











Mr. Martin Kupka, Minister of Transport, Government of the Czech Republic cc Tomáš Neřold, Head of Road Safety, Ministry of Transport Edita Hrdá, Ambassador at the Permanent Representation of the Czech Republic to the EU Martin Bednář, Head of Unit, Internal market and Competitiveness, Permanent Representation of the Czech Republic to the EU European Commission (DG GROW and DG MOVE) National vehicle authorities

7 October 2024

Re: Registration of a Tesla Cybertruck in the Czech Republic

Dear Minister Kupka,

In July the owner of a Tesla Cybertruck based in the Czech Republic publicly announced that national authorities registered his vehicle for use on public roads.¹ A related online post suggests that the Czech Republic's system of Individual Vehicle Approval was used to register this Cybertruck ("it is [registered as] an individual import").²

Acute manipulation of maximum mass, and failure to meet the N1 test

Tesla's manual for the Cybertruck pick-up truck gives its maximum mass as 4 tonnes, with some small differences between model variants.³ However, we understand that the owner-importer of this Cybertruck, or the technical testing centre working on his behalf, declared its maximum mass as 3.5 tonnes in documentation submitted to Czech registration authorities, in an attempt to classify this import as a light duty vehicle under EU law.

¹ See the post on X by CyberTruck.cz. Link.

² Skokan (2024), "The first Cybertruck is officially on Czech roads with a technical approval. How was it obtained?" Link.

³ Tesla (2023). Cybertruck weight data. <u>Link</u>. The maximum mass of the Cybertruck's four model variants ranges from 4,007 kg to 4,159 kg; see further Annex 1 to this letter.

We are not aware of any lawful basis for this level of manipulation regarding maximum mass. A key question is: can the Czech ministry please point to a legal basis allowing the maximum weight of the vehicle, as declared by the vehicle-maker - and imprinted on the Vehicle Identification Number (VIN) plate, to be disregarded in favour of a figure approximately half a tonne less, thereby conveniently matching the EU weight limit for light duty vehicles?

As we understand EU vehicle provisions, there is no legal basis to lawfully engage in this level of manipulation. Second, even if such acute levels of manipulation regarding maximum weight were somehow lawful, we do not see how a Cybertruck could legally qualify as a light duty commercial goods vehicle in the EU, i.e. N1 class.

To be validly approved and registered as an N1 commercial goods vehicle in the EU, the vehicle's goods-carrying capacity must be equal to or higher than its person-carrying capacity, measured using a weight-based test.

This important safeguard, set out in 2018 EU legislation, is clearly intended to safeguard Europe from the very over-sized pick-up trucks now being increasingly imported and bringing danger to our streets. As the calculation below shows (see Annex 2), this Cybertruck fails the EU test to qualify as a light duty commercial goods vehicle.

In light of the points above, it is our assessment that the approval and registration of Cybertrucks in the EU poses illegal risks to all other road users. If this analysis is accepted, it follows that the small number of Cybertrucks registered so far in the EU need to be de-registered, with the relevant Member State/s confirming their removal from public roads.

We therefore ask the following questions:

- In the event it exists, can the ministry please point to a legal basis allowing the maximum weight of the vehicle, as declared by the vehicle-maker and imprinted on the Vehicle Identification Number (VIN) plate, to be disregarded in favour of a figure approx half a tonne less, thereby conveniently matching the EU weight limit for light duty vehicles?
- Does the Czech ministry agree that the Cybertruck fails the N1 weight test set out in EU Regulation 2018/858 and therefore cannot lawfully be registered as a light-duty goods vehicle in the Czech Republic?
- This letter shares evidence indicating that an unlawful registration appears to have taken place linked to an inaccurate declaration of the Cybertruck's maximum weight, and a mistaken (or incomplete) application of the rules that apply to light goods vehicles. Will you, as Minister, initiate a review of this registration? During the period of this review, we ask you to suspend the Cybertruck's access to public streets, which is necessary for public safety and insurance reasons (linked to a potential finding that this vehicle was not in fact lawfully registered). We ask you to commence this review with urgency, and to inform us of your decision regarding the review requested.

