



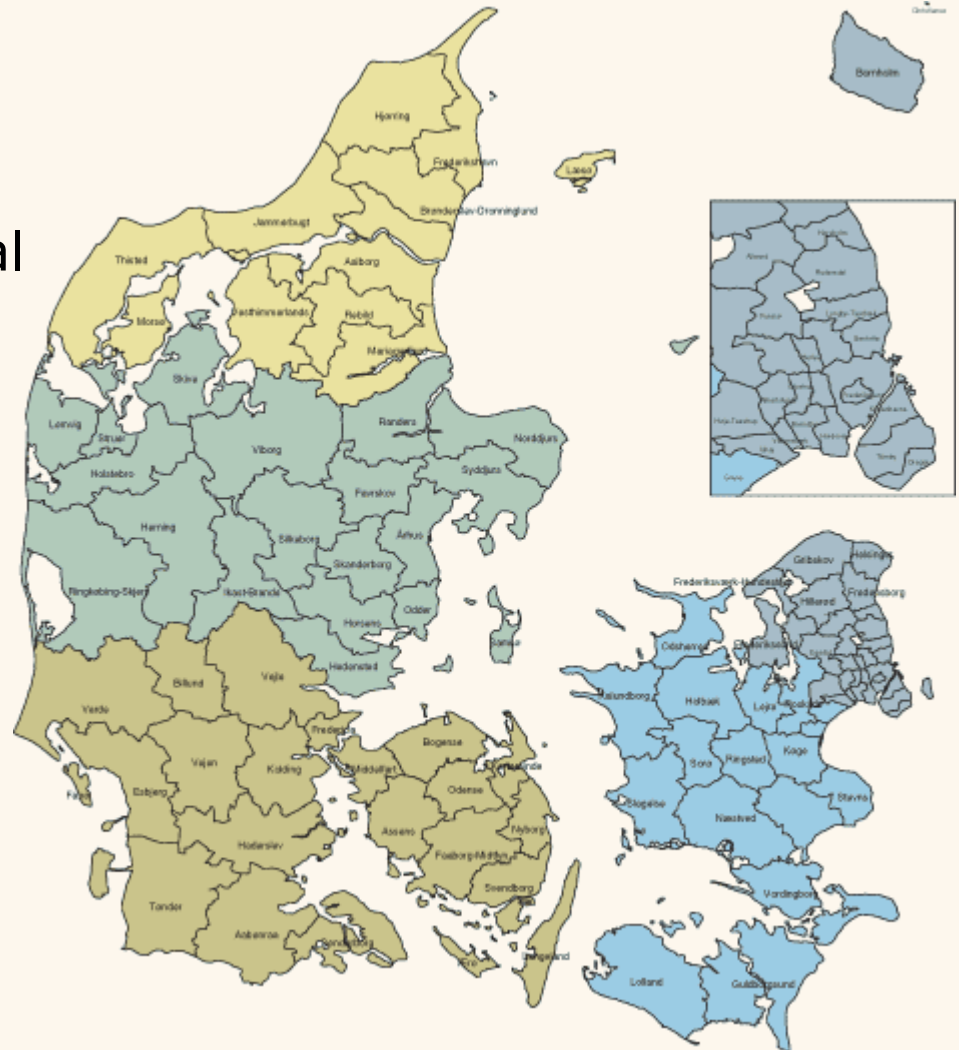
Kolding
Kommune

The Danish national 112 system

Søren Ipsen
Chief Fire Officer

5 regions

- The regions have the main responsibility for the provision of hospital services and the ambulance service
- 1 staffed control room in each region



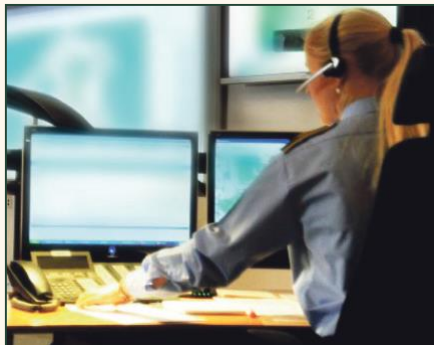
98 municipalities

- In charge of the fire services
- Only some fire brigades have staffed control rooms
- Those fire brigades or the private emergency company Falck provide control room services to some other fire brigades



