IOWN INTEGRAL

NTT R&D FORUM 2024

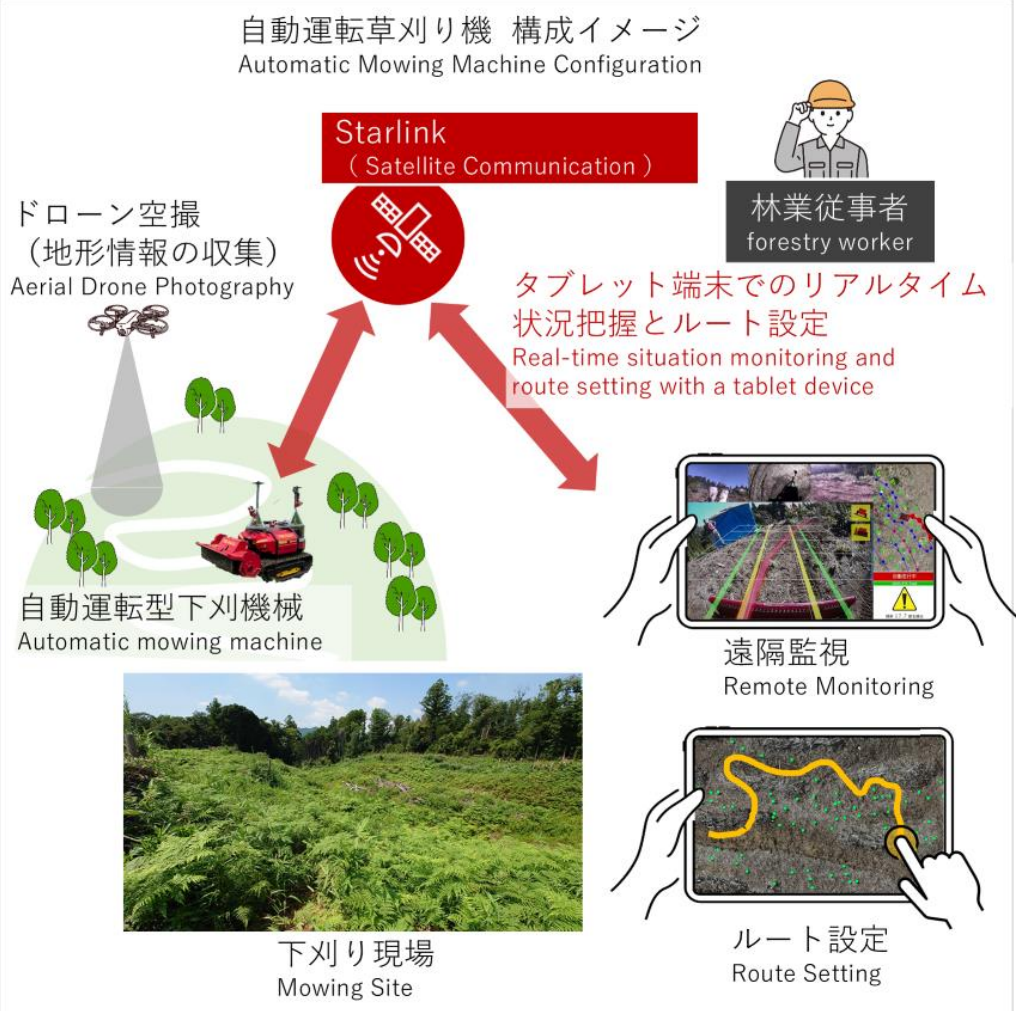
DEVELOPMENT

δ 05-04

Expanding automated driving technology with Starlink satellites

Automatic mowers are provided to ensure safe weeding operations for operators

#Productivity Improvement #Well-being, Human Capital Management



///Technical Issue

The high risk of serious injury and heat stroke from the hot sun are challenges with manual mowing.

///Research Goal

Reduce labor hours/man-hours by 50% or more.

---Technology

- Remote monitoring system using Starlink, 4G and 5G
- Realization of automatic driving using high precision GNSS such as CLAS and NW-RTK.
- Visualization of work area information through in-house developed tablet application.

---Novelty

- Compared to radio-controlled mowers and brushcutters, automatic operation by GNSS is possible. This enables efficient operation and weeding from remote locations.
- This is the first case in Japan that an automatic mower can be operated from a tablet application.

---Applicable Business

In the field of Forestry and maintenance industry, this solution solves labor environment issues in mowing operations at solar power plants and forestry sites, such as accidents and injuries during mowing, damage by wasps and other insects, heat stroke caused by working under the hot sun, and aging forestry workers.(Scheduled for commercialization in 2026)

Related Exhibition= δ05-01 Exhibitors= NIPPON TELEGRAPH AND TELEPHONE CORPORATION , NTT DOCOMO, Inc., DOCOMO Technology, Inc.

Contact URL Outside Partner= Chikusui Canycom, Inc.