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Lars-Peder Lundgren

WARNING SYSTEMS OVER DAB



EXISTING PLATFORMS



Mobile Networks with SMS, Cell Broadcast, Native applications and more



National Siren systems, Loudspeaker system..

Broadcast Networks reaching radio listeners, often public broadcasters that have the responsibility

Social Media



- Mobile Networks may be down

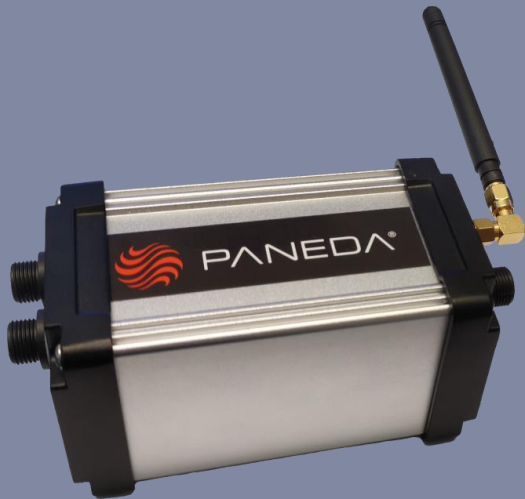
- Can we trust the veracity of social media?



- Broadcast Radio has the highest uptime, but reaches only radio listeners



Paneda has developed a complete eco system using DAB technology for warning system, including dedicated receivers