12 police districts

- 1 staffed control room in each district

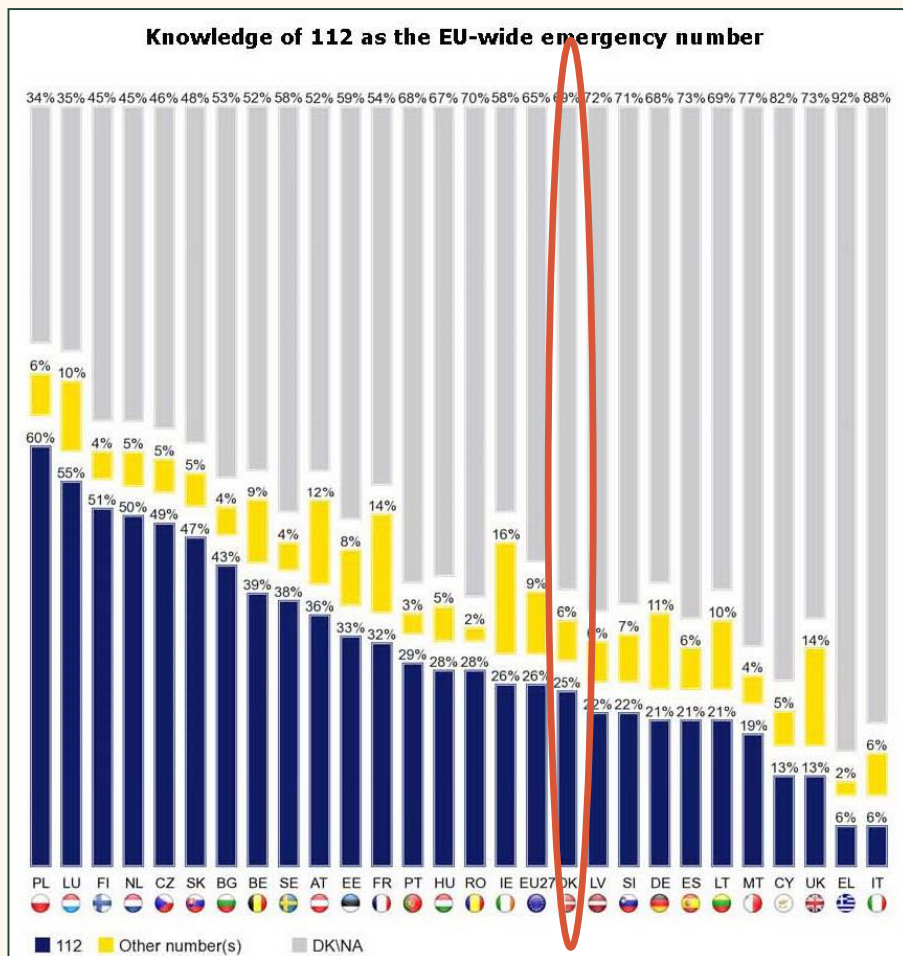


112 is main emergency number

- but we also have some service numbers



Knowledge of 112

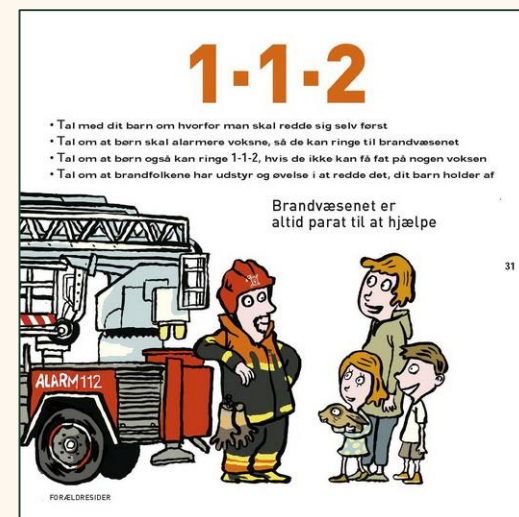


Telephone number(s) EU citizens would call in the event of an emergency in their own country
-% by country

