

The future of autonomous vehicles: expectation and worldviews of the stakeholder by Sensitivity Auditing. Interviewing the modelers and sociologists
by Sara Sbaragli*

The article reports the results of the i4Driving project relating to the Sensitivity Auditing of the modeling of autonomous vehicles (AVs). By analysing the interviews, already calibrated on i4Driving, and questioning the perceptions of the modeling participants, in this case, the consortium and the sociologists who are experts in autonomous driving, we carry out a sensitivity auditing which suggests questioning the vision, perceptions and norms of the actors involved in the modelling to guarantee the plausibility and credibility of the developed model.

Keywords: autonomous vehicles; artificial intelligence; sensitivity auditing; interviews; road safety; social impact.

Il futuro dei veicoli autonomi: aspettative e visioni del mondo degli stakeholder attraverso la Sensitivity Auditing. Interviste ai modellisti e ai sociologi

L'articolo riporta i risultati del progetto i4Driving riferiti alla Sensitivity Auditing durante la modellazione dei veicoli autonomi (AVs). Facendo un'analisi delle interviste, già calibrate su i4Driving, interrogandosi sulle percezioni dei partecipanti alla modellazione, in questo caso il consorzio e sociologi esperti di guida autonoma, realizziamo una sensitivity auditing che suggerisce di interrogare la visione, le percezioni e le norme degli attori coinvolti nella modellazione per garantire la plausibilità e la credibilità del modello sviluppato.

Parole chiave: veicoli autonomi; intelligenza artificiale; sensitivity auditing; interviste; sicurezza stradale; impatto sociale.

1. The method used to design the future of self-driving cars

The main objective of this study, part of the *i4Driving - Integrated 4D driver modelling under uncertainty*, is the Sensitivity Auditing (Saltelli *et al.*, 2013; 2020; 2023) of autonomous vehicles modelling. Sensitivity auditing, inspired by the sociology of science, specifically deals with the quality

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* ISTC-CNR and Università di Napoli Federico II. sarasbaragli@gmail.com.

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of mathematical or statistical models and is a versatile approach recommended by existing EU guidelines (2021) that consists of a broader consideration of the effect of all types of uncertainty, including structural assumptions embedded in the model and subjective decisions taken in problem framing that is critically monitored by the extended multi-stakeholder community that is responsible for validating the model. All parties in a dispute in the context of conflicting scientific evidence could use sensitivity auditing to support a defensible and plausible model or to demonstrate its irrelevance or bias. Recent revisions (Lo Piano *et al.*, 2022; 2023).

The use of interviews with modelers during sensitivity auditing ensures that perceptions and “techno-scientific imagery” about autonomous vehicles are thoroughly analysed and that possible blind spots produced by accepted norms and beliefs are identified. The ultimate goal of sensitivity auditing is to ensure the plausibility and credibility of the developed models.

The main visions on autonomous driving, also called “technical-scientific scenarios” or “sociotechnical imaginaries” in the conception of Jasanoff and Kim (2015), are considered in relation to what modelers and sociologists believe will happen as the technology evolves.

We focus on one aspect of the sensitivity audit that suggests exploring the worldviews and sociotechnical imaginaries of the actors involved in the modelling (rule VI: check the framing against alternative worldviews) (Saltelli *et al.*, 2013; Saltelli, Funtowicz, 2014).

The method used for the multi-stakeholder consultation consists of interviews with the i4Driving consortium to reveal opinions, perceptions and norms on the future technological landscape. In combination with this, interviews were extended to sociologists with expertise in autonomous driving in the relevant areas of safety (understood as road safety and safety of the big data produced) and public investments. A total of 21 “semi-structured interviews” were conducted with the consortium modelers (at least two interviews per work package) and 8 interviews with expert sociologists in autonomous driving using different interview grids calibrated to the know-how and methodology of i4Driving¹.

