

# AGENDA

- Overview of the Swedish Police
- A (very) short presentation of Rakel
- Present border solutions
- Issues regarding ISI Nor-Swe as seen from user point of view



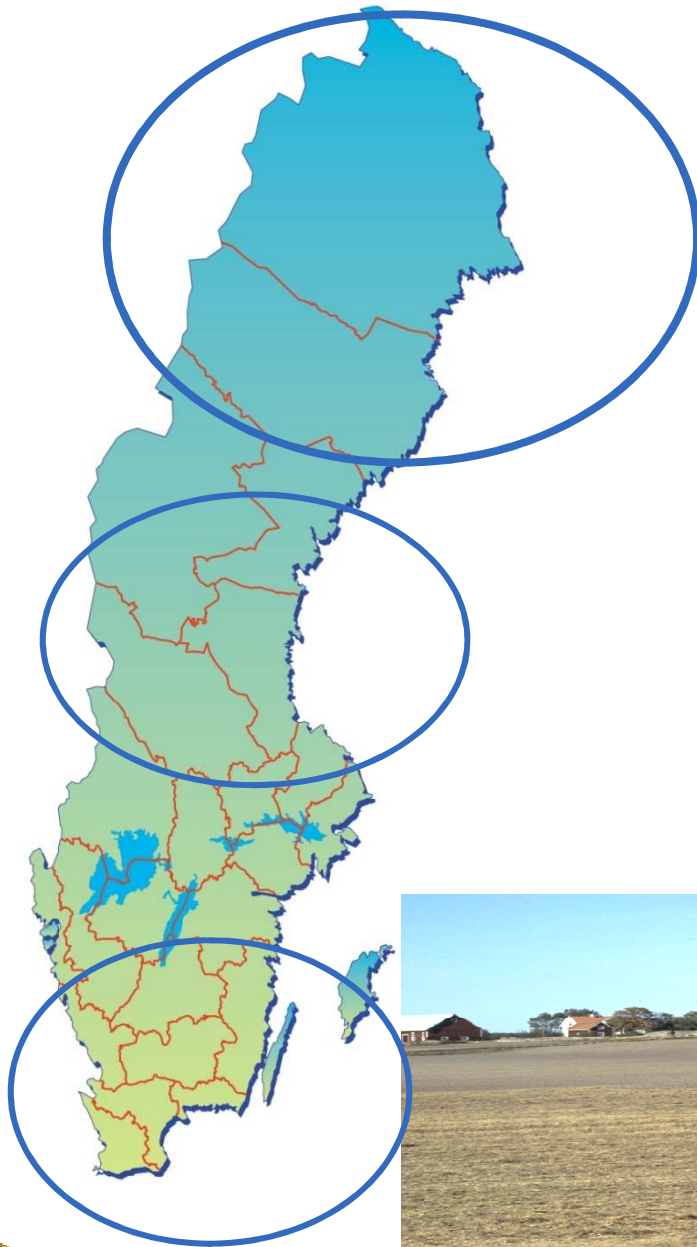


# The Swedish Police



**Rikspolisstyrelsen**  
National Police Board