	112	National number(s)	Other number(s)	DK/NA
GROUP 1: 112 is the sole/main emergency number				
Average	92%	1%	5%	3%
SE	96%	0%	3%	1%
FI	95%	1%	4%	2%
NL	94%	1%	5%	2%
DK	92%	3%	5%	2%
RS	91%	0%	6%	3%
PT	86%	5%	9%	6%
MT	52%	5%	15%	31%
GROUP 2: 112 operates alongside other emergency numbers				
Average	39%	53%	16%	4%
EE	90%	15%	11%	3%
LU	84%	14%	29%	6%
BG	80%	12%	6%	5%
SI	79%	35%	14%	3%
SK	77%	40%	6%	2%
DE	76%	18%	28%	3%
LV	76%	11%	19%	7%
LT	72%	20%	11%	6%
PL	69%	37%	10%	2%
ES	65%	11%	25%	9%
CZ	56%	70%	4%	2%
BE	41%	28%	35%	6%
HU	31%	20%	45%	11%
IT	19%	72%	14%	5%
CY	18%	31%	20%	36%
IE	13%	79%	12%	2%
AT	13%	83%	5%	4%
FR	9%	83%	8%	4%
EL	2%	81%	9%	10%
UK	1%	95%	3%	2%

How to promote 112

- National 112 day on February 11th
- Documentary on TV called "Alarm 112"
- Number on emergency vehicles
- Teaching materials for children