¹ The interviews were submitted on “a reasonably chosen non-probability sample”: the leaders of the work packages were interviewed. They then provided the names of at least one task leader per work package to be interviewed. Based on the results of the first interviews with the consortium, the interviews were extended to sociologists who are experts in autonomous driving to reveal the complexity of the wider and consequent social, economic and environmental impact.

For each hierarchical theme (or node) resulting from the analysis of the corpus of interviews, 15 in total², a comparative analysis of the content is proposed for each group of interviewees (consortium and sociologists), including the social factors enabling the penetration of autonomous vehicles and their benefits, for citizens and companies; the interaction between autonomous vehicles and vulnerable road users and road safety (more technical issues addressed exclusively by the consortium); the broader and long-term social, economic and environmental impacts of autonomous vehicles such as the connection with public transport, changes in energy consumption, the variation in traffic flows, the insurance market, and the role of the public sector.

2. How will autonomous vehicles spread and change our lives?

The interviews show that the *diffusion of self-driving cars* is a complex phenomenon influenced by different measures that promote desirability and adoption. Safety is the dominant factor that influences public trust, social acceptance and diffusion of autonomous vehicles. In addition to safety, incentive policies are crucial in encouraging people to adopt autonomous vehicles, accelerating their widespread use. Interviewees suggest benefits similar to those offered for electric vehicles, such as free parking, tax incentives and privileged access to certain urban areas. The issue of affordability is equally important. Large-scale adoption will only be possible if costs are kept low. Models such as leasing or car-sharing are seen as effective strategies to make the technology accessible to a wider audience. One catalytic idea is to offer pilot experiences to the public. For example, introducing autonomous shuttles in areas not served by public transport could demonstrate the usefulness of autonomous vehicles in practical settings, thus increasing public trust. Finally, AVs are being deployed primarily by companies that recognize their economic potential, and the social and ecological benefits are a powerful selling point. Reductions in traffic, emissions, and road accidents

The grid of interviews for sociologists doesn't include questions regarding potential interactions between autonomous vehicles and vulnerable road users; risky behavior in a mixed traffic system, and in the case of incomplete automation; and the issue of road safety in the strict sense (more technical issues addressed exclusively by the consortium).

² The main hierarchical themes that emerged from the interviews are: *Advantages of AVs*, for citizens, and companies; *Penetration*; *AI spread in society*; *Transition*; *Changes in Lifestyle*; *AVs interaction*; *Vulnerable road users*; *Risk behaviors*; *Road safety*; *Public transport*; *Energy consumption*; *Traffic flow*; *Insurance market*; *Public sector*; *Big data*.

are often cited as key outcomes of autonomous driving adoption. Furthermore, positioning autonomous vehicles as symbols of modernity and sustainability could appeal to a broader audience.

For interviewees, self-driving cars will bring various *benefits to citizens*. The consortium claims that self-driving cars will improve road safety by reducing human errors, thanks to faster and more accurate reactions by autonomous systems, accidents and, therefore, road mortality. With an emphasis on comfort and inclusiveness, the modelers emphasize that the advantage of autonomous driving consists of gaining free time during travel and the possibility of access to mobility for certain categories. vulnerable groups such as the elderly, people with disabilities and other disadvantaged groups, such as those without a driving license, creating opportunities for independence and social inclusion. Self-driving cars also promote urban sustainability and smart cities by reducing parking and traffic, thanks to shared vehicle fleets that could be managed more efficiently, freeing up space for green infrastructure. Sociologists also recognise the potential of autonomous driving in terms of road safety, but stress that its success depends on adequate infrastructure and the ability to manage unexpected situations. While appreciating the advantages of greater comfort and inclusiveness, sociologists highlight possible critical issues such as the loss of individual responsibility and the need for trust as an inclusive factor and insist on the importance of smart cities and infrastructural integration.

