











## DigiDecom 2021 - DIGITAL

Online international workshop focusing on digital transformation, robotics and other game changing trends in nuclear decommissioning

# eSiteview in decommissioning

Up-to-date view of the site improves project performance – user study of Fortum's eSiteview in decommissioning

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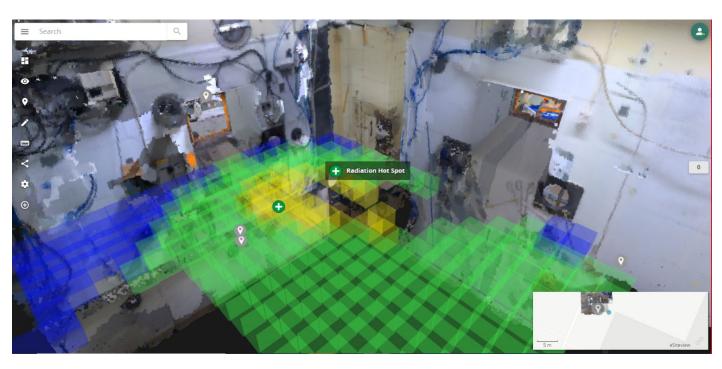
Fortum Power and Heat Oy, eSite

**Finland** 



### Introduction to Fortum's eSite

- eSite digitizes plants to enable people to visit them remotedly
- eSite drives to enhance safety and operational excellence in nuclear industry
- eSite is a solution provider combining modern and field-proven tools to improve how people work in nuclear projects
- eSite customer references in nuclear industry: NPPs in Finland, Sweden and Germany
- eSite's objective in DigiDecom2021 virtual event:
  - eSite is looking for partners to deliver "1+1=3" solutions to nuclear Decommissioning



eSiteview used during decommissioning to visualize radiation.

- Courtesy of VTT -

Radiation measured with Createc N-Visage Scanner and radiation field calculated with Createc N-Visage Fusion software.







### eSiteview in brief





### eSiteview Case: VTT's research reactor FIR-1 in Finland



Photo: VTT

- The FiR 1 research reactor, which has served as a key nuclear energy and educational research facility for 50 years, was shut down permanently on 30 June 2015.
- Decommissioning of the reactor is currently in the phase of preparations of the demolition work
- 2022: Dismantling and interim storage of the dismantling waste starts.
- 2023: The empty reactor building is decontaminated and released.

eSiteview solution in use from 2019



## eSiteview user study conducted by VTT in December 2020

- General findings positive for decommissioning
  - Useful for
    - Reminding site conditions in details
    - Less visits to site, even essential for rarely visiting
    - Measuring, training, safety planning
    - Work planning
  - Very high usability in work scheduling and radiation planning
    - Reality Capture challenges documentation
    - Physical limits for limiting contamination
    - Effective work phasing and logistics planning
    - Enables proactive ways to work
  - "It is good to have more eyes on site!"



- System Usability scale result (VTT user study).
  - If below 70, usability development required.
  - Brooke J. 1996. SUS A quick and dirty usability scale





# Contact us for more use cases and success stories from nuclear industry: decommissioning, new build, outage planning and many more!



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