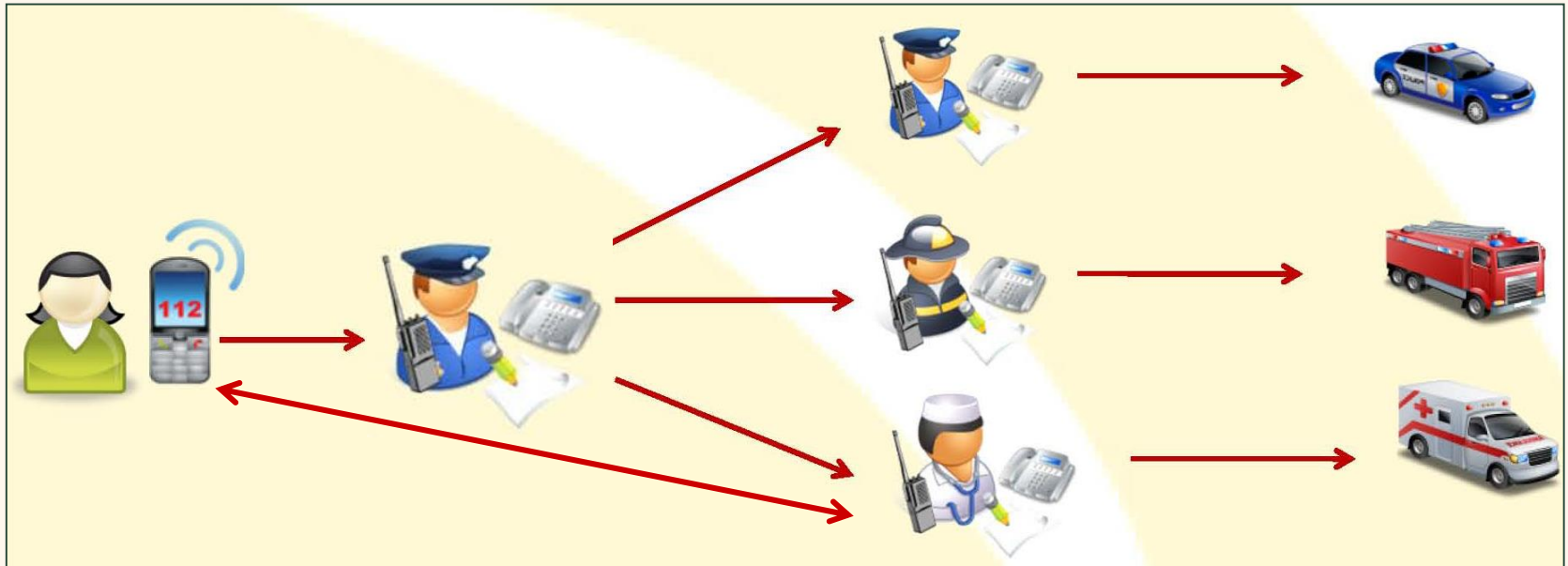
3 Public Safety Answering Points

- The Danish National Police operates 2 PSAPs:
 - Aarhus
 - Slagelse
- The Copenhagen Fire Brigade operates 1 PSAP



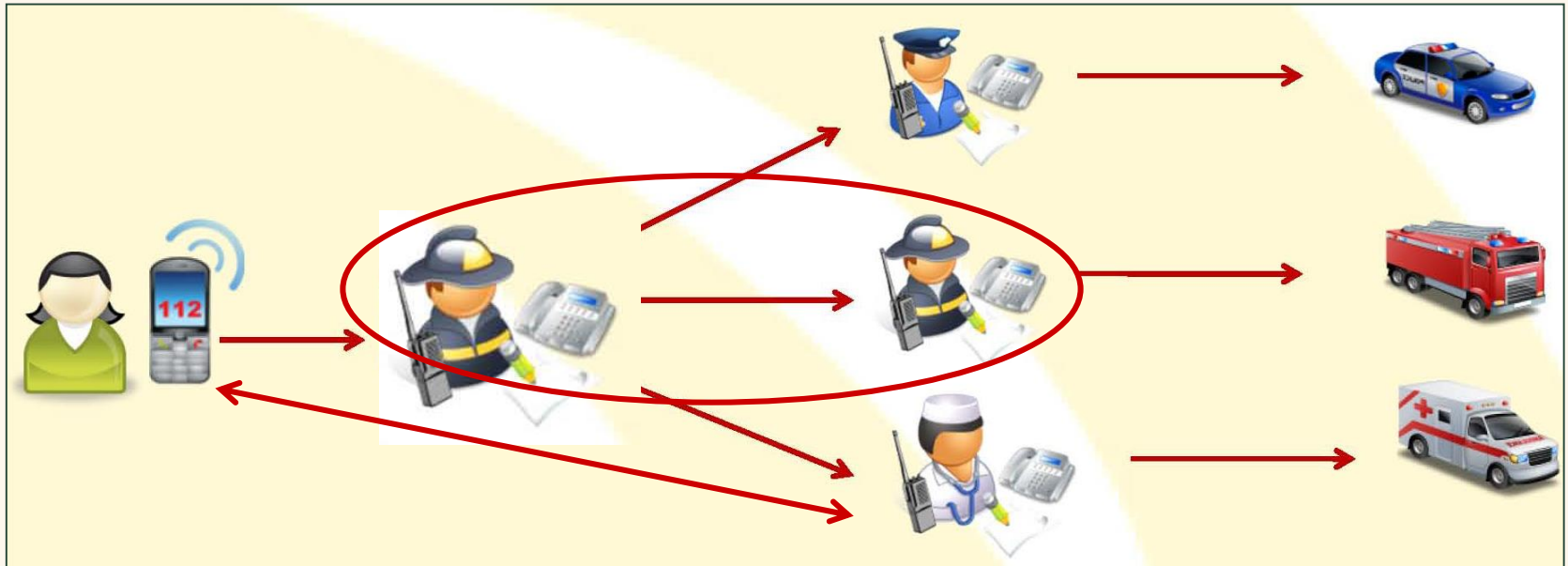
The 112 models in Denmark

- Outside Copenhagen



The 112 models in Denmark

- In Copenhagen



Control room software

- The 2 PSAPs operated by the police use the same software with shared servers.
- The PSAP operated by the Copenhagen Fire Brigade uses a different technical platform.
- The control rooms in the 12 police districts are identical from a technical point of view.
- The 5 regions have nearly identical control rooms. Until recently only the different emergency medical services had control rooms in order to dispatch own resources without any co-operation with other EMS.
- The staffed control rooms in the municipal fire departments use different setups, but the software is supported mainly by two providers.