Regarding the *benefits for companies* derived from autonomous driving, the consortium considers that automation will produce a reduction in business costs by eliminating the need for drivers, optimizing costs and logistics and incentivizes new business opportunities with innovative mobility models such as shared fleets and on-demand services and, in short, sees a positive impact on cost efficiency. The consortium, in short, sees a positive impact on the operational efficiency of companies: the ability of autonomous cars to improve logistics planning and optimize transport routes is emphasized, reducing downtime and increasing profits. Sociologists, on the other hand, agree on the economic benefits but warn of the risk of unemployment, especially in the transport sector, highlight that not all companies could benefit without adequate regulations and underline the social and economic implications, with gains concentrated in technology companies. Some sociologists emphasize the importance of adapting technologies to local needs. In addition, sociologists underline the social and economic implications of autonomous driving, with gains concentrated in technology companies.

The analysis highlights a general consensus on the gradual *transition*, already underway, towards a self-driving mobility system. Modelers describe

the transition to autonomous driving as an incremental innovation and transformation driven by technological innovation and changes in vehicle ownership. There is consensus on the need to move from a model centered on the private car to one based on shared mobility and mobility services. The transition is seen as a long-term collaborative process involving governments, companies and civil society, but with a predominant influence of market logic. Sociologists agree more on a cultural adaptation, suggesting that the change will not be sharp but rather a gradual integration between old and new. Some raise doubts about the democratization of autonomous driving, highlighting the fundamental role of public policies and regulation to ensure that the benefits of the new technology are distributed equitably. They also underline the importance of social movements, which could push towards a more sustainable and inclusive mobility model. In the long-term impact, sociologists see autonomous driving primarily as a support to existing systems, with only a significant impact in specific areas such as industrial transportation. Some sociologists question the longevity of this new technology, describing it as a “technological fad” that may lose relevance over time.

For the consortium, the transition will bring a positive revolution in daily mobility and *change lifestyles*. Shared and on-demand mobility services will be integrated with public transport, reducing the need to own a private vehicle. The consortium highlights the optimization of free time thanks to autonomous driving as a major social and economic benefit. The introduction of autonomous cars will encourage a redesign of cities, with less traffic, more green spaces and a more efficient use of urban infrastructure. Sociologists, on the other hand, highlight potential side effects. For example, the use of autonomous cars could reduce the use of public transport and active mobility modes, such as walking or cycling. There are fears of a further incentive to dependence on the car, with negative effects on the environment and health. Furthermore, they highlight that autonomous driving will change our perception of time and space. For example, there could be an increase in long-distance travel, with effects on urban planning and the organization of cities. Furthermore, there are fears that technology could lead to greater alienation and reduced interaction with the surrounding environment³.

³ On the future landscape of self-driving cars, the benefits of autonomous driving and the factors that drive this transition, the following readings are proposed for further study: Stilgoe J., Mladenović M. (2022); Stilgoe J., Cohen T. (2021); Parekh D. et al. (2022); Al Mansoori S., Al-Emran M., Shaalan K. (2024); Jing P., Xu G., Chen Y., Shi Y., Zhan F. (2020).

3. The interaction between autonomous vehicles and vulnerable road users

Integrating self-driving cars into mixed traffic requires advanced technical solutions, a rethinking of the urban infrastructure and simultaneously, an educational effort to promote safe and harmonious *interactions between vehicles and vulnerable users*.

According to modelers, autonomous cars must compensate for the lack of visual contact between drivers and pedestrians/cyclists with clear external signals or displays that communicate intentions (e.g., giving way). Digital connectivity, i.e. the integration of connected systems between AVs and mobile devices of pedestrians and cyclists, could also improve communication and prevent risky behavior. Furthermore, the predictability of AVs could create mistrust and confusion. For example, users may hesitate to cross in front of AVs because they are not sure of their reactions. It has been observed that some pedestrians and cyclists could exploit predictability by adopting bold behaviors, knowing that AVs will stop in case of risk.

