Effective Container Inspection at BORDer Control Points

C-BORD Final Public Workshop

9th October 2018

Rotterdam NL

UC FULLY AUTOMATED SEA PORT

WP 9

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CONTENT

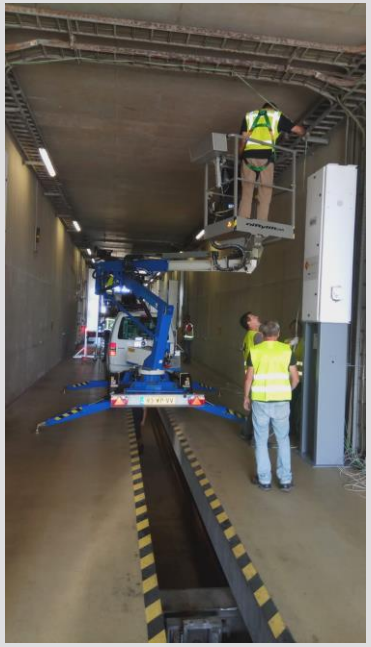
BUILD-UP AND PREPARATION
SOFTWARE PREPARATION
X-RAY DEMONSTRATION

FIELD VALIDATION PROTOCOL
(INCLUDING LICENSE APPLICATION, UPDATES AND RISK ASSESSMENT)

FIELD VALIDATION

BUILD-UP

- Preparation of simulants with correct atomic ratios started in 2017
- Partial transformation of operational site started September 3rd 2018
- Full suite of C-BORD technologies installed
- WiFi connection between WPs established
- Central software platform installed

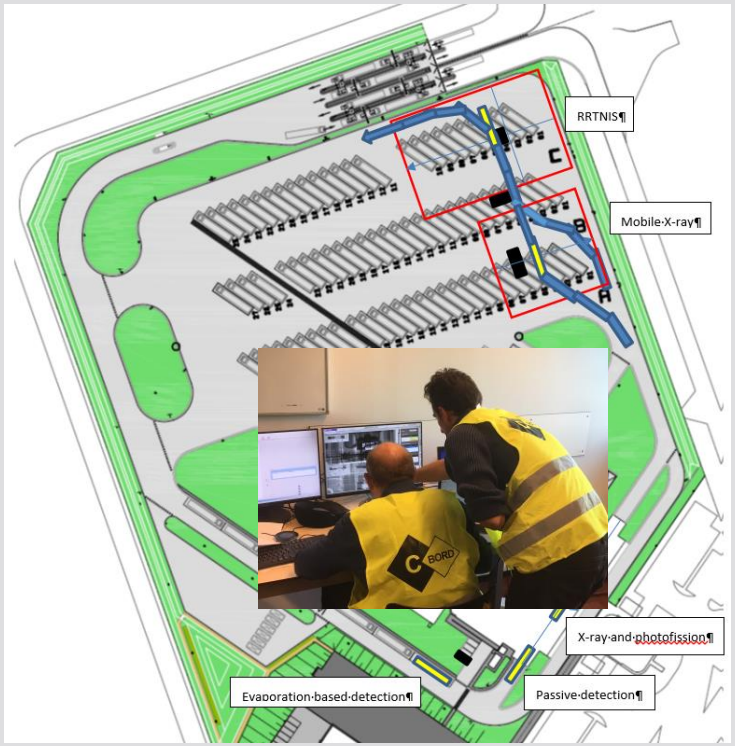


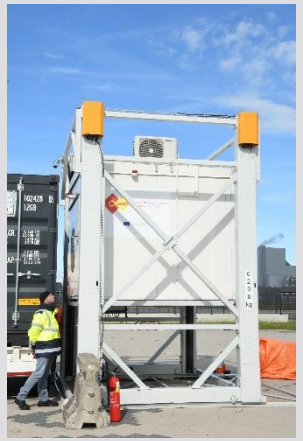
FIELD VALIDATION PROTOCOL

- Protocol encompassing 54 experiments developed and updated
  - 4 types of cargo, threat positions at 2 depths, in 10 ft containers, 2 trucks
  - Simulants of bulk threat materials
  - Minute amounts of threat materials injected in the gas phase
- License granted for controlled experiments using non-intrusive neutron inspection
- Risk assessment (feedback from review to be processed)

