![IRSN - INSTITUT DE RADIOPROTECTION ET DE SÛRETÉ NUCLÉAIRE - Enhancing nuclear safety](logo)

A software platform for data control of nuclear emergency exercises
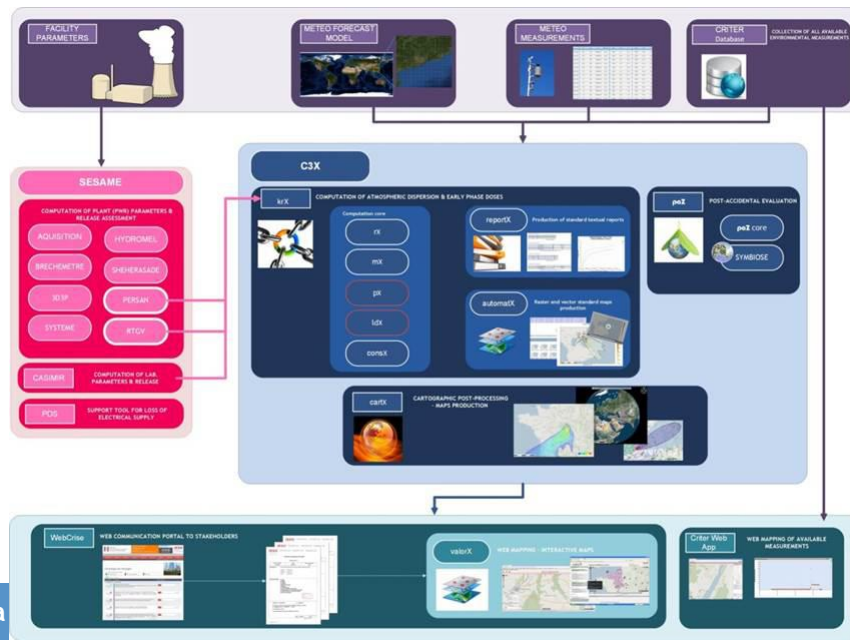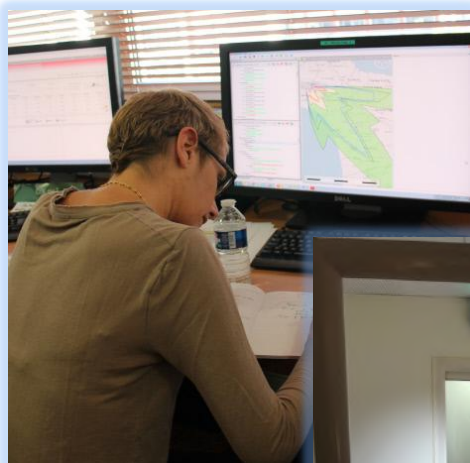
NERIS 2018 workshop

Session 5

**PSE-SANTE/SESUC/BMCA
TOMBETTE Marilyne
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Context

* Technical support for **public authorities** in case of a nuclear emergency situation
* **Crisis Technical Center** equipied with **a set of tools**

M. TOMBETTE / IRSN / PSE-SANTE / A software platform for data ...

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Scenario of exercises

* In France, ~12 exercises / year at a national level
* Technical scenario and data control

Dose rate

Ground Deposition

Contamination probe

How to get the ??.?? ?? that matches the technical scenario ?

Main goal of scenario data control

- **Real time delivery**

- **Difficult conditions**

- **No connexion**

↗ **Values have to be revised before their diffusion to any crisis center to avoid confusion in the understanding of the scenario**

↗ **No measurement result should be sent without having being revised by a data controller**

↗ **A Bias is introduced by the scenarist (time of response, …)**

More and more constraints
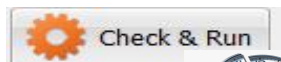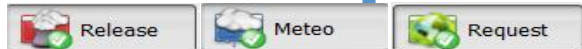
* Real meteorological fields
* More and more different measurement means for mobile teams
* Measurements more and more automated and connected
* Real-time delivery of measurements

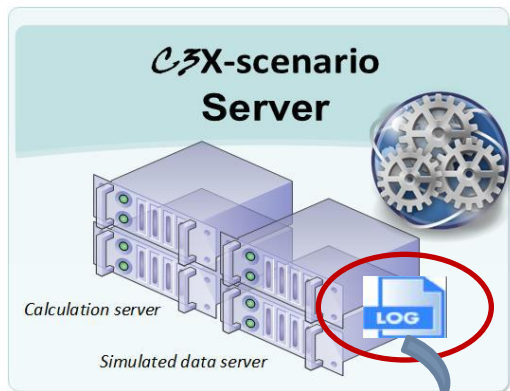# Software platform for data control via the web (but works also off-line)

