

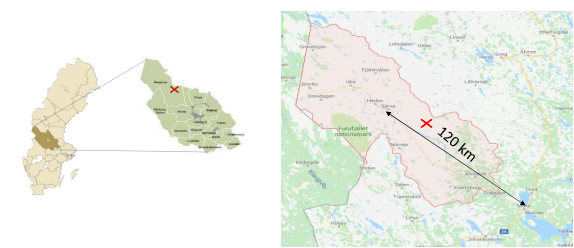
IX Jornadas
NOVOS PARADIGMAS DA PROTEÇÃO CIVIL
 Conferência técnica e científica
 International Meeting on Forest Fires in Europe

Forest Fire in Sweden 2018
 Complex environment
 Com Johan Szymanski/Col Anders Persson



SAFE 18 | Maio 2019
 Matosinhos | Portugal

Forest Fire on Älvdalen's Military Training Field



ORPUSMARTIN 2019-01-16


Forest Fire in complex environment



ORPUSMARTIN 2019-01-16

Monday 16 July 01:00hrs – Things Change....


- ≥ **Briefing about to begin**
 - Staff rotation in place
 - Fire is under control
 - Material and helicopters on site, with excess capacity
- ≥ **Then the Head of the Military Training Field arrives...**




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Background (cont.)

22 July



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Target Area, 10% – UXO:s.

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Afternoon, Monday 16 July
Problem Recognition



Back to square one – New Incident Action Plan

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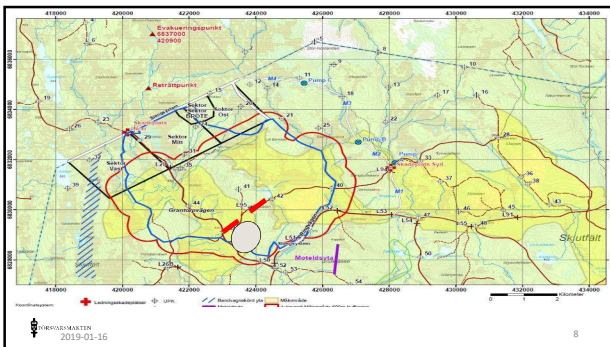
7

Monday 23 July
Support from the EU Mechanism



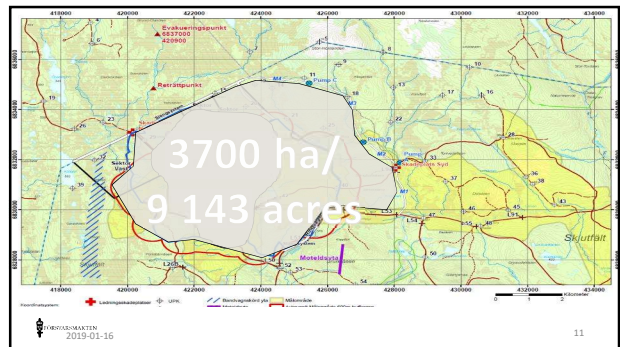
pic.twitter.com/AFr5C3pbmd

2019-01-25



MSB 2019-01-16

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MSB 2019-01-16

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Director General MSB, Supreme Commander, Defense Minister, Deputy Prime Minister

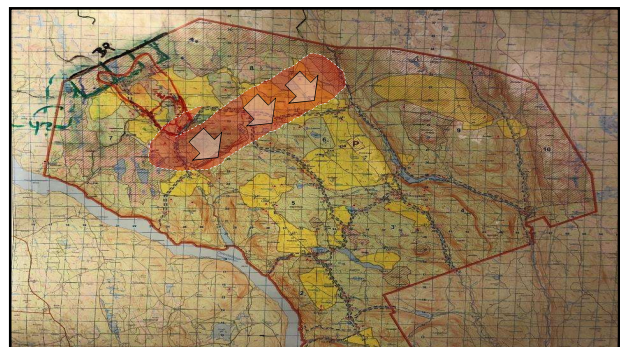
• Our Message on 20 July:

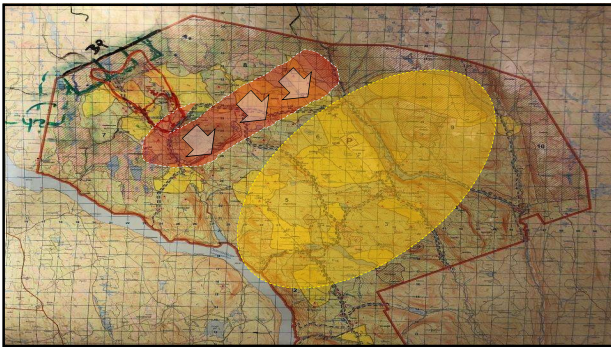
- Give MSB mandate to coordinate and prioritize national resources
- Request help from the EU-mechanism
- Understand that the country is in a State of Emergency



