Observations
KPN network failure

EENA Webinar 24 November 2020
About The Netherlands / LMS / me

- We provide the PSAP’s for the police, fire, and ambulance
- Part of National Police organisation
- We are building a network of 10 connected PSAPs

- 1 national Police
- 25 safety regions
- 25 regional ambulance organisations
- 1 Royal Netherlands Marechaussee
- 4 ministries (Justice and Security, Defence, Health, Economic Affairs)

- 112 Advisor
- 112app, AML, improvements 112
- Marieke.Ackerman @politie.nl
Schematic overview 112 chain
Schematic overview 112 chain

Communications networks

Terminating Network for 112

KPN

Public network

Control room domain

112 platform

112 network

2nd stage PSAPs
Alternative number also unavailable
Timeline KPN network failure 24 June 2019

- **3:15 PM**: initial signs of unavailability 112 and 0900-8844
- **4 PM**: manning the 1st stage PSAP fall back location (however, 112 unavailability not location related)
- **5:12 PM**: alternative 088 phone number in use.
- **5:15 PM**: police and fire stations manned, ambulances in strategic locations
- **6 PM**: Tele2 routes 112 to 088 number
- **6:12 PM**: NL-Alert sent, alternative 088 phone number
- **7 PM**: Gradual recovery of telephone communication (incl. 112)
- **7:12 PM**: NL-Alert correction
- **9:30 PM**: Final NL-Alert sent to complete communication to the people
Course of 112 calls on the day

Estimated 1,600 missed calls between 3:30 PM and 6:45 PM based on average number of calls on a Monday afternoon.
Course of 088-6628240 calls on the day

- 088 calls
- 112 calls

5 PM
Social Media
112 via 088

6:15 PM
NL-Alert
112 via 088

7:15 PM
NL-Alert correction

9:30 PM
NL-Alert
112 available
Course of 088-6628240 calls on the day
Reports through social media

WhatsApp Telegraaf (newspaper)
- Approx. 600 reports
- 19 serious reports put through to the police

Social media police overall: approx. 8,000 versus approx. 800 normally
Facebook and Twitter (corporate): approx. 3,800 reports
WhatsApp: approx. 410 reports
NL-Alert (Public Warning System)

- Four regions sent out regional NL-Alerts preceding the nationwide NL-Alerts (light green).
- First national NL-Alert sent from back-up system (dark green).
- Sending the nationwide NL-Alert from National Crisis Centre failed (light grey).
- Incorrect WhatsApp number was sent to all mobile devices. Correction sent (dark grey).
- Further regional NL-Alerts were sent after the national NL-Alerts (purple).
- Various different messages, instructions, and alternative numbers. NL-Alerts were received on time/late/not at all.
Operational script

Available since 2013

Describes possible scenarios and actions.

Scenario 4: 112 is unavailable. Corresponding measure assumed availability of 0900-8844.

First revision in response to KPN network failure

Principle for further development: remain as close to the normal situation as possible. For civilians as well as 112-centre and control room employees.

Operational Script Generic 1-1-2 in case of disruption in support services version 1.9.4, date 2 July 2019

Police Confidential

National protocol NL-Alert
Investigations

Radiocommunications Agency Netherlands
What was the cause of the malfunctions and what measures can be taken to prevent such malfunctions in the future?

Health and Youth Care Inspectorate
What has been done to ensure the accessibility of the emergency services and has this gone as intended?

Inspectorate of Justice and Security
How have acute emergency organizations dealt with the unavailability of the emergency number 112 and the KPN malfunction?

Lessons learnt / recommendations

1. Not all incidents can be prevented. So make the 112 chain really robust, but also provide alternative ways to contact the emergency services. And make sure that people know what to do if 112 is unavailable.

2. Make sure that providers can test if 112 is reachable. And make sure that you can test your public warning system.

3. Make sure you have a solid (nationwide) plan for inaccessibility of the emergency number 112.

4. There was a lot of improvisation that day. Take care of the implementation of the plan and make sure that the staff is familiar with the plan.
Questions?

Thanks you for listening!

Are there any questions?