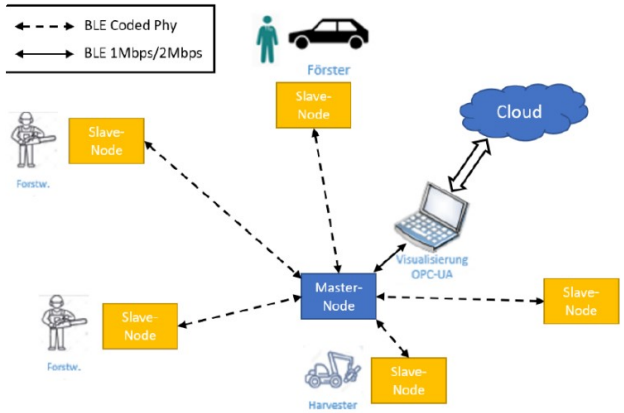
Co-worker safety 4.0 | Work safety improvement system for forest operations



Improvement of work safety through a new IT solution. A sensor node network connects to anyone involved (carrying such a node) and provides information about current danger situation over license-free band using Bluetooth low energy (BLE) .

Improved work safety through a sensor node network which connects to anyone carrying such a node and provides information about the current danger situation over a license-free band using Bluetooth low energy (BLE). For example: in a tree felling operation with a harvester which is supported by a forest worker, any person with such a little IT-device in his / her pocket (such as supervision personal, field forester, …) will get information about the position of the harvester and the work the harvester is doing. On the other hand, also the harvester has the information about these people. Risk alert warnings are sent to actors automatically, risk zones and risk status can be retrieved from actors, offenses of critical overlaps in risk safety zones are identified. The system is using u-Blox M8N GPS modules and map visualization on screens. The information gets translated to a danger situation depending on the individual work-situation (for example larger danger area when the harvester is cutting a tree than while driving). Communication of 150 - 700m, up to 9 slave nodes and battery allows 50h usage. GPS accuracy around 2.5m under forest conditions. The system may connect to a Cloud. This opens further data processing options, such as inclusion of passers-by via GSM-net or team-oriented data analysis for work-safety education needs.

MAI MULTE DETALII

PROVOCARE ABORDATă

4. Asigurarea unei forțe de muncă bine pregătite prin dezvoltarea unor competențe atractive și prin educație

DOMAIN

Perturbări ale pădurilor, riscuri, răspuns la dezastre

Produse, piețe, comerț

Recoltare, infrastructură, logistică

TIP DE SOLUțIE

Mașini, echipamente inteligente

CUVINTE CHEIE

Sensor node; BLE; work safety

SOLUțIE DIGITALă

Da

INOVAțIE

Da

ȚARA DE ORIGINE

Elveţia

SCARA DE APLICARE

Național

ANUL DE îNCEPUT șI DE SFâRșIT

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DESPRE EXEMPLUL DE BUNă PRACTICă

A PRINCIPALEI ORGANIZAțII

Berner Fachhochschule
Haute école spécialisée bernoise
Bern University of Applied Sciences

PROIECTUL îN CADRUL CăRUIA A FOST CREATă ACEASTă FIșă INFORMATIVă

Rosewood 4.0

DATA POSTăRII

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A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY

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