Mats T Persson



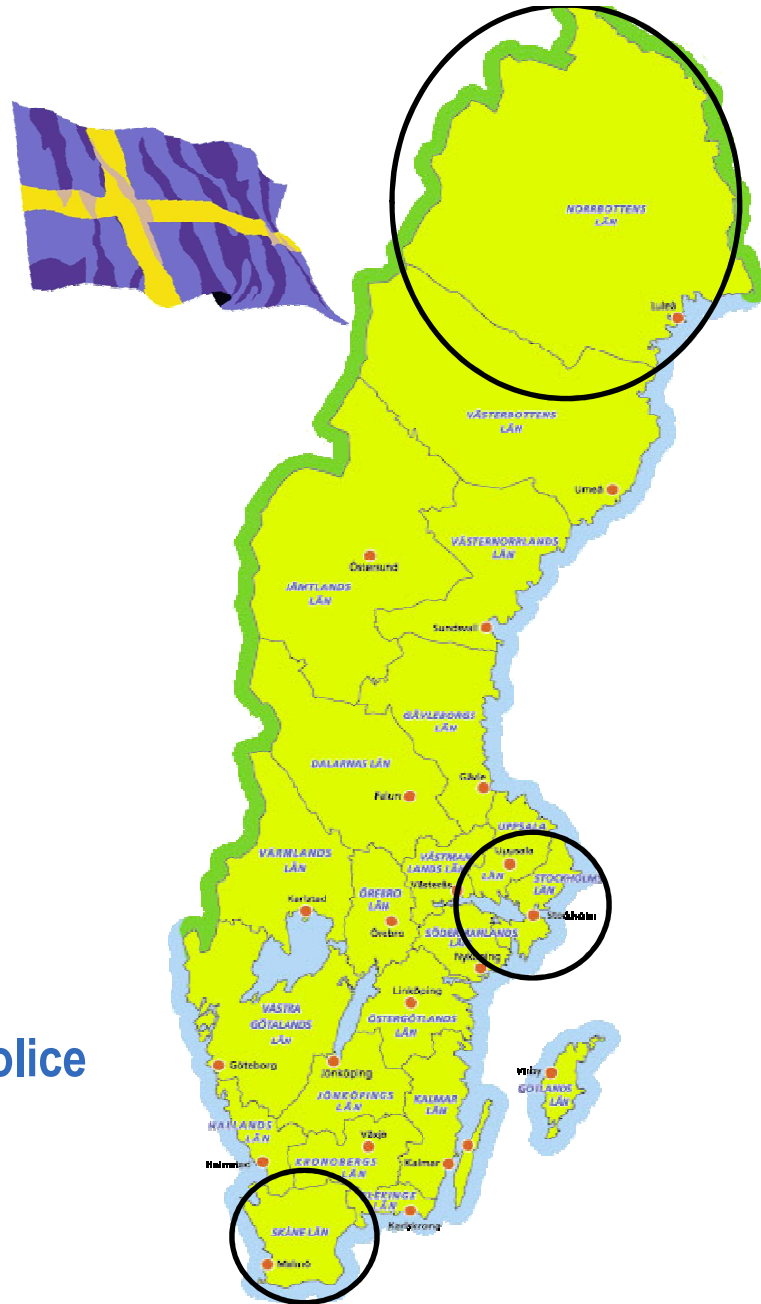


# SWEDEN

Population:  
9,4 milj.

21 police  
authorities

Total numbers of Police  
officers in 2014:  
approx. 21 000



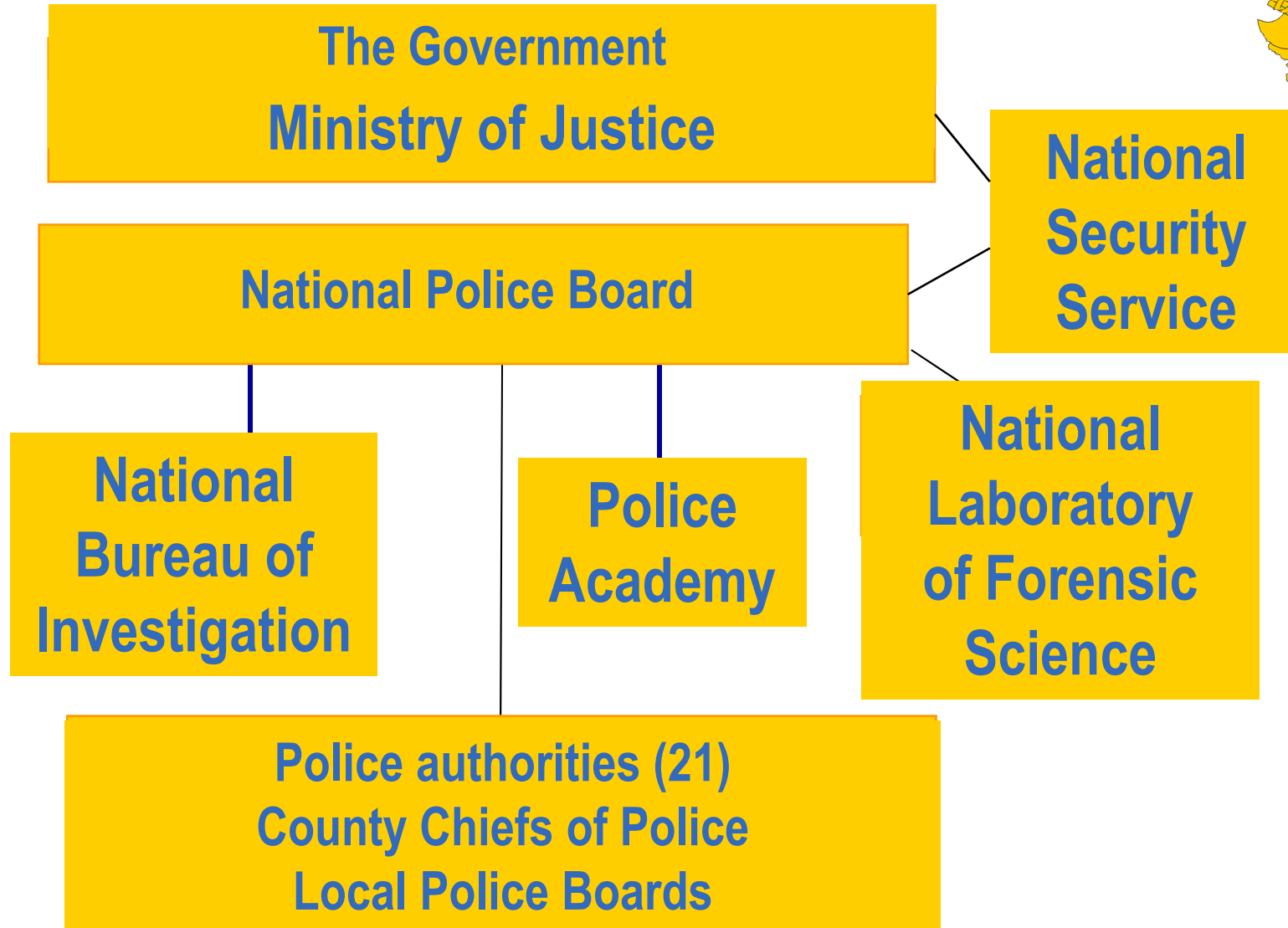
Population:  
250 000  
Police officers:  
460

