



Full Scale eXercises Results (FSXs)

Insights from Ingenious project

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Satways

INGENIOUS Final Event

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- 1 Full Scale eXercises (FSXs) overview and objectives
- 2 Full Scale eXercises (FSXs) approach and methods followed for the integration and validation of the technologies
- 3 Full Scale eXercises (FSXs) Results

Full Scale eXercises (FSXs) overview & objectives



Objectives of the FSXs

- Full-scale field validations in operational conditions (two iterations)
- Test the FR level of operational capabilities in collaborative formation
- Stress the performance of the Toolkit in protecting FRs when operating in harsh and hazardous environments
- Provide better understanding of the FR's challenges in the field

How do you do it?

Or how do you test a system of smart devices



iPhone
(Smart device)

VS



Ingenious
(A system of smart devices and components)

Full Scale eXercises (FSXs) approach & challenges



Conditions:

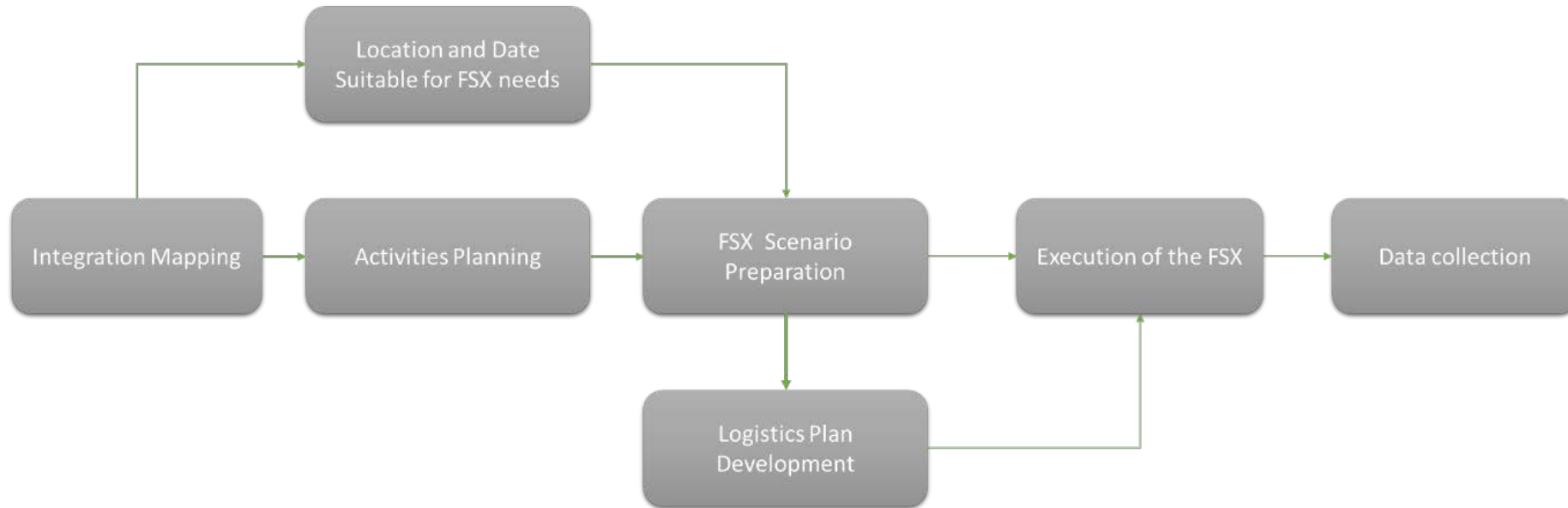
- Based on a realistic multi-hazard scenario
- Several response use cases
- Testing collaboration among response teams of different disciplines
- Realistic roleplay
- Flexible and adaptive deployment control
- Structured evaluation and validation framework

Positioning of the FSX

The FSX role in Continuous Improvement and Integration of the FSX system

Ref	Components	LIT-IT1	LIT-IT2	SST-IT1	LIT-IT3	FSX-IT1	FSX-IT2
1	Helmet	LIT#1	LIT#10	SST#1	LIT#19	FSX#1	FSX#2
2	Augmented reality services		LIT#11	SST#2	LIT#20		
3	Gas Sensor		LIT#12	SST#3	LIT#21		
4	Uniform		LIT#13	SST#4	LIT#22		
5	Boots		LIT#14	SST#5	LIT#23		
6	K9 Vest		LIT#15	SST#6	LIT#24		
7	Field communications	LIT#5	LIT#16	SST#7	LIT#25		
8	MAX		LIT#17	SST#8	LIT#26		
9	Swarm on MIN		LIT#18	SST#9	LIT#27		
10	Deployable IPS						
11	Triage & Face Recognition App						
12	Fusion Engine & Expert Reasoning						
13	Work Site Operation App						
14	Social Media App						
15	COP Platform & C3						
16	Multilingual App						

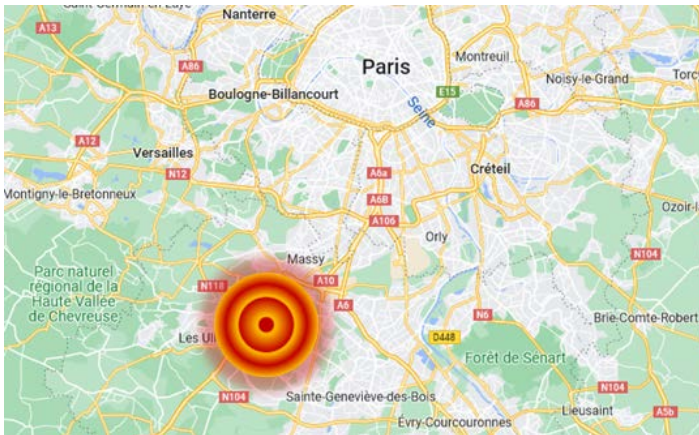
The Plan



Full Scale eXercises (FSXs) approach & challenges



Two iterations:



Earthquake

Terrorist Attack

Full Scale eXercises (FSXs) approach & challenges



Impressions:

FSX#1 → https://www.youtube.com/watch?v=z1_zOWftlo4

FSX#2 → <https://www.youtube.com/watch?v=rVL7mNK3eak>

Full Scale eXercises (FSXs) Results



- Complete testing of the Ingenious System against technical and user requirements
- Real user feedback improved the different solutions in the project
- Validation under realistic scenarios

FSXs Conclusions

- FSXs are important in bridging technical test with actual practical and operational reality
- Critical the engagement of end users in the whole process of the FSXs
- Positioning of the FSX should be harmonized and well thought with the rest of the tests
- Significant emphasis should be placed on human aspects to build not only better technology but a complete solution
- Improve the capabilities and provide value



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**Thank you for
your attention**

Any Questions ?

Name of presenter
Job title affiliation
Contact details
(4 lines max)