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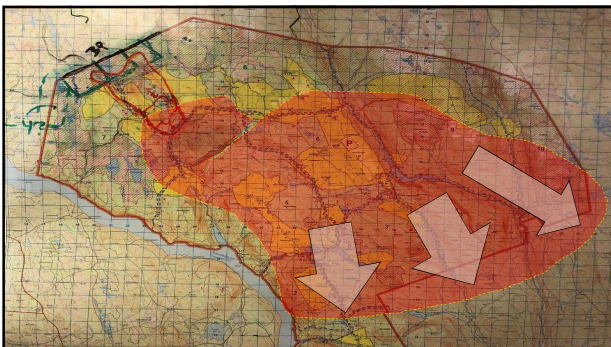


Remove Heat (conventional)



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Remove Fuel (conventional)

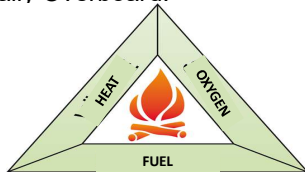


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Thinking Inside and Outside The Box – Without Going Totally Overboard.

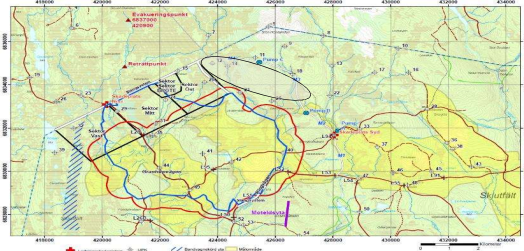


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2019-05-20

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Deliberate Burn-Off



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Ideation (remove heat) - Snow



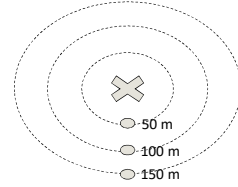
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Challenges

- ≥ Staff security
- ≥ Evaluation of effectiveness?
- ≥ Documentation?
- ≥ UXO:s?
- ≥ Classified Operation



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Ideation (remove oxygen) - Bomb



Photo: Wikipedia

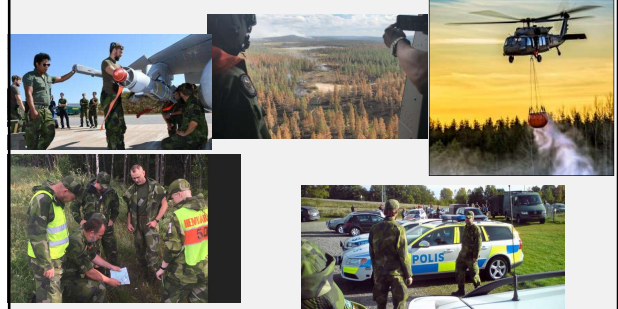
Jas 39 Gripen

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Armed forces Support



Remove Oxygen

- ≥ Historically, artillery was shot to put out smaller fires
- Move the whole Artillery Regiment from Northern Sweden ?
- Drop a bomb from JAS 39 Gripen ?



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Rapid Prototyping – Installation of Bomb Initiated



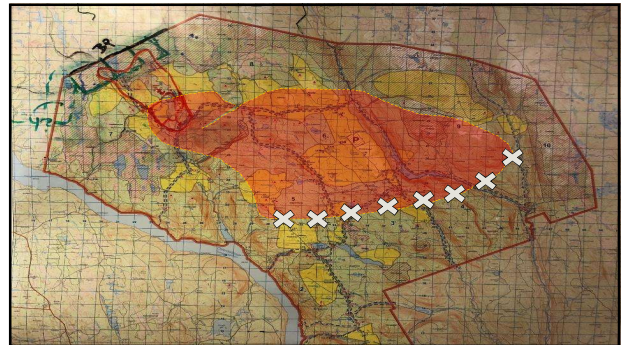
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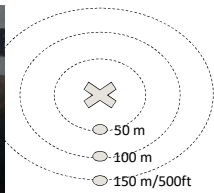
At the same time, at Incident Command Center...



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Effect?



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Main lessons learned/identified

- ≥ Using bombs:
 - ≥ It is possible to use explosives and bombs.
 - ≥ Research and development needed -
 - ≥ Big international interest
- ≥ Overall experiences
 - ≥ You need to have a robust and in advance a very clear Command & Control from the bottom to the top
 - ≥ Tactical level – on scene commander (of course)
 - ≥ Operational level /County – County government/agency
 - ≥ Strategic level /Governmental level – Swedish Civil Contingencies Agency coordinating and req EU support.

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Questions?

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