Population:  
2 milj.  
Police officers:  
4950

Population:  
1,2 milj  
Police officers:  
2350



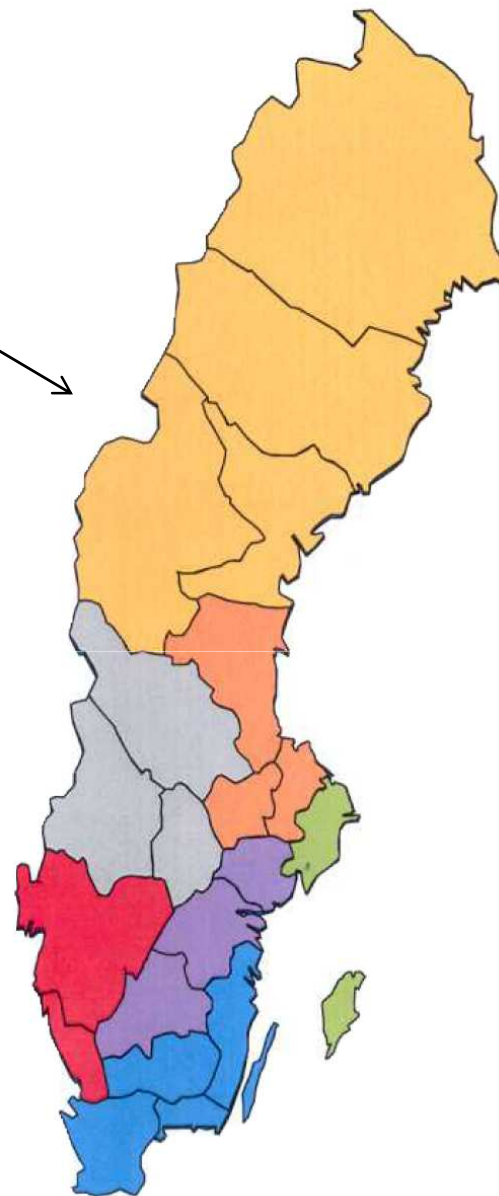
# Police Organisation in Sweden



## Police regions as off 1/1 2015

### National supportdepartments:

- Economy
- Human resources
- IT
- Communication (information)
- Legal affairs
- Development



# RAKEL

- Radio communication for efficient commanding
- Government owned; company operated
- Swedish civil contingency agency, (MSB)
- Parliament decision based on the need for better cooperation between Public Safety organisations
- Roll out started in 2004 and was completed in 2010
- About 50 000 users at present





# LEGAL ASPECTS

- Schengen convention; article 39-47; implemented in a Swedish law; (The Law concerning International Police Cooperation); 2000:343
- If a person is observed committing a crime, a Policeofficer may pursue the suspect over the border to Sweden. The punishment for the crime has to be as serious that extradition is plausible and that imprisonment is a possibility, according to a Nordic convention.
- This is also applicable when a prisoner has escaped and is on the run.



