

This research project addresses one of the most important and challenging issues of contemporary private law: how to regulate the situation of individuals whose bodies and minds have been deeply integrated with technology. The rapid development of neurotechnology, artificial intelligence, and biotechnology has led to a growing number of people functioning with advanced implants, brain-computer interfaces, and cognitive enhancement systems. This phenomenon, referred to as cyborgization, is giving rise to hybrid entities — beings that are no longer purely biological nor entirely artificial.

Traditional private law relies on a clear distinction between persons and things, based on the assumption of biological homogeneity of human beings. The human body has traditionally been treated as inviolable and indivisible, while technology has been viewed as an external accessory governed by property law. However, in a world where devices such as brain implants or intelligent prosthetics are permanently integrated into the human organism and cognitive functions, this distinction becomes inadequate.

The project involves an in-depth analysis of these challenges and aims to develop a new, coherent model of regulation within the framework of European civil law systems. Its goal is to create legal constructs that protect technologically enhanced individuals while maintaining the fundamental values of private law: human dignity, personal autonomy, and bodily integrity.

The project will address, among others, the following key issues:

- **A new definition of the human body:** Should technological elements permanently integrated into the organism (e.g., brain-computer interfaces) be treated as part of the body protected under personal rights?
- **Transformation of legal personhood:** Does cyborgization require the creation of new categories of legal subjectivity, depending on the degree of technological integration with the human being?
- **Civil liability of cyborgs:** How should the principles of fault, intent, and causality be adapted when human actions are co-directed by integrated artificial intelligence systems?
- **Ownership and responsibility for integrated technologies:** Can technological components integrated into the human body be subject to transactions? How should disputes over their repair, ownership, or replacement be resolved?

The research will result in a model of the "cyborg body" in private law, considering various levels of technological integration, and consequently, a model of "hybrid legal subjectivity" tailored to technologically enhanced individuals. This model will outline the principles of tortious and contractual liability for cyborgs, as well as norms governing ownership, use, and risk related to technologies integrated into the body.

The project addresses the urgent need for a systematic legal framework for the growing group of individuals whose daily functioning is based on technological augmentation. The absence of such a framework risks chaotic legal development, violations of human dignity, and the emergence of new inequalities and threats to individual autonomy.

In the long term, the project contributes to the development of a new field of study — cyborg law — and will serve as a foundation for future legislative, doctrinal, and philosophical work on the place of humans in an era of technological transformation.