Principle

Release   Meteo   Request

Check & Run

Space, time, RN and source dependent quantities

XYZT

Data controller

C3X-scenario PC

Web Clients
Web Clients
Web Clients

LOG

CSV, GIS

....   files

C3X-scenario Server

Calculation server

Simulated data server

LOG

Internet   1a

Internet   1b

JSON files
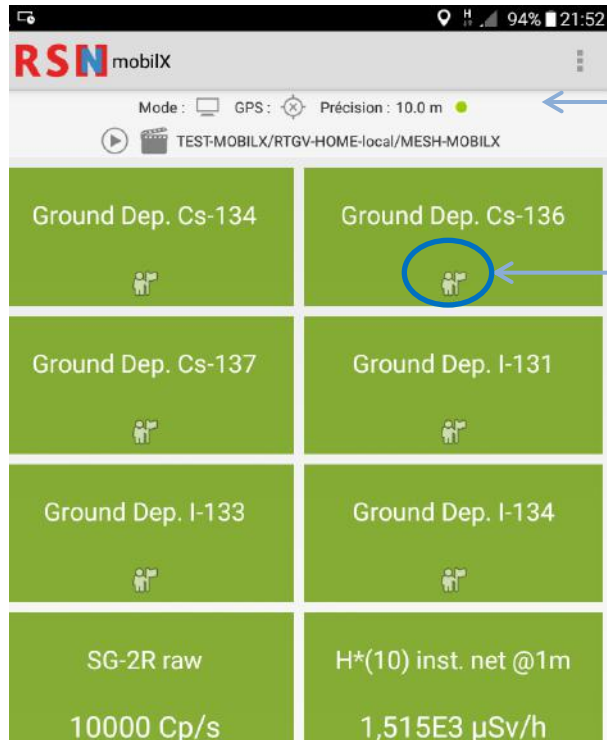
mobilX Tablet

10000 Cp/s
H*(10) inst. raw @1m
1,515E3 µSv/h
SBM-2D.raw

LOG   x,y,t,v file

mobilX app

> ▸ **Mosaic view during a mission**

GPS accuracy

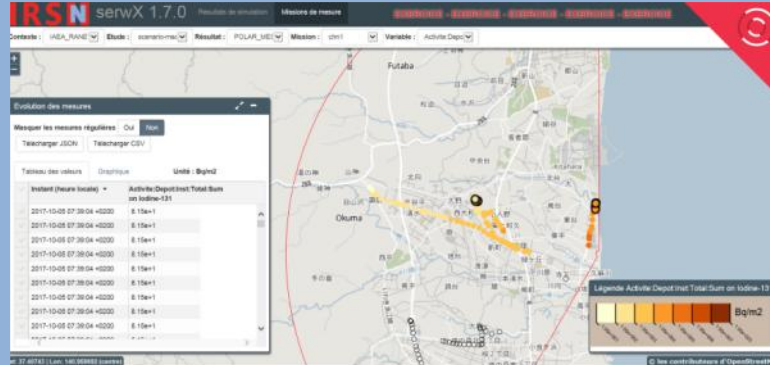Value view and log-recording on-demand only

Value view and log-recording continuously
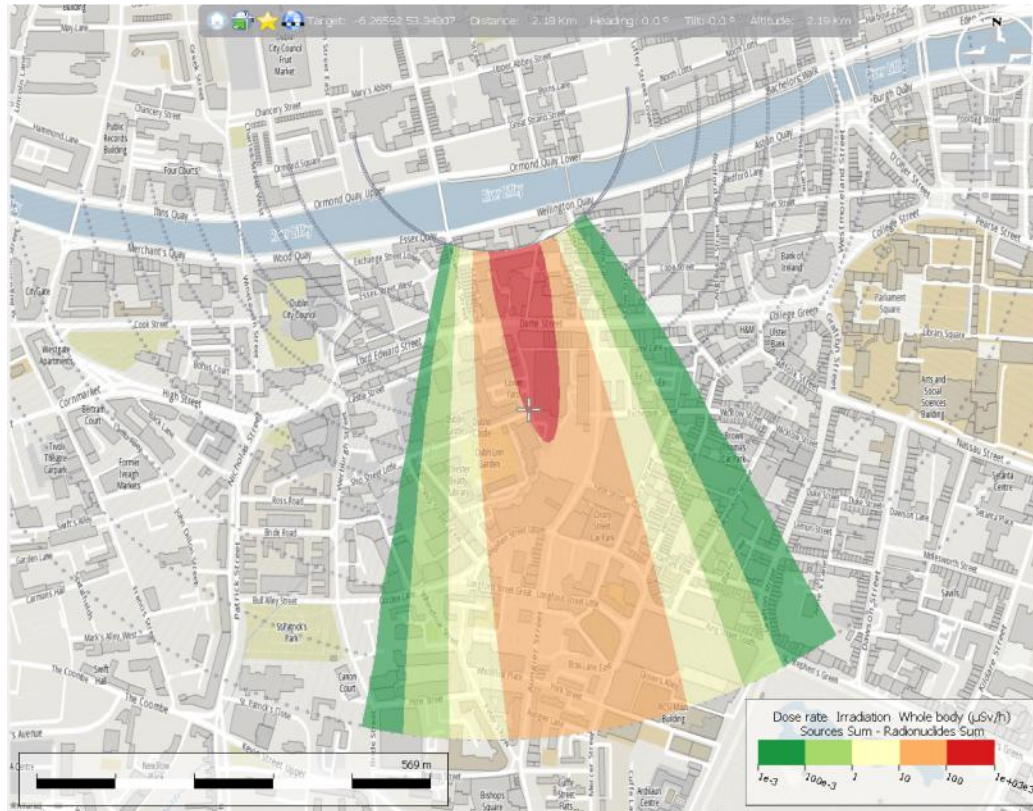
Examples of use

Measurement trucks - EDF

HK 2017 exercise

RANET 2017 exercise (IAEA, Fukushima, Japan)

If you want to try (coffee break)

Thank you for your attention

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