator to override it. Not very often. Not very often. I probably I probably should use the automatic system.... I should probably trust it more.... But I've also always got my.... I'm still always looking at the road signs and looking at my speed as well. That's just.... I'm considering all elements, really..... I'm not.... I guess the idea of this technology is we all should be switched off. But that's also in a perfect world where we didn't have other cars to consider. We would probably do that, but we we that's not as simple as saying that... we've still got to look around us and....

Interviewer so, even though you use it and you trust it, you're still keeping one eye on the road signs and everything....

P20 Of course, of course. Yeah and I think that will continue for some time.

Interviewer And what kind of situations have you found that you do use the override? I know you said you've not used it very often, but what situations have you used it in?

P20 I've used it when the system tells me that I that I'm encroaching or going over erm.... or close to going over. And also when I'm... I'm.... the old dreaded speed camera in the van... that I see very often over here.... cos quite often I will.... If I'm approaching.... before the speed limiter kicks in, I will. I will. I will activate it....

Interviewer And I think you said that you've got the option as well of manually using the speed limiter. So then you have to manually change it yourself....but you prefer the automatic version....

P20 Yeah, just less things to do, I guess.

Interviewer And the the the ability to be able to kick down on the accelerator to accelerate out of the speed limiter, which you said you don't use very often. Do you think that's an important part of the system to have that ability....

P20 Yes. Yes.... again, it depends on the condition of the driving where you are, I guess... I mean, if you're doing a lot of sort of.... if you're driving built up areas wouldn't be as beneficial, I imagine. But if you were, if you were, say erm..... transitioning from a 30 to a 60 zone, which again is quite common to where I live, actually, yeah, I see the benefit of that.... it would be important. If you were doing sort of erm....... consistent driving at the same speed, its merits are quite limited.

Interviewer And are there any improvements that you would make to the system that you've got at the moment....

P20 Erm.... What I do like in the current system, I like the erm... I like the.... I like the visual display on the on the windscreen. It's like a it's like a hologram kind of idea. That's a really, really neat.... I like that.... because actually looking at the dashboard isn't always that practical. So either either audio or visual or both, but have a visual more at your eye level, but not so that it distracts you..... I think the system works really, really well.... they've obviously thought about that erm.... so erm.... that will.... if I didn't have that...could be an obvious improvement, but.... I can't really think of an obvious improvement at the minute, no.....

Interviewer So the intelligent speed limit system is usually a system you can turn on and off., like it is in your car. What would you think about it if it was either impossible to turn them off or it was very difficult to turn them off. So it was kind of a way of trying to get people to use them. How would you feel about that sort of element of choice being taken away a little bit?

P20 Well, it's a good question and.... You know, we have a choice as drivers at the minute..... But what I see.... And the way we are going with with with..... I mean, the way vehicle driving is becoming....we are.... I refer to a car like driving a bus, you know.... we are.... there's less freedom about driving. There's more regulations, more.... more risks of being fined and we're all being herded like sheep into a way of driving and.... that gives us a lot less flexibility so.... for me personally, I am not a huge car lover, I'll be honest with you.... some people would have a problem that... you know, I can really appreciate that but erm.... It's only going one way.... regulations are going to get tighter and tighter and.... It's a hard one to answer, really. I personally don't have a huge problem with it.

Interviewer It sounds like to you, you see it as an inevitable move.... this is how driving is going to go and it doesn't matter so much to you, but to somebody who was more of an enjoyer of driving.....is that....

P20 I think the purist driver, yeah... would be... would be..., would not agree to that erm... But I'm not a purist driver, so I'm relatively ok erm....and....having too much control on the road can be very dangerous. But at the same time, so can technology erm....and I'm a big advocate for cycling erm... I'd like to see a lot more. The UK has a huge problem compared to somewhere like Denmark or Holland, or.... we don't have anywhere near enough of it compared to Europe. And one of our.... one of our nemesis and it probably works both ways, is car drivers. They they they are very dangerous on the roads.... and the cyclist will always come off worse if there's an incident.... and a lot of that time is due to the driver exerting too much control and causing danger. So that's where the benefit of that technology for me could really help.... providing the technology is reliable.....

Interviewer So it sounds like your perspective as a cyclist sort of influences how you see car driving as well a little bit.

P20 Yes...yeah.

Interviewer So if you were in the market for another car, how important would it be to you to have these kinds of systems? And would you go looking for a car that had an automatic speed limiter on it....

P20 Erm.... I'm that used to it, I wouldn't really think about it.....it's like.... I guess it's the... it's the.... where I was.... 10 years ago with reverse cameras with sensors.... for me is another bolt-on or technology that for me works... so.... I'd be quite blasé about it... almost I'd expect it, because I'm used to it. So, yeah, for me, it's part of my driving repertoire, really.... I wouldn't go out of my way but at the same time, I would expect it if that makes sense.

Interviewer So you're looking at cars that will have this kind of technology in them.

P20 Yeah, cos I've had it since 2019 so I'm used to it.....

Interviewer And when you first got the system, did they explain to you how it works?