For modelers, standards and regulations must necessarily support the safe integration of AVs in urban contexts⁴, defining clear roles and responsibilities for all road users. In addition, the creation of dedicated lanes and other infrastructure modifications could improve safety in mixed traffic environments. Other proposals for better integration of self-driving cars are:

- education and awareness: raising awareness among all road users about how to interact with AVs is essential to avoid risky behavior;
- human supervision: in complex situations, it's proposed to maintain a minimum level of human control, such as a passenger who can intervene if necessary;
- connected systems: connecting vehicles, pedestrians and cyclists via technology could significantly reduce risks.

Modelers find that *interactions between autonomous vehicles and vulnerable road users*⁵ are a multidimensional challenge. While technological advances are seen as crucial, a holistic approach that integrates advanced technology, dedicated infrastructure, education and communication, and clear

⁴ For a more in-depth look at the interactions between self-driving cars, the following reviews are proposed: Yuan X., Deng F., Yao X., Wu Y. (2024); Lu J., Peng Z. *et al.* (2023).

⁵ For a deeper understanding of the interactions between self-driving cars and vulnerable road users, the following reviews are proposed: Deshmukh A., Wang Z. *et al.* (2023); Ziakopoulos A., Rosenbloom T., Yannis, G. (2019).

regulations is considered essential to ensure the safety and effectiveness of such interactions.

Furthermore, to promote road safety, the users of self-driving cars must avoid a series of *risky behaviors*⁶. Distraction and lack of supervision, such as using a cell phone or other activities not related to driving (e.g. distractions due to familiar situations), can prevent timely interventions. Inappropriate human interventions (unsolicited or unjustified while driving), for example, taking control unnecessarily or overriding the system's decisions, can disrupt the system's functioning. Behaviors of passengers inside self-driving vehicles, such as sudden movements, distractions or interference with the vehicle's system, can compromise the correct functioning of autonomous systems. Excessive trust in autonomous systems can reduce the readiness to regain control in critical situations, increasing the risk of accidents. Poor understanding of different levels of vehicle automation, for example, the incorrect use of partially autonomous systems, thinking that they are fully autonomous, can lead to inappropriate behavior. Also, the possibility of cybersecurity breaches with potential hacker attacks or the deactivation of autonomous functions could compromise the operation of the vehicle.

On the other hand, *road safety*⁷ is reinforced by clear regulations on autonomous driving and international and regional regulations, but also adapted to local specificities and operational contexts. It's necessary to maintain human intervention in critical situations, the use of advanced sensors capable of detecting pedestrians, bicycles and obstacles, and subject autonomous vehicles to rigorous, intensive testing in simulated and real conditions before authorizing their public use.

⁶ For a more in-depth analysis of risky behaviors in a mixed traffic system and in the case of still incomplete automation, the following revisions are proposed: Negash N.M., Yang J. (2023); Zhang J., Shu Y., Yu H. (2021).

⁷ For further information on the topic of road safety related to self-driving cars, we suggest the following readings: Almaskati D., Kermanshachi S., Pamidimukkala A. (2024); Matin A., Dia H. (2022).

4. The wider and longer-term social, economic and environmental impacts of autonomous vehicles

Modelers consider AVs as complementary to *public transport*⁸. They are described as tools to improve accessibility to transport services, especially for the first and last mile and in poorly served rural and suburban areas, also thanks to the reduction of operating costs (no drivers). AVs could facilitate more flexible public transport models, connecting train stations, bus stops and suburban areas. Integration is seen as an evolutionary process that will depend on the public policies that favour its implementation and on the available infrastructure. Some modelers recognize the risk that AVs could represent a competitor to traditional public transport, especially if used as private vehicles or for individual ride-hailing services. This scenario is described as a threat to the economic sustainability of public transport. Furthermore, eliminating drivers could reduce operating costs and improve the efficiency of public transport. Both groups of interviewees agree on the positive potential of self-driving cars to improve the efficiency and accessibility of public transport, but sociologists add an important critical and systemic dimension, highlighting the challenges that will accompany this transition, among them:

- it's stressed that AVs are considered effective above all for structured and predetermined services, such as subways or buses on segregated routes, and that integration requires a rethinking of urban infrastructures, with dedicated lanes or more rigid regulatory systems;
- the concern is raised of a polarization of the market between public and private services or that the adoption of AVs could incentivize private mobility, undermining investments in public transport and also underlining the need for public policies to prevent this drift;
- it's highlighted that such systems may not completely solve the problems of social accessibility, especially for the most vulnerable sections of the population, and the effectiveness of AVs will depend on the adaptation of infrastructures and the availability of economic resources;
- it's emphasized how transformation can create new opportunities, but only if accompanied by active labor policies, training and professional requalification.

⁸ For a more in-depth analysis of the connection of AVs with public transport, the following revisions are proposed: Liu Y., Tight M., Sun Q., Kang R. (2019); Bahamonde-Birke F.J., Kickhöfer B., Heinrichs D., Kuhnimhof T. (2018).

On the merit of the *variations in energy demand*⁹ resulting from the introduction of autonomous cars, both agree on the increase in energy consumption in the short term, with the possibility of a reduction conditioned by policies and optimal management of mobility, the importance of infrastructure and route management to mitigate the negative effects is underlined. Both recognize the rebound effect, that is, that the convenience of autonomous cars could induce an increase in overall mobility. Specifically, the consortium highlights an increase in energy demand in the short term due to the presence of advanced systems such as sensors, communications and software that will require additional energy. Among the mitigating factors are technological optimization, shared mobility and electric automation. Sociologists highlight that autonomous technologies are energy-intensive (batteries, sensors, infrastructure). And some note that the type of energy will change (electricity instead of fossil fuels), but will not necessarily decrease. Furthermore, they highlight among the critical issues that energy demand depends on infrastructure, battery production and resource management; resource production could create new global imbalances and shift the focus from energy demand to the importance of reducing environmental impact.

Regarding changes in *traffic flow*¹⁰, the consortium reports that the introduction of self-driving cars will initially lead to an increase in congestion. This phenomenon is attributed to the coexistence of autonomous and manual vehicles, creating inefficiencies and uncertainties. But then, with more autonomous cars on the road equipped with new communication technologies, congestion will tend to decrease (time-lapse). Sociologists agree with this vision but emphasize the cultural and infrastructural dimensions. They believe that the initial impact will depend on the preparation of cities to accommodate the technology. In the long term, both the consortium and sociologists believe that the widespread diffusion of autonomous vehicles will lead to a rationalization of traffic. Automatic management systems and optimized algorithms will reduce human inefficiencies by improving vehicle flow. Communication and automation will be able to reduce traffic congestion with more efficient and fluid speed patterns. Tools such as platooning (vehicles moving in synchronized convoys), dynamic route management and urban redesign are cited as promising solutions. The reduction of traffic in the

⁹ For a more in-depth analysis of the impacts of autonomous driving in terms of changes in energy consumption, the following revisions are proposed: Faghihian H., Sargolzaei A. (2023); Noroozi M., Moghaddam H.R. *et al.* (2023).

¹⁰ For a more in-depth analysis of the impacts of autonomous driving on energy consumption, the following reviews are proposed: Mohammed D., Horváth B. (2023); Matin A., Dia H. (2022).

long term will depend not only on technology but also on the ability to integrate it rationally and sustainably within urban and social dynamics: on integration with public transport solutions, on the reduction of demand for individual cars and on rigorous regulation.