Unless this registration is reviewed, the Czech Republic leaves itself exposed to further applications to approve imported Cybertrucks, and risks becoming a back-door channel to trans-ship such dangerous vehicles to other Member States.⁴

We can already note that any suggestions that this vehicle will remain on Czech soil are confounded by its owner-importer describing multiple visits to Slovakia (see Annex 3). The reality is that the Czech Republic's registration of a Cybertruck opens the prospect that this vehicle can travel on any street open to vehicular traffic in the EU 27.

For the avoidance of doubt, and as outlined further below, we also do not see any lawful way a Cybertruck could be registered as a passenger car (M1) in the EU.

A Cybertruck could not be lawfully registered as a passenger car (M1) in the EU

The Cybertruck fails to meet a range of basic European road safety norms that apply to passenger cars (M1). As outlined below, these range from the Cybertruck's inadequate, or non-existent, crumple zones for crash absorption to its sharp edges.

Non-existent or inadequate crumble zones for crash absorption

The Cybertruck's non-existent or inadequate crash absorption brings unacceptably high risks to all other road users. Due to the self-certification system which operates in the US, the Cybertruck has never been crash-tested by any public authority. Already, there are real doubts if the Cybertruck meets the lower pedestrian safety requirements that apply in the US. For example, the US Center for Auto Safety questions if the Cybertruck's stainless steel construction has sufficient crumple zones (usually made from plastic composites) to satisfy US pedestrian safety standards.⁵

Non-existent or inadequate crash absorption (crumple zones) would lead to increased rates of injury severity and death for people in other vehicles, pedestrians and cyclists. High weight vehicles with little or no crash absorption are even more lethal. The owner-importer of the Cybertruck in Czechia states that the Cybertruck is "so dangerous for pedestrians" because it "has no deformation zone in the front part" but "simply a hard sheet of stainless steel".⁶

⁴ While we are not aware of governments declining to accept IVA imports first registered in other Member States, EU law gives powers to do so. The re-registration of a vehicle which poses a genuine risk to public health can be declined, including vehicles approved and first registered under IVA in other Member States. See European Commission (2007) *Procedures for the registration of motor vehicles originating in another Member* State Link. Member States can also insist that a vehicle is submitted for testing where there is evidence of a risk to road safety; see also Art 5(a) of Directive 2009/40/EC on roadworthiness. ⁵ See NBC News (2023). Pedestrians, already dying at record levels, now face Elon Musk's Cybertruck. Link.

⁶ Skokan (2024), "The first Cybertruck is officially on Czech roads with a technical approval. How was it obtained?" <u>Link</u>. See further Annex 3, which includes screenshots of content posted on 18 July.

Extreme acceleration in high weight vehicles

Research by the Insurance Institute of Highway Safety,⁷ and by *The Economist*,⁸ shows that heavier vehicles lead to more fatal outcomes as other road users are far more likely to be crushed in collisions. The high weight of the Cybertruck is itself an issue. Extreme acceleration combined with high weight compounds road safety risk.

Cybertruck drivers can propel this vehicle from 0 to 90 km/h in approx 2.5 seconds, seriously reducing their reaction time, which in turn increases collisions, crash severity and road deaths - and all this aggravated by a weight more than twice that of a typical new car. The US Center for Auto Safety concludes that the "stiffness of stainless steel construction", coupled with extreme acceleration, is "going to turn these [Cybertruck] vehicles into a missile".⁹ Extreme acceleration in such high-weight vehicles is not contemplated under EU law.

Risks especially to children linked to poor direct vision

The Cybertruck has a high bonnet, deep seating position and large A and B pillars. All these factors combine to obstruct the driver's view of other road users. Moving off from stopped positions such as junctions, for example, Cybertruck drivers will be unable to see children in a great many situations. Hence, the Cybertruck's poor direct vision carries a higher risk of causing child fatalities.