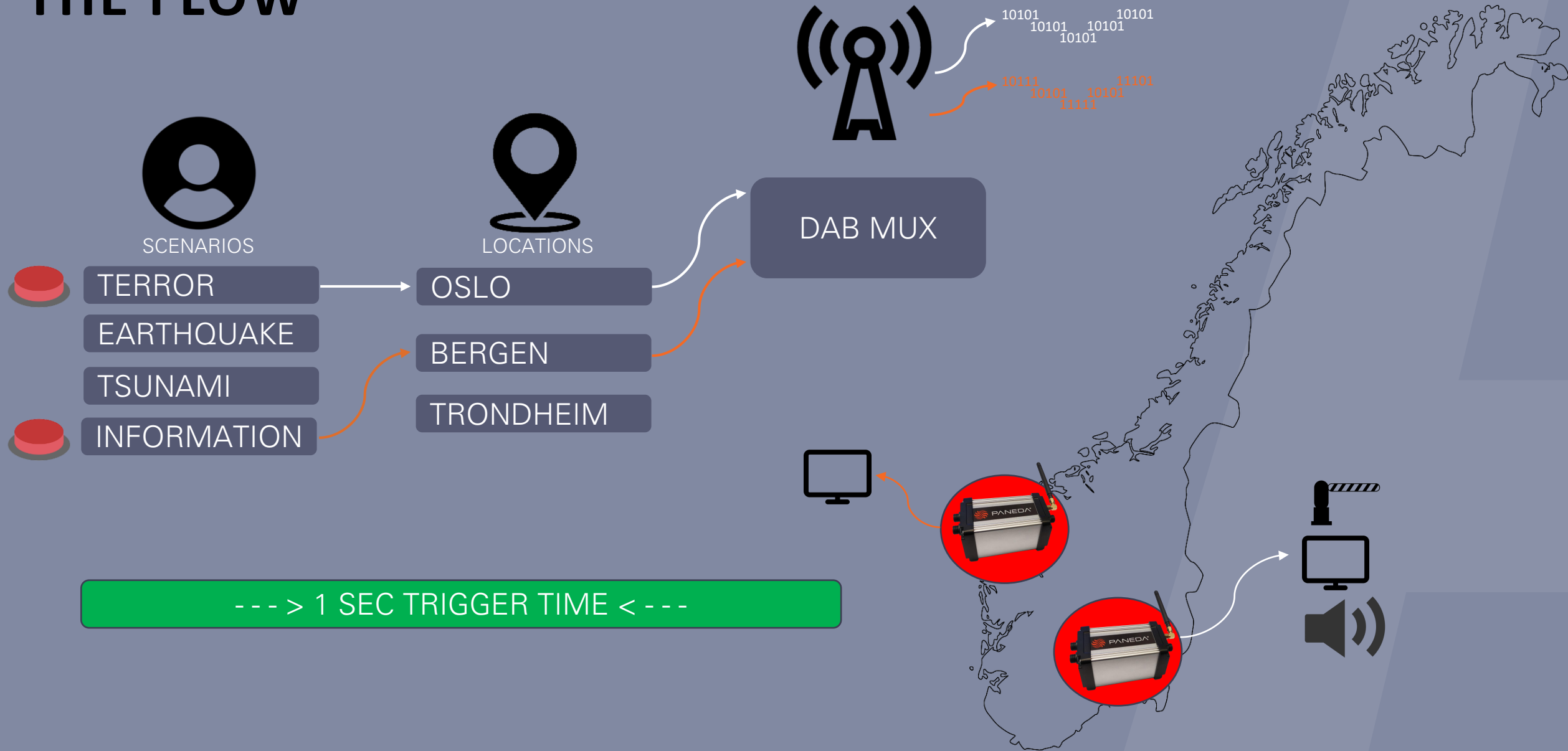
IP 67

MULTI USAGE

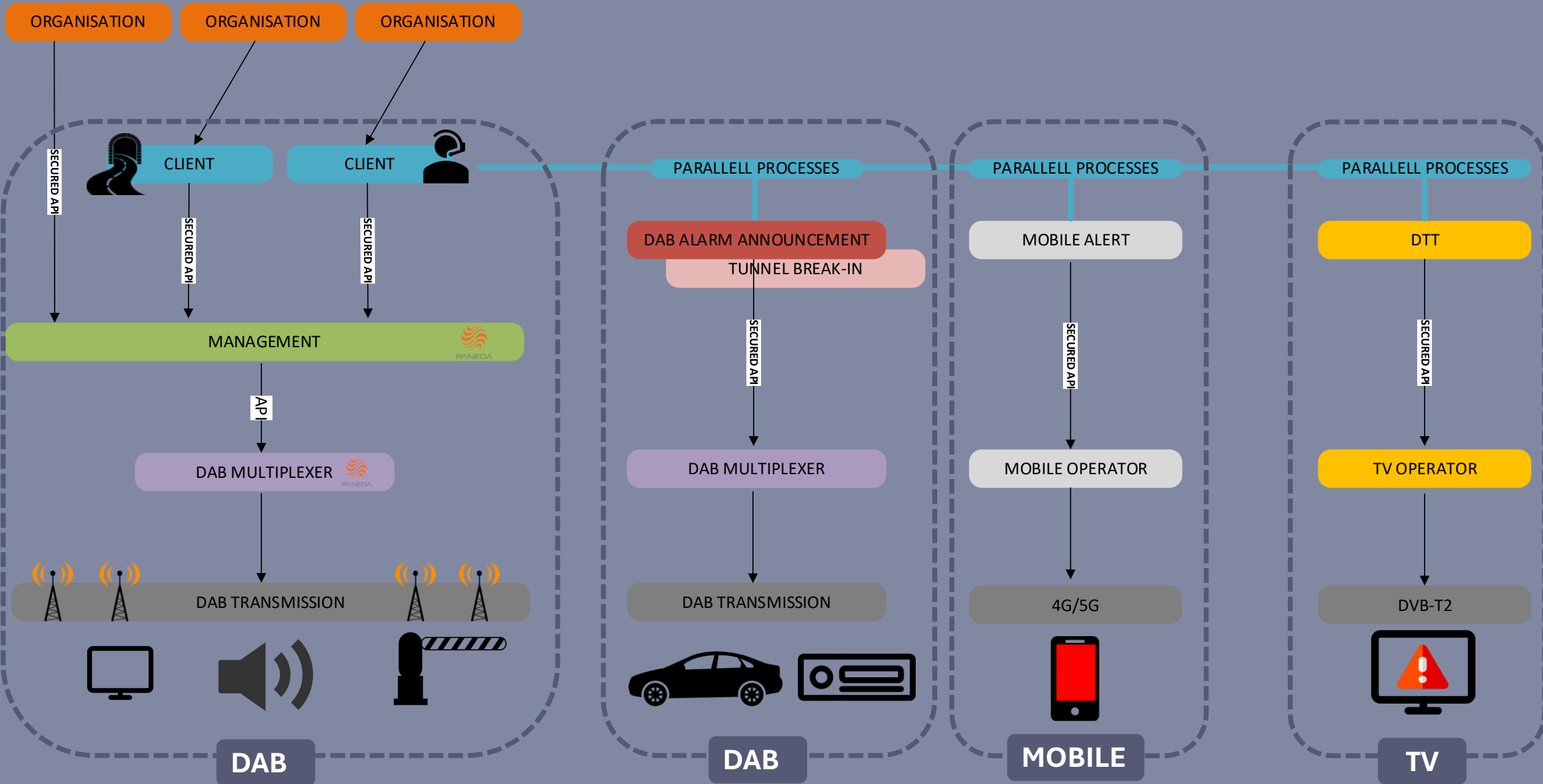
ADRESSABLE



THE FLOW



COMPLETE EWS CONCEPT



CONCLUSIONS



MOBILE NETWORKS

Reaches people having instant access to a device
Are in a coverage area
Mobile network in operation



RADIO BROADCAST

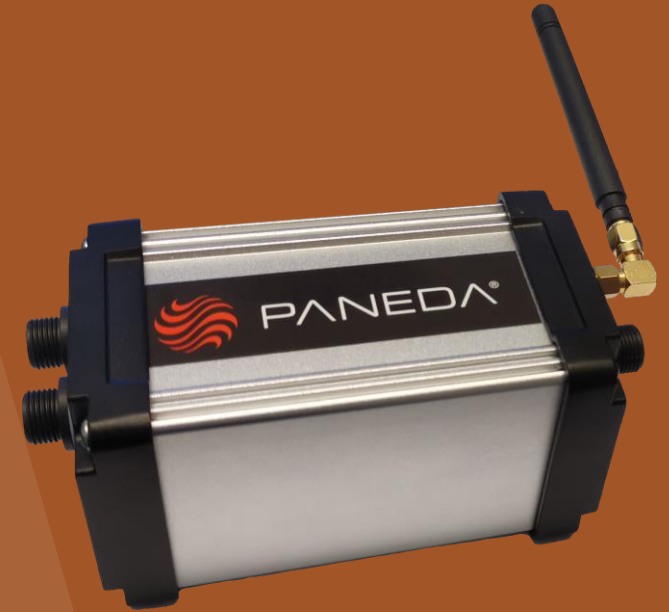
Public Broadcasters are responsible for
“Emergency population warning”
Reaches people listening to radio
Majority of listening is in cars



PWS

REACH MORE PEOPLE
SAVE LIVES
FAST!

Does not compete with other systems
Does not require Internet or mobile networks





THANK YOU

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**ADDITIONAL SLIDES
(NOT PRESENTED)**



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A REAL USE CASE

<https://www.youtube.com/watch?v=QP1OV-tCaEU>



PANEDA SUPPLIER OF COMPLETE TRIGGER SYSTEM

LOUDSPEAKER SYSTEM
SIREN SYSTEM
FIRE ALARM SYSTEM
SIGNS
LED
SCREENS

TRIGGERED BY DAB AND 4G/5G



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LIVE FIELD TESTS

BACKGROUND

In a small city in Norway, Paneda and its partner installed 20 PWS receivers for different applications, sirens, loudspeakers, connected screens and different types of signs.
Together with a partner, also an SMS broadcast system was installed.

SCENARIO

Fire in the harbour battery park, extremely dangerous gas leakage, deadly within 2 minutes

TARGETS

To start evacuation of people to a collection point
Rescue team 9 minutes away, and most of the evacuation should have been performed by the time they arrived



SUCCESS!



CHIEF OFFICER SAYS

These type of systems plays an important role for us. When we arrived on site, most of the evacuation was done and we could focus on what we do best, save life and put out fires!

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<https://youtu.be/-bAGPEbHrel>



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