The consortium recognizes the role of the *public sector*¹¹ in making infrastructure suitable for autonomous vehicles. It's emphasized that public-private cooperation will be essential to finance road sensors, advanced communication systems and dedicated lanes. For the consortium, private companies should contribute to the costs of infrastructure only in specific cases, for example, when their technology requires additional elements not yet present on the roads. However, some experts believe that involving private parties can create management complexity and conflicts of interest. The consortium sees the integration of self-driving cars as an opportunity to modernize cities and reduce pollution. It's emphasized that public investments must be guided by a technological vision that favours sustainable urban development. It calls for clear and forward-looking governance, in which public institutions facilitate the adoption of autonomous driving with adequate rules and investments. Sociologists believe that the State must intervene to support these innovations, but with a long-term vision. Public investments must generate a tangible improvement in the quality of life, such as greater safety, reduced traffic and a positive environmental impact. Some raise concerns about social inequality, as these investments risk benefiting only the wealthiest classes. For sociologists, private companies, being the main beneficiaries of the spread of autonomous driving, should assume a significant share of the costs. This principle of co-responsibility is seen as a way to avoid the entire expense weighing on the community. They, while sharing the potential positive impact on cities in terms of sustainable urban development, emphasize that this transition must be inclusive and accompanied by targeted environmental policies. The success of these technologies will depend on the capacity of institutions to adopt participatory approaches. Governance must address complex issues such as inequality, data management and social impact.

Regarding the *insurance market*¹², interviewees agree on the need to re-define insurance models and establish a clear regulatory framework. The consortium sees the change as an opportunity to improve risk management

¹¹ For a deeper understanding of the role of the public sector, the following reviews are proposed: Liu Y., Tight M., Sun Q., Kang R. (2019); Bahamonde-Birke F.J., Kickhöfer B., Heinrichs D., Kuhnimhof T. (2018).

¹² For further information on the changes in the insurance market, we suggest the following readings: Vojvodić M.N., Mandić D., Miloradović M. (2024); Anderson J.M., Kalra N., Stanley K.D., Morikawa J. (2018).

and introduce new insurance solutions through the use of data and technology. Responsibility tends to shift towards vehicle manufacturers, especially in fully autonomous driving scenarios. They foresee an increase in technology-related risks, such as sensor failures, inadequate maintenance and possible cyber attacks. This will require new insurance solutions, with specific policies for technological products and automated systems. Insurance premiums could be influenced by the reliability of technologies, with differentiated rates based on vehicle safety and the advanced performance of autonomous systems. Sociologists, on the other hand, approach the issue with more caution, raising questions of social equity, transparency, and de-responsibilization of the user. The possibility of economic polarization is highlighted, with higher insurance premiums for advanced vehicles, making the ownership of autonomous cars a privilege for the few. The issue of data transparency is also raised, as the collection and use of driver information could create ethical and legal issues. Regulation and privacy protection emerge as critical factors to avoid legal loopholes and negative effects on society. For the distribution of responsibility, modelers believe that in the event of accidents, the blame could shift from the driver to the manufacturer of the vehicle or the algorithm in a fully autonomous system, while some maintain the hypothesis of shared responsibility between the driver and the machine in cases of assisted driving. According to sociologists who have a more complex and nuanced vision, responsibility should be shared between car manufacturers for technical or programming defects, the developers of the algorithm, called to answer for software errors, and the users, especially in cases where a minimum of human supervision is required.

At last, the consortium tends to focus on the functional and technical aspects of *Big Data* collection¹³, highlighting the potential for improving security and efficiency. Data can be used to identify responsibilities in case of incidents, acting as a “black box” and monitoring illegal behaviors in an automated way, in addition to offering significant commercial potential. In contrast, sociologists raise ethical, social and political issues, focusing on surveillance risks, data misuse and the need for an adequate regulatory and cultural framework. Both perspectives converge on the need for data protection and cybersecurity investments, but differ in priorities: operational practices for the consortium (obtaining explicit user consent, ensuring a form of economic compensation for the use of personal data, minimising advertising

¹³ For an in-depth look at the cybersecurity of self-driving cars, the following reviews are proposed: Girdhar M., Hong J., Moore J. (2023); Limbasiya T., Teng K.Z., Chattopadhyay S., Zhou J. (2022).

disclosure) and protection of individual rights for sociologists (personal data can be profiled and exploited to create targeted advertising campaigns, often without awareness on the part of users, need to educate citizens on the use of their data). Both groups of interviewees agree on the need for clear rules to protect privacy and ensure security, but sociologists introduce a further reflection on the social and democratic consequences of the massive collection of Big Data.