P20 Yeah, yeah. Yeah, they were very they were very good, actually. I took a couple of test drives and.... traction control.... which I've had previously.... But this one works slightly different, so there's a lot of erm.... I mean, one thing I forgot to mention.... linked to these.... I guess, the software of this car, there's an app and it can give you all the performance values.... you can.... if you really want to see how many times it's it's automatically activated... if you've erm... if you reach the speed limit so you can really..... chew through a lot of data, if you want to so erm... but yeah, the dealer took me through all that.....

Interviewer because sometimes there's so much tech in cars these days isn't there.....

P20 Yeah. But I also think that the dealers have to be aware of that. I mean, a lot of these guys go on these courses. They go over to.... the manufacturers and get these courses before they bring a new model. So I think it's... I think it's becoming more and more important to erm.... cos a lot of people aren't tech savvy, so they should be told....

Interviewer So what do you think is the best way of getting over that technology to people? Is it to sit down and talk them through it? Or is it test driving? What do you think is the best way....

P20 a bit of theory, a bit of practical.... I think they both must go hand-in-hand and there's no substitute for erm... for both of them. You've got to get the theory and you have to get the real world experience. So yeah...sit down, sit down in the car, stationary and then over a couple of test drives ....that can take as many as you like because the customer should be getting to walk away reassured that they understand it.

Interviewer And I suppose that if you're looking for cars in the future, you've got a good understanding of the system now anyway. So now you're expecting it to be there....

P20 Yeah, precisely.

Interviewer So what would you think if they started putting speed limiting systems in cars as a compulsory feature in all new cars?

P20 As I said to you before the.... we are.... we are going to.... we are moving towards stricter ways of driving... through legislative control.... speed limits..... traffic enforcement. So this is erm.... this is... a step.... towards counteracting that, but also making sure the roads are safe.... have some alarming statistics on the road.... traffic collisions, people unfortunately losing their lives as bad as that so..... no one likes laws imposed on them. But if it benefits the wider good and keeps people safe on the roads, I.... I mean, you can say the same thing.... there's courier vans have speed limits.... you see them at the back.... this cannot drive more than 70 miles per hour. So it's it's it's it's happening... and there has been... it has been there for some time. You normally do these tests on commercial vehicles before, before domestic vehicles. And I think it's just a matter of time before it will be.....

Interviewer So it's it's an inevitable move of technology, an inevitable move of regulations. It sounds like you you would be generally accepting of that. Do you think there'll be groups of people who will be very resistant? I think you mentioned the sort of purist drivers....

P20 Oh, yeah, of course. No, not a question. It's like anything.... any any change to process or procedure or law.... you always have... kickback... that's that's that's normal.

Interviewer And do you think there's a way of of reducing that resistance from people? I know you spoke of safety, so.....

P20 Well, I think a lot of it's policy isn't it.... it's how high it's rolled out.... I think a lot of government sort of policies aren't... they're rolled out a little bit cold. They're not .... they're not engaging the public as much. I mean, I can give you examples with..... renewable energies and gas, and you know, we're we're we're turning the switch quite quickly, and I feel that hasn't been..... we're reacting due to poor policy over the years, we've imported too much gas. We haven't erm.... we haven't, in my opinion, prepared enough to to to build up to the.... this huge switch to renewables or nuclear whatever.... and that's poor policymaking erm..... nothing else......

Interviewer Is that in how you communicate things to people?

P20 Yeah, yeah, yeah.... and that supports the.... that supports the implementation better as well. If you say to people that we're going to do this, we're going to do that.... kind of with not much communication or notice..... that that gets people's backs up and you don't get public buy-in.... and the public buy-in, is the important bit.... and that's important.....

Interviewer So what's the best way do you think of getting the public to buy into these sort of new technologies.....

P20 I think you just need to look at the demographics and..... pick small pockets of demographics and use them as test beds and just start to.... notch it up ever so slightly. You can't go from nothing to a hundred percent overnight. That's impossible. You've got to target different levels of demographics and you've got to say.... OK, well, who are the... who are the people who are going to have the the least resistance...medium resistance and most resistant and maybe use them as testbeds.... and particularly focus on the ones with most resistance and see.... well, why are they resisting so much... And until you do that... and that will help tweak the system as well, you know erm.... but yeah, I think that's that's.... how you roll it out is very important. It must be done gradually.

Interviewer And do you think if if these systems were more generally in cars, because at the moment they're in some cars and not in in other cars.... if they were in all cars, do you think it would make driving safer?

P20 Yeah, there's there's there's more cars on the roads, there's more cyclists on the roads.... and there's probably more people on the roads so.... that...you know, there's way more cars than there were 50 years ago. There's more people as well. There's more to..you know, put that all together..... you've got a lot of manual control and a lot of.... manual intervention, and.... when you actually think about it, it's incredible how more accidents don't happen.... but cars are part of the reason.... they are designed to.... good braking systems erm.... but our roads compared to other parts of continental Europe are... they're night and day..... size.... cycling lanes are dedicated, not like over here where we do have them but cars can park in the middle of them.... So we've got a problem in itself where the obedience and the discipline isn't there.... So having that technology is probably more important in the UK than it is in other countries.... cos of our obedience and our discipline....