# LEGAL ASPECTS, con't

- The pursuing Policeofficer has to ask for assistance from the neighbouring country at the latest when crossing the border, but can until assistance arrives, stop and apprehend the suspected person.
- The Policeofficer may, due to security reasons, search the body, take possessions in custody or put handcuffs on the suspect.
- The Policeofficer shall obey Swedish Law and instructions given by Swedish Police.
- The Policeofficer may only use his weapon when life is at stake



# PRESENT BORDER SOLUTIONS

- In Sweden the operator of the PPDR Tetra net (Rakel), Swedish Civil Contingency Agency (MSB), has implemented “back to back” solutions at the borders between Sweden-Denmark, Sweden-Finland and Sweden-Norway. At present only voice is transferred between the countries. However the supplier has offered the options of SDS and Status messages to be transferred as well.



# DENMARK - SWEDEN

- Between Sweden and Denmark there are at present 4 talkgroups to be used for cross border communication. The first talkgroup is to be used mainly for field personnel in charge of the operations and can be used by any PPDR organisation; the second one is dedicated for Police communication; the third one for fire and rescue and the fourth one for ambulance services.



# FINLAND - SWEDEN

- Between Sweden and Finland there are two “back to back” talk groups and the two are used regardless of PPDR organization. The first one is used in the northern part (land) of the border area and second one on the Baltic Sea.



# NORWAY - SWEDEN

- The third “back to back” solution between Sweden-Norway has yet another setup. In emergency situations the first talk group should be used and for planned events the second one.



# Issues and challenges

- Emergency calls
- DGNA
- All-start
- Tracked units
- SDS
- Positioning
- ISSI and individual calls
- Talk queuing



# EMERGENCY CALLS

- There are known differences between how to handle Emergency calls in Nødnett and Rakel.
- The Swedish Police suggests that an Emergency call from Swedish Police subscribers in Nødnett is forwarded to The Swedish Police National Communication Center and that the emergency status is sent to the nearest local Police command and control center (in Nødnett). The reason behind this is, despite similarities in language, the risk of misunderstanding in a stressed situation.





# DGNA

- Dynamic Group number assignment, where the issue is that dispatchers in Nødnett will not be able to use DGNA to visiting subscribers from Sweden in either net whilst a dispatcher in Rakel will be able to use DGNA for a visiting subscriber from Norway, when in the Rakel net.
- According to the Swedish Police this is not a real issue since most of the cooperation will be based on patching groups from either net.



# ALL-START

- This function is not supported by Airbus Defence & Space and thus Rakel and is therefore not considered as an issue.



# TRACKED UNITS

- The issue is related to the fact that both a Swedish and Norwegian subscriber can be tracked when in Nødnett and Rakel. However if a Swedish subscriber migrates to Nødnett, the Rakel dispatcher no longer is able to track its own unit and vice versa. The operational issue refers to the situation when a migrated subscriber has used the Emergency call function and the radio connection for some reason has been lost.
- The Swedish Police wants to set up a procedure how to react in such a situation.



# SDS

- “Store and forward” (the message is delivered when the subscriber returns to its home network) is not supported in the suggested ISI solution and Airbus Defence & Space has proposed that the “normal” function of SDS should be implemented and that SDS messages are delivered instantly. However there is no guarantee that the subscriber receives the message when migrated to the other network. Motorola has rejected the proposed solution arguing that this will confuse the subscriber as inconsistency to known behavior.



## SDS; con't

- The Swedish Police uses quite a lot of SDS messaging as a complement to voice for information about dangerous individuals and suspected vehicles and also to give important operational information to those who have turned down the audio in the radio. The suggestion is that the “Store and forward” function is not as important as long as the normal SDS function remains unchanged.



# POSITIONING

- Within the main project the question has been whatever this function should be a part of the ISI solution or not.
- The Swedish Police regards this issue as very essential both in order to create a safe and secure operative environment as well as be able to send the best positioned patrol to assist a person in a distressed situation and therefore sees this issue as an important part of the project.



# ISSI AND INDIVIDUAL CALL

- In order to contact a migrated subscriber one has to write the whole ITSI (14 characters).
- The Swedish Police knows that there is support for this but wants the terminal suppliers to answer for the technical limitations regarding this issue.
- The Swedish Police wants MSB to have fully implemented Aliasing and that there is a decision for the use of tactical ISSI, before ISI can be used.



# TALK QUEUING

- There is a difference in the settings of when the time slot is released. In Nødnett the call is released after 2 s. and in Rakel the time limit is 6 s. This may cause problems when a Rakel subscriber presses the PTT and the talkgroup is already busy. The Rakel subscriber is then put on hold. This is not supported in Nødnett and the consequences may be that Nødnett subscriber will not be able to talk on the patched talkgroup since the Rakel net then will prioritize Rakel subscribers. The issue can be solved either with user defined training or to give Nødnett the right of control of the group conversation (all patched group calls are defined individually with either Nødnett or Rakel as the controlling system).





**THANKS FOR YOUR ATTENTION!!**

Any questions?

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