Table 1 – Perspectives in comparison: consortium and sociologists on the future of Autonomous Vehicles.

Aims	Consortium	Sociologists
General approach	Technical and operational vision: focused on the integration of autonomous vehicles , road safety and interactions in mixed traffic.	Socio-cultural vision: Emphasis on the long-term social, economic and environmental impacts of autonomous driving .
Perception of technology	Technology seen as a practical solution to improve mobility and safety. Need for technical regulation and progressive adoption.	Technology seen as an agent of social transformation , with impacts on habits, human relationships and privacy. Critical issues on blind trust and loss of personal autonomy.
Safety and reliability	Focus on road safety : reducing accidents by eliminating human error and developing reliable algorithms.	Focus on citizen safety : subjective perception of safety, psychological impact and dependence on algorithms.
Changes in the mobility model	Support shared mobility and integration with public transport. Reduction of private vehicle ownership.	Attention to social impact : risk of exclusion for some segments of the population and growing dependence on digital platforms.
Social acceptance and infrastructure	Need for educational campaigns and government incentives to encourage adoption of autonomous driving.	Reflection on cultural barriers and resistance to change. Importance of inclusive education .
Energy impact and sustainability	Expects energy demand to increase due to technological complexity of autonomous vehicles. Renewable energy solutions.	Focus on social sustainability and the need for public policies to avoid an increase in the ecological footprint.
Legal responsibilities	Distribution of responsibilities between manufacturers, software providers and end users . Need for new insurance models.	Focus on ethical responsibility and moral issues related to critical decisions of autonomous vehicles. Criticism of the lack of a clear legal framework.

Ethical issues and Big Data	Need for regulatory standards for data protection and greater algorithmic transparency.	Concerns about data misuse and surveillance risks . Criticisms of the asymmetry of power between companies and citizens.
Challenges and recommendations	Emphasis on technical regulation, safety and progressive experimentation for a safe transition.	Need for interdisciplinary approach , transparency and ethical standards for sustainable and inclusive adoption.

Conclusions

While it is clear that the existence of a substantial share of techno-scientific imaginary (as by Jasanoff, Kim, 2015) among consortium partners exalts the positive vision of the technology and the idea that it will lead to a general improvement, there does not seem to be much by way of shared certainty among the partners interviewed. Will autonomous driving reduce traffic? Mostly yes, but there could be transients where both traffic and consumption will increase. Will the take-up be smooth? Depends, mostly on the policies. Vulnerable road users need attention, but even people with disability will be able to move by car. Risks? Yes, there are risks. The prudent optimism of technologists is reflected in the cautious concern of the sociologists, who are, of course, more alert to issues of equality, fairness, democracy, opportunity divide, and algorithmic governance. Sociologists are more worried than technologists when it comes to the interplay between public and private transport and to the issue of responsibility (and loss thereof), as well as with labour market outcomes. None rejects the technology outright, nor do we perceive in these results forms of frontal opposition to corporate actors in charge of big data, which we have been accustomed to seeing in recent debates about the impact of artificial intelligence, not to mention debates in other technologies, such as in the field of agrochemicals, on pesticides, genetically modified food and foodstuffs.

The substantial moderation of the interviewee is possibly associated with the low temperature of the debate on this particular issue at the moment of writing. In any case, the application of that part of sensitivity auditing (Saltelli *et al.* 2013; Saltelli, Funtowicz, 2014) that invites the participant to a technological endeavour to check their own vision seems to have worked well, with all parties relatively confident to express their view on the topic.

We hope the publication of the present work, once disseminated to the consortium members, will help keep this fruitful conversation alive.

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