Interviewer So the speed limiting system is something you can turn on and off. And also, if you're driving and it limits you, you can accelerate and just speed up again. So what are your thoughts about that optionality within the system? Because I suppose if somebody wanted to go faster, they could just either turn it off or override it.

P20 Yeah erm.... that's just something again that's going to take time to convince people. I mean, everyone brakes the speed limit.... I do. Many people do, even if it's this 5 miles per hour erm.... It's for the benefit of everyone, if we didn't do that and this technology would help achieve that..... So you can only ask that question to the wider public and....

Interviewer So it's a case of encouraging people to use it rather than making it so you can't do those things, you know, so you can't turn it off and it's hard to override. Is it still important to you to do it through persuasion rather than setting the system up like that?

P20 Yeah, I think persuasion is more important because.... if you don't persuade people then... rebellion kicks in and.... people want to break into the system and change it, I mean, you look at electric scooters, for instance..... That's another issue.... if I just side-track on that.... they have speed limiters.... but straight away, the guys can get them.... tweaked or whatever, they....they can bypass, some kind of.... chip, which increases it by 60 percent or something. So these things are doing 25 miles per hour on a footpath... crazy. That's because.... they're rebelling. They want to go faster and faster. So that in itself is an example of how erm.... people want to keep on pushing the boundaries.

Interviewer So are there any incentives around using the system or ways of persuading people that you think would be good for increasing people's use of them?

P20 Erm.....yeah, that's that's that's the difficult bit. That's... that's the challenging bit.... I guess I guess it's just.... Test... test and more testing and gathering opinions. I'm by no means saying what I have in my car is the fully fledged solution. The the the crux of the technology works, it's just how you roll it out to the wider public, if that's the way to go erm... I personally think.... it's.... Yeah, it's a very difficult one. I mean, look at look at the.... cameras on people's cars... there's more and more cars with these surveillance cameras..... and the main reason is, I think is is is.... well, I think one of the main reasons is to save money on the insurance premiums.... because the companies demand it.... so that could be employed to to adopt... most people will react due to monetary reasons, unfortunately...., not the conscience of.... not the conscience of health and safety, it's more....can I save £50 on my insurance... but, oh, yeah, I'll get a cheap camera and stick it in my car....that's why you see so many of them, in my opinion... it's something similar.... that the insurance companies need to try and that engages people. If you have a speed limiter in your car.... a fully automatic speed limiter, and this could be a way to..... this could be a way to erm... bridge that, that confidence, that.... lack of confidence.... to a fully fledged mandatory system... whether it gets to mandatory.....where everyone is forced to, that's probably a long way off erm.... but having something linked to insurance where.... if you have this, you will save money.... that will definitely engage people.... no question....

Interviewer So the initial thing to do is to encourage people with financial incentives... and then maybe over time....

P20 maybe so.... and then.... and then a bit like myself, oh I'm not worried about the financials, I'm more just.... you know, like tech.... and you'll always get those people.... But.... it's a majority of the people you need to convince and.... people will vote with their pockets as opposed to their their hearts, I guess.

Interviewer Because one of the things about these systems is that sometimes they come as standard, but sometimes you have to pay for an add-on...so people would have to pay out extra money to even have this system in the first place.

P20 Yeah, yeah erm..... I mean, the more I think about this, the deeper I'm thinking.... having a mandatory speed.... er.... limiting function....you know, you're putting a lot of cars on an even keel with each other as well..... So performance cars won't be as attractive anymore. All these supercharged Porsches and Ferraris. There's no point in having one. You might as well just all drive a Ford Focus.... cos that's essentially what we're being driven toward. I'm ok with that, I don't care. I'm not a car enthusiast erm....do we all want to live in a world where we all have the same boring car? That... it's a completely different mindset.

Interviewer So it will have an impact on car manufacturing as well....

P20 Oh, huge....But then again.... if I go and buy a Ferrari, I can't drive a Ferrari like it should be driven.... It's like... really you drive a Ferrari in second gear, but we all know people that have a Ferrari don't drive it like that....but it's ridiculous... people buy these cars and they can't really drive them like they should be driven. So then you question the merit of what's the point of having a car like that... you can't really go full throttle, you know.... So it's it's a bit hypocritical really buying a car.... that can do all these top speeds...but really, it's illegal to...it's a false economy... it's crazy so erm.... and then they take them over to Germany on this Nuremburg ring.... just so they can get their....justify spending £150k on this car.... once every two years....absolutely crazy.... they're vanity projects...that's all they are.....

Interviewer Well, that's great. That's all of my questions. Was there anything else that you'd thought of about the system, either when you were doing the survey or while we've been talking that we haven't covered?

P20 No, no. I think I think I think that's everything... it's quite.... well, the more you talk about, it's more... thought-engaging.... interesting questions you asked....

Interviewer Well, that's great. Thank you very much for talking to me.