

## WeLASER project preliminary system integration: some results and next steps

### Preliminary integration

WeLASER project successfully achieved its preliminary system integration in April 2022, after assembling all the systems onboard the mobile platform and i) checking the mechanical interfaces, ii) verifying the electrical interfaces and iii) establishing the first communication level among the subsystems.

### Some results

The whole system is working according to the Work Plan and relevant advances were achieved in all the different parts of the prototype:

- The integration of the IoT sensor networks and cloud computing apps,
- The high-power laser source,
- The AI-perception system and the scanning system and
- The second prototype of the autonomous robot.

During the integration project meeting, held on April 27, 2022, at CSIC, the WeLASER robot was manually driven to the experimental fields showing promising

performances and the consortium agreed to achieve milestone 2 “Electro-mechanical and communication interfaces assessed”.



### Next steps and practical recommendations

According to the tests carried out and the list of malfunctions detected during the integration meeting, the WeLASER weeding system resulted promising and the consortium expects to achieve the final objectives. Moreover, a strong set of strategic actions need to be developed during the following months to optimize the communication and dissemination of WeLASER results as well as the system final exploitation. For instance, there will be two additional stakeholders’ events, three field days in three different countries (Denmark, The Netherlands and Spain), three Computer Aided Telephone Interviews (CATI) in France, Poland and Spain, and a final demonstration with a one-week Summer School for specialized students.

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