Sharp edges inevitably increase injury severity and deaths

European law bans sharp edges on new cars.¹⁰ There appear to be no comparable provisions in US legislation. Sharp edges, which are a prominent feature of the Cybertruck's design, exacerbate injury severity and death rates.

During the registration process, Czech authorities required ultra-narrow rubber slats to be retro-fitted to Cybertruck approved in early July (see Annex 3 for images). Such a retrofitting process would not meet EU rules prohibiting sharp edges in the first place.

In conclusion

We submit that the level of manipulation here regarding the declared maximum mass of the Cybertruck is unlawful. We similarly submit that there is no lawful way to approve and register a Cybertruck in the EU as a light duty goods vehicle because it fails the relevant test requiring the goods-carrying capacity of such a vehicle to be equal to, or higher than, its person-carrying capacity.

⁷ IIHS (2023). As heavy EVs proliferate, their weight may be a drag on safety. Link.

⁸ The Economist (2024). Americans love big cars, but new analysis suggests that the heaviest vehicles kill more people than they save. Link.

⁹ Car Expert (2023). Experts slam safety of "death machine" Tesla Cybertruck. Link

¹⁰ EU law prohibits sharp edges on new M1 vehicles (passenger cars); <u>link</u>. As European van-makers supply to both the M and N segments (e.g. campervans straddle both segments), EU rules against sharp edges are more widely observed in practice, i.e. for N1 (commercial vehicles up to 3.5 tonnes) and N2 (commercial vehicles 3.5 - 12 tonnes). Small-series European passenger cars are also subject to the 'no sharp edges' rule; <u>link</u>.

We also outline how the Cybertruck so seriously conflicts with basic European road safety norms that it couldn't be lawfully registered as a passenger car in our analysis. There is, in our assessment, no legal path to lawfully register a Cybertruck for use on EU streets.

We realise that Individual Vehicle Approval (IVA) lacks sufficient oversight. We further realise that, as Minister, you may have been unaware until now of the growing level of public concern linked to the use of the IVA channel to approve and register vehicles. Much of the content here will, we acknowledge, come as news to you.

We therefore urge you to initiate a review of this registration. During the period of this review, we ask you to suspend the Cybertruck's access to public streets. This is necessary in light of the risks faced by other road users, and for reasons linked to public liability and insurance, particularly if the review finds that this vehicle was not lawfully registered. We ask you to commence this review with urgency.

Many thanks

Yours sincerely

Antonio Avenoso, Executive Director, European Transport Safety Council André Sobczak, Secretary General, Eurocities Barbara Stoll, Senior Director, Clean Cities William Todts, Executive Director, Transport & Environment Karen Vancluysen, Secretary General, POLIS - Cities and Regions for Transport Innovation Geert van Waeg, President, International Federation of Pedestrians Jill Warren, Chief Executive Officer, European Cyclists' Federation

This letter is sent on behalf of the organisations that have applied their logos (above). The email addresses of the contact persons for this letter are: graziella.jost@etsc.eu, james.nix@transportenvironment.org and c.woolsgrove@ecf.com.

Annex 1 - Maximum mass of the Cybertruck

Below: screenshot from the Tesla website showing the Cybertruck's Gross Vehicle Weight Rating (GVWR), the North American expression for "maximum mass" in Europe (or more formally, the technically permissible maximum laden mass). The Cybertruck's maximum mass is 4,007 kg to 4,159 kg across its four variants (shown from left to right below, namely, Dual Motor - All Season, Dual Motor - All Terrain, Tri Motor - All Season, Tri Motor - All Terrain). Link.

tesla.com/ownersmanual/cybertruck/en_us/GUID-12A976DD-EB60-431B-AFF1-5A37E95006DB.html				@ ☆	🚥 🗅 🕹
Cybertruck Owner's Manual				Q Search	
	GVWR Total**	8,834 lb (4,007 kg)	9,169 lb (4,159 kg)	8,863 lb (4,020 kg)	9,169 lb (4,159 kg)

