Planned obsolescence is not inevitable

Environmental and social impacts related to the generalization of the removal of tires at 3 mm tread depth across the European Union

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A well-established 1.6 mm regulation

Summer tires have been subject to a harmonized regulation (1.6 mm) worldwide for a long time

- When driving on wet ground, a **minimum tire tread depth is required** to allow water dispersion and ensure adequate grip.

- In December 2015, the European Commission adopted the **Circular Economy** package. Applied to tires, this concept can be understood as the **use of technologies, during the design phase, allowing a high level of performance throughout the lifetime of the tire and up to the legal tread depth limit**.

A **European directive of 1989** requires Member States to ensure that the tires of vehicles in use have tread depth of at least 1.6 mm

42 States have a 1.6 mm requirement.

Japan and Canada also require removal of tires at 1.6 mm

But a premature removal at 3 mm is promoted

In practice, European drivers are incentivized to change their tires at 3 mm by some stakeholders of the tire industry

- It is **difficult for motorists to assess the exact performance of their tires throughout their entire lifespan**.
- Despite the European regulation, **some stakeholders in the tire sector support the replacement of tires at 3 mm tread depth well before the legal limit**.
- **Within the European Union, most tires are replaced at 3 mm**. A study published in 2014 in the peer-reviewed scientific journal *Tire Science and Technology* reveals that the average and median tread depths of tires in European landfills are 3.1 and 3 mm respectively.

Without conclusive evidence to reduce the frequency of accidents

Accident data is not conclusive in supporting a regulatory change of 1.6 to 3 mm of the minimum tread depth

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*"The accident data used in the current study however indicates **no benefit in terms of reducing the number of accidents by increasing the minimum tread depth**. [...] The results of the study suggest that **1.6 mm could be a suitable level** based on existing national legislation in member states."*
TNO report for the European Commission, *Study on Some Safety-Related Aspects of Tyre Use*, 2014

*"In case of an increase of the minimum tread depth, tires have to be replaced more often. The resulting **increase in costs** can lead vehicles owners to not invest in tires with a long-term performance due to budget constraints. If tires with a short-term performance are preferred due to cost considerations this will **negatively impact driving and traffic safety**."*
Thomas Burkhardt, Vice-President of VUFO*, newsletter of February 16th 2017, translated from German

*VUFO : VUFO is an Institute for Traffic Accident Research, specialised in road accidents for more than 13 years.

Environmental damage and economic costs

The impact of the enforced removal of tires at 3 mm across the European Union would be significant

- **The following results are the comparison between tire removal at 1.6 mm vs tire removal at 3 mm on the European market over one year:**

- The **monetization of all environmental impacts shows an overall increase for society of €636 million every year**, more than twice the annual budget of the European Environment and Climate Program (the LIFE + program has a €300 million allocation per annum).

- **The surcharge for drivers would amount to €6.9 billion**, as a consequence of more frequent tire purchases and increased fuel consumption.

Means exist to fight against planned obsolescence

These recommendations could help ensure the safety of motorists and support a transition towards a more circular economy

1. **Measuring the wet grip of used tires at a tread depth of 1.6 mm would ensure** a level of performance over time in terms of safety. Wet grip is currently measured solely on new tires.

2. Within certain national regulations, certain sectors are subject to the **obligation to set up an eco-modulation tax scheme, contingent on compliance with ecodesign criteria**. This incentive is not yet applicable for tires. It would, however, prompt manufacturers to innovate for sustainability and would draw consumer attention to the issues of resource management.

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