Building the Method for Social Implementation of Automated Driving Technology Complying with Actual State Based on ELSI
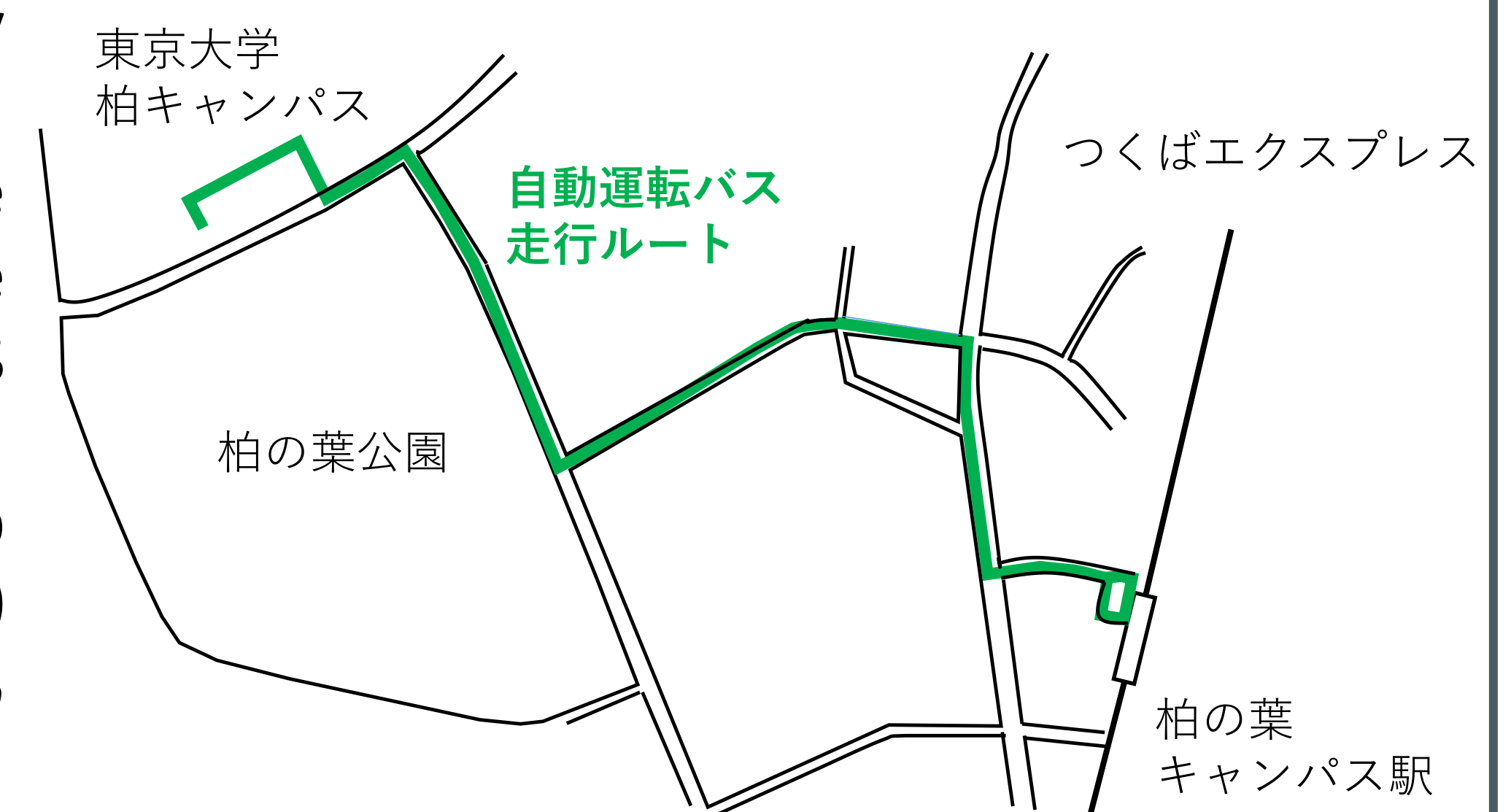
Introduction

ELSI is an abbreviation for "Ethical, Legal and Social Implications/Issues". Efforts to study and deal with ELSI that arise with the development of new science and technology in advance have been made in various fields.

Automated driving technology frees people from driving and realizes a society in which people can move around more safely and comfortably, but it also has the potential to create automobile-centric cities, and it causes traffic accidents just like humans.

In this project, we will identify ELSI related to automated driving technology and examine how this technology should be implemented in society.