FIELD VALIDATION PROTOCOL

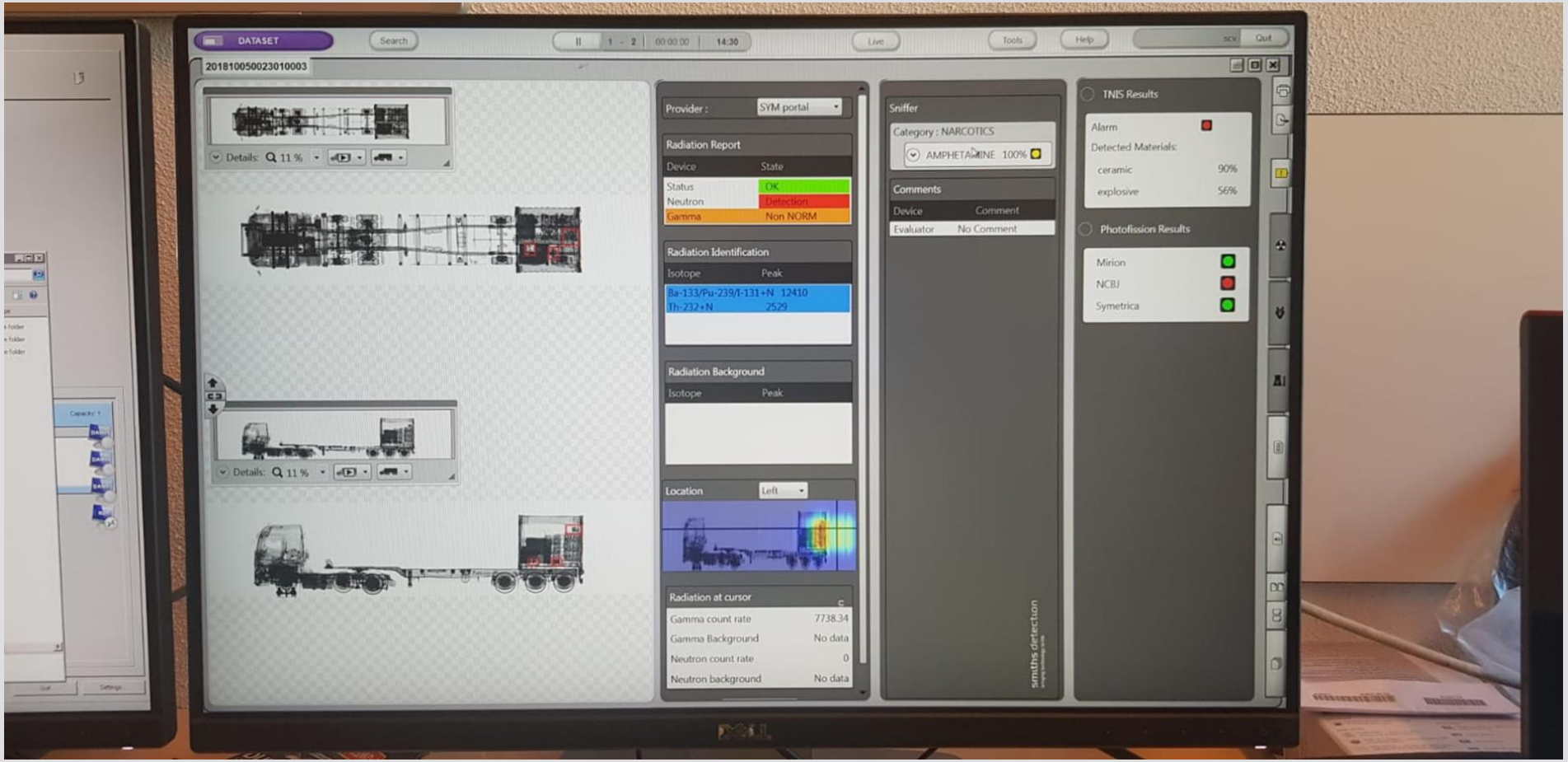
- Control street set-up
- Images and interpreted raw data sent to central platform (WP7)
- Customs officers involved in the field validation interviewed (WP8)





DATA COLLECTION

- All WPs reported to the central “Daisy” platform



PRELIMINARY RESULTS

- Completion of all experiments + 12 commercial containers (1st line only)
- Large variation in technology readiness
- Useful combinations of technologies demonstrated, both in real life and in model
- Presentation of combined results on one platform promising
- Large interest of colleagues in the additional information that C-BORD is bringing

OUTLOOK

- Wider variety of technologies will be applied
- Coherent, integrated use of technologies
- Artificial intelligence assisted learning from results
- External data will be added to the technology output

- Reduce false positives AND false negatives
- Automated interpretation of technology output

- An highly innovative Customs administration

THANK YOU

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