Technology providers

- Some examples:
 - IHM
 - IBS
 - Intergraph
 - Frequentis
 - Terma
 - Swissphone
 - Motorola
 - ...



112 access

- Emergency calls can be done on cell phones even though the phone is without a SIM card
- Before getting in contact with the call-taker the citizen hears a voice response saying that the call is going to be forwarded to a PSAP. This information probably avoids some hoax calls.
- The call-taker is able to see the citizen's phone number and address, when an emergency call is made from landline phone.
- If the call comes from a cell phone, the control room software shows the fairly accurate location to the call-taker.



Emergency call statistics

- The 2 PSAPs in Aarhus and Slagelse cover appr. 4.2 mio. inhabitants and handle over 80.000 calls a month.
- More than 60% of all calls stop here, because the citizen just needs some pieces of information or because of the fact, that it is a hoax call.
- The PSAP in Copenhagen covers appr. 1.2 mio. inhabitants and receives more than 600.000 emergency calls a year. Those calls lead to
 - 70.000 assignments for the emergency medical services and 11.500 assignments for the fire brigades
- Altogether 80% of all emergency calls concern need for medical assistance.



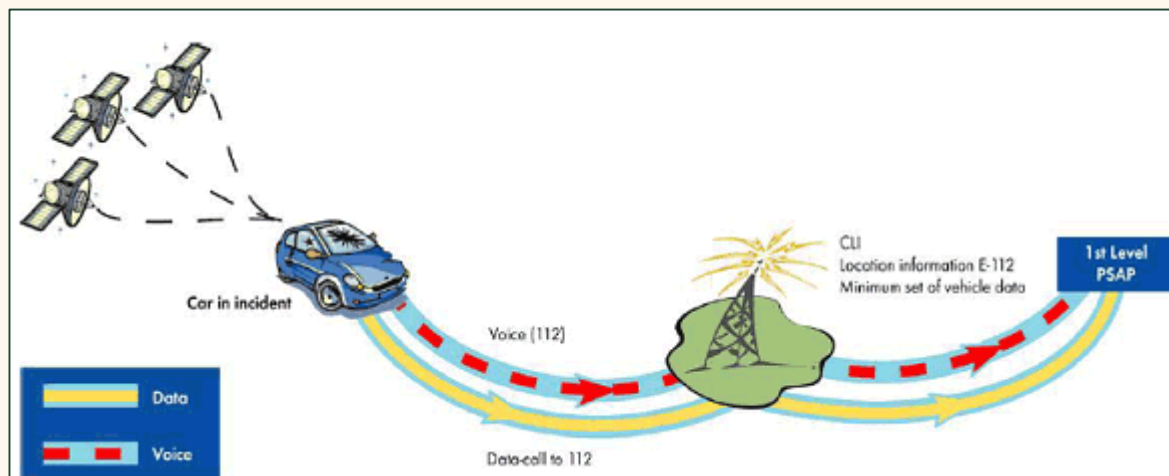
Call-handling

- If an emergency call isn't answered within 10 seconds, the call is forwarded to another PSAP.
- Statistics from one of the 5 regions show that the conversation between the citizen and the call-taker in the regional control room takes 3 minutes in average.
- Personnel in the PSAPs in Aarhus and Slagelse consists of police officers (3 weeks of training).
- Call-takers in the PSAP in Copenhagen are former fire-fighters/paramedics or "civilians"



eCall

- The pan-European in-vehicle eCall is an emergency call including precise location generated automatically when a severe accident occurs.
- Denmark has signed the Memorandum of Understanding concerning eCall, but the Danish National Police hasn't yet planned how to implement eCall.



Public warning for citizens

- National siren warning system.
- Persons who are hearing-impaired may subscribe to the warning system at the DEMA and thus receive text message warnings on cell phones.
- Emergency messages on TV, on radio and on internet.
- Until last year authorities were able to inform citizens by using the site kriseinfo.dk.
- Companies provide services that can send voice messages to landline phones or text messages to cell phones.



Contact details

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