As part of our activities, we are inviting the general public to ride the automated driving bus (between Kashiwa-no-ha Campus Station and the University of Tokyo Kashiwa Campus) that is being operated by Kashiwa ITS Promotion Council, and extracting their opinions.
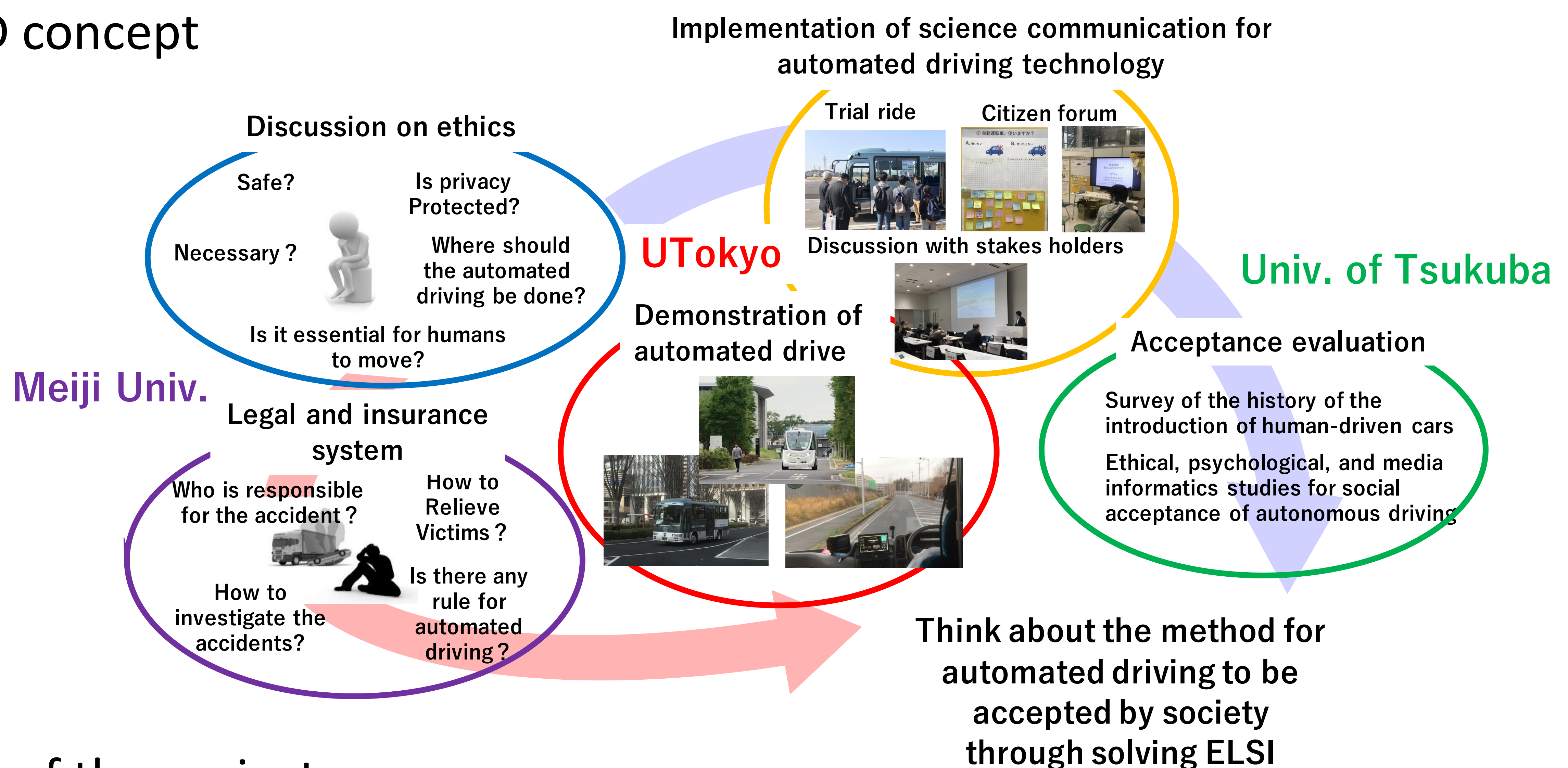
This research and development project has been adopted by the R&D Program *Responsible Innovation with Conscience and Agility (RInCA)* (FY2020-) by *Research Institute of Science and Technology (RISTEX), Japan Science and Technology Agency (JST)*.

Fundamental questions and future prospects

Self-driving cars, like humans, have the potential to make mistakes and cause accidents. Can society accept that? Should we accept it? How? This project aims to create a future in which society can appropriately enjoy the benefits of innovation. In order to achieve this, it is essential that the risks associated with new technologies are properly understood, and that the limits of ethically acceptable risks and fair compensation are considered.

R&D concept

Aim of the project

To establish a method for deeper understanding and dialogue about automated driving technology between experts and the general public by practicing science and technology communication in a way that is linked to demonstration tests of automated buses.

To propose a legal and institutional framework that enables the resolution of automated vehicle accident disputes based on objective evidence.

To examine the ideal form of social acceptance of automated driving technology through a survey of the history of social acceptance of automobiles and ethical considerations, and to propose methods for realizing such acceptance.

Through the above, we will make it possible for innovations in automated driving technology to be promoted in a way that is open to society.

Publications

Tsutsui, H., 2022, Automated Driving Technology and ELSI, *The Journal of Science Policy and Research Management(研究 技術 計画)*, 37(3), pp.252-263 (In Japanese).

東京大学生産技術研究所