Annex 2 - Application of the N1 weight test to a Cybertruck registered as 'light duty'

As noted above, the under-declaration of the maximum mass by more than half a tonne is not lawful in our view. Nonetheless, we apply these figures below to assess the compliance of such registration with the N1 test. The Cybertruck fails to comply. The test, set out below, can be accessed in 2018 vehicles law.¹¹

- 3.6. Vehicles shall show a goods-carrying capacity equal or higher than the person-carrying capacity expressed in kg.
 - 3.6.1.For such purposes, the following equations shall be satisfied in all configurations, in particular when all seating positions are occupied:
 - (a) when N = 0:

 $P-M \geq 100 \ kg$

(b) when $0 < N \le 2$:

 $P - (M + N \times 68) \ge 150 \text{ kg};$

(c) when N > 2:

 $P - (M + N \times 68) \ge N \times 68;$

where the letters have the following meaning:

'P' is the technically permissible maximum laden mass;

'M' is the mass in running order;

'N' is the number of seating positions excluding the driver's seating position.

¹¹ See Article 3.6 of Part A, Annex 1 of Regulation 2018/858. Link.

Mass in running order (or MIRO for short) is the unladen weight of the vehicle plus 75 kg, assumed in EU law as the weight of a driver.¹² According to the Tesla manual, the unladen weight of the lightest variant of the Cybertruck is 3,009 kg. Adding 75 kg brings this figure to 3,084 kg, which is then entered for MIRO in applying the test.

We test the Cybertruck with 5 seats, reducing this by 1, as the test provides that the driver's seating position is excluded.

TPMLM is the Technically Permissible Maximum Laden Mass, the long form in EU law for maximum mass. Hence, the equation is:

TPMLM - (MIRO + 4*68) should be greater or equal to 4*683,500 - (3,084 + 272) should be greater or equal to 272 3,500 - 3,356 = **144**, which is **not** greater or equal to **272**

Annex 3 - Screenshots of content from Huntinspeed and X (July 2024)

Below: screenshot from the Huntinspeed website where the Cybertruck's non-compliance with European safety rules is accepted and highlighted. <u>Link</u>.

huntinspeed

Edges and pedestrian safety

The electric Cybertruck is designed in such a way that in its current form, the manufacturer cannot officially sell it on EU markets . This is mainly due to the steel body, which has no deformation zone in the front part, it simply has a hard sheet of stainless steel. It is so dangerous for pedestrians in the event of a collision.

Stainless steel sheets partially form **the exoskeleton** of the car and strengthen its overall torsional rigidity. The car would thus **not pass** crash tests and could not be sold on the old continent.

Another **red** flag for European regulations is the roundness of the body panels. The Cybertruck has them **completely** straight, while the EU requires a few millimeters **of curvature** of each plate, also for the safety of pedestrians. However, all these regulations apply to official sales through the manufacturer/dealer. The **cybertruck.cz** project has nothing to do with the official Tesla representative office. It is an individual import.

¹² See the definitions under Part 2 of Section A of Regulation <u>2021/535</u>, articles 1.3 and 1.19.

Below: screenshot from the Huntinspeed website indicating that this Cybertruck has already been brought to at least one other Member State. <u>Link</u>.

huntinspeed

Cybertruck in Slovakia

We could already see the Cybertruck in Slovakia, specifically in Bratislava, where it came to visit the unofficial DriveTesla dealer. This vehicle **also tested the wading mode** (Wade Mode) in a lake near Bratislava, which resulted in the car burying itself in round gravel. However, wading did not cause any technical problems.

After visiting Bratislava a few weeks ago, you will soon be able to see Cybertruck **in the east of Slovakia**. It will be exhibited at the Electric Car Show on September 6-8 in the Optima shopping center in **Košice**.

Below: images of the narrow rubber slats retro-fitted to the Cybertruck approved by CZ authorities. *Link*.



Cybertruck I modifications Photo: huntinspeed

Below: screenshot of a post on X recording the registration of a Cybertruck in CZ. Link.

