### A robot for radiological mapping of containers





#### Scope

## Radiological mapping of radioactive material containers before shipment

- System enabling the radiological mapping of the underside of containers
- Wireless robot-assisted mapping with autonomous navigation
- Dose rate measurement at point of contact

#### Supervision and traceability of data

- Control of the robot from a remote control station
- Real-time 2D mapping to identify areas of interest to be investigated by contact
- Real-time display of dose rate measurements
- Automatic recording of data for each investigation performed

#### Advantages

- QUALITY Elimination of non-quality costs related to inspection errors prior to shipment of containers
- SIMPLICITY Simple solution deployable in minutes
- ADAPTABILITY Wireless standalone solution with capability to include additional radiological measurements
- NUCLEAR SAFETY / RADIATION PROTECTION Remote control to reduce the radiological impact on the operator
- OCCUPATIONAL SAFETY Elimination of risks for the operator during the operation

#### Key data

- Wireless mobile base with omnidirectional wheels
- Autonomous navigation below the container
- Probe elevation system for contact measurements
- Real-time transmission of radiological data and creation of 2D mapping
- Extended measurement range (via two measurement probes) from a few tens of nSv/h to a few Sv/h
- Recording of mapping for traceability

# Strengthening safety and quality of radiological inspection operations on containers

#### **Our services**

- **Global measurement service** with provision of both the service and the suitably adapted equipment
- Inspections on your premises by an experienced team in close collaboration with your own teams
- **Provision of data** (radiological and physical readings/measurements), which remain **your property**



#### **Our references**

#### Orano DS

• TRIADE classified facility (ICPE): Implementation since 2015 for the inspection of waste containers before shipment





Provision of the new version RIANA SC in 2018 specified from operating feedback





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