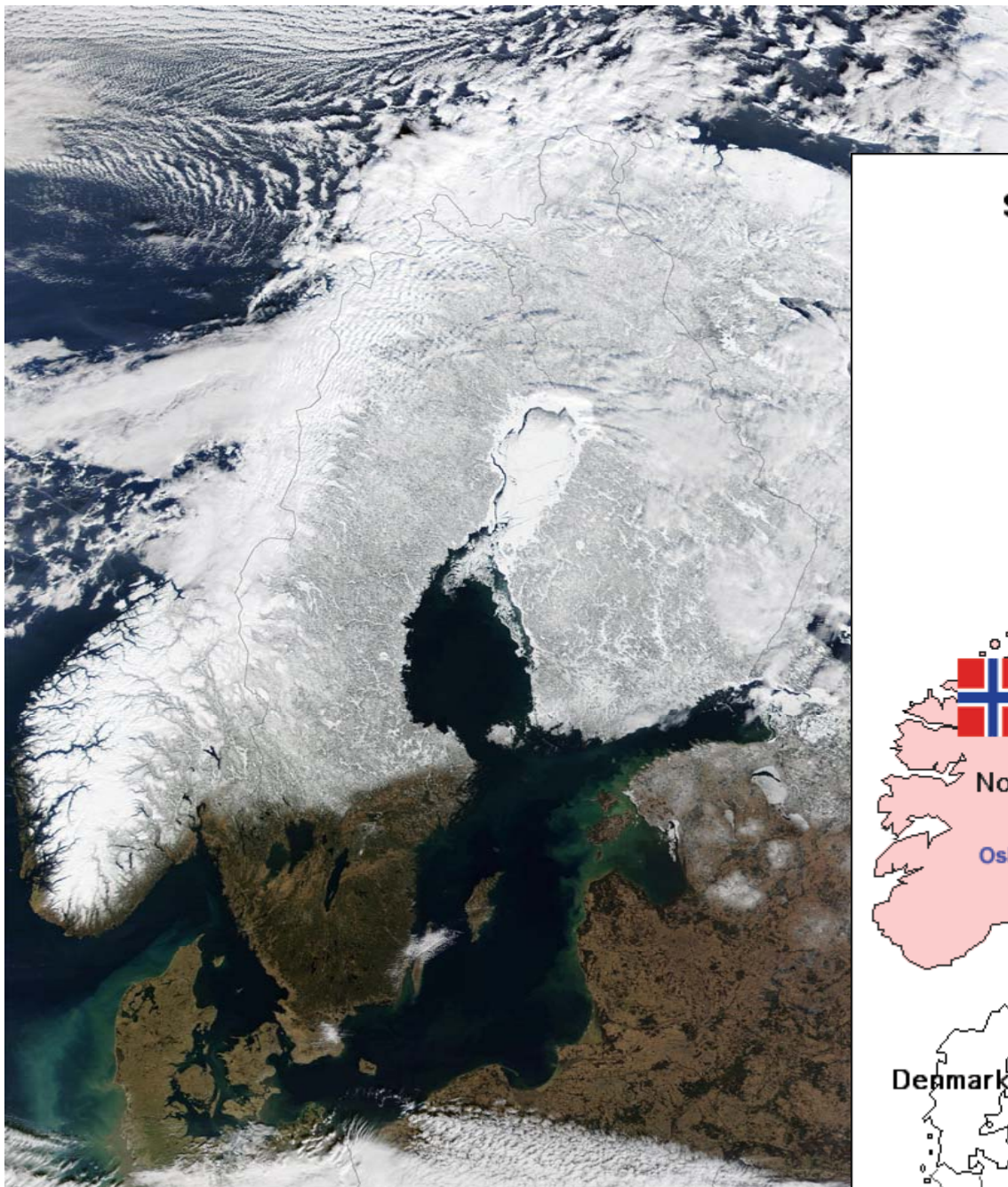


# PACS in Denmark

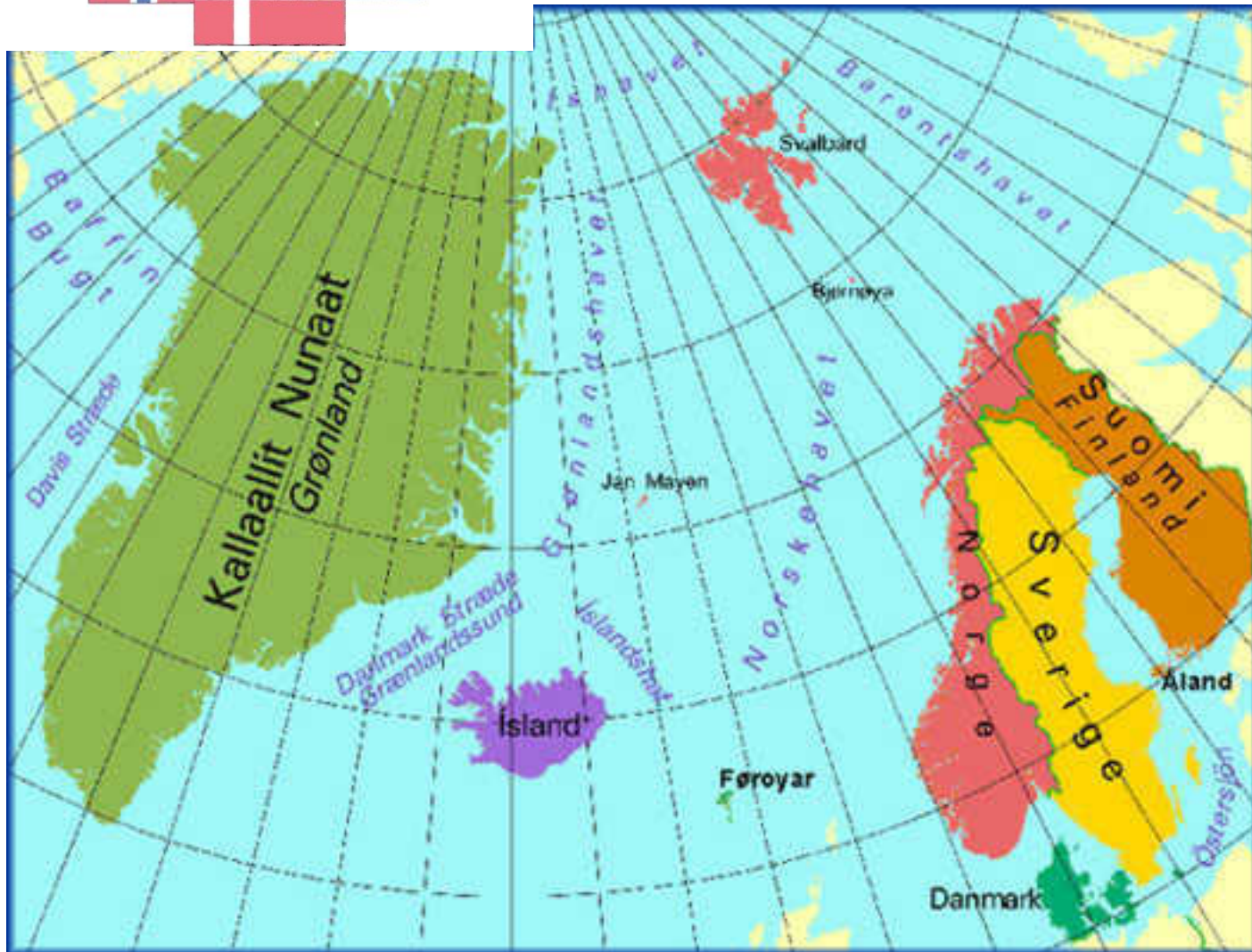
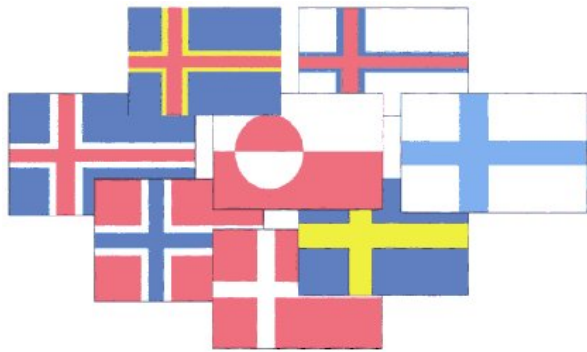
## - consolidation and integration:

Streaming technology –  
the future of teleradiology ?

Finn Mathiesen MD  
CMIO  
Vejle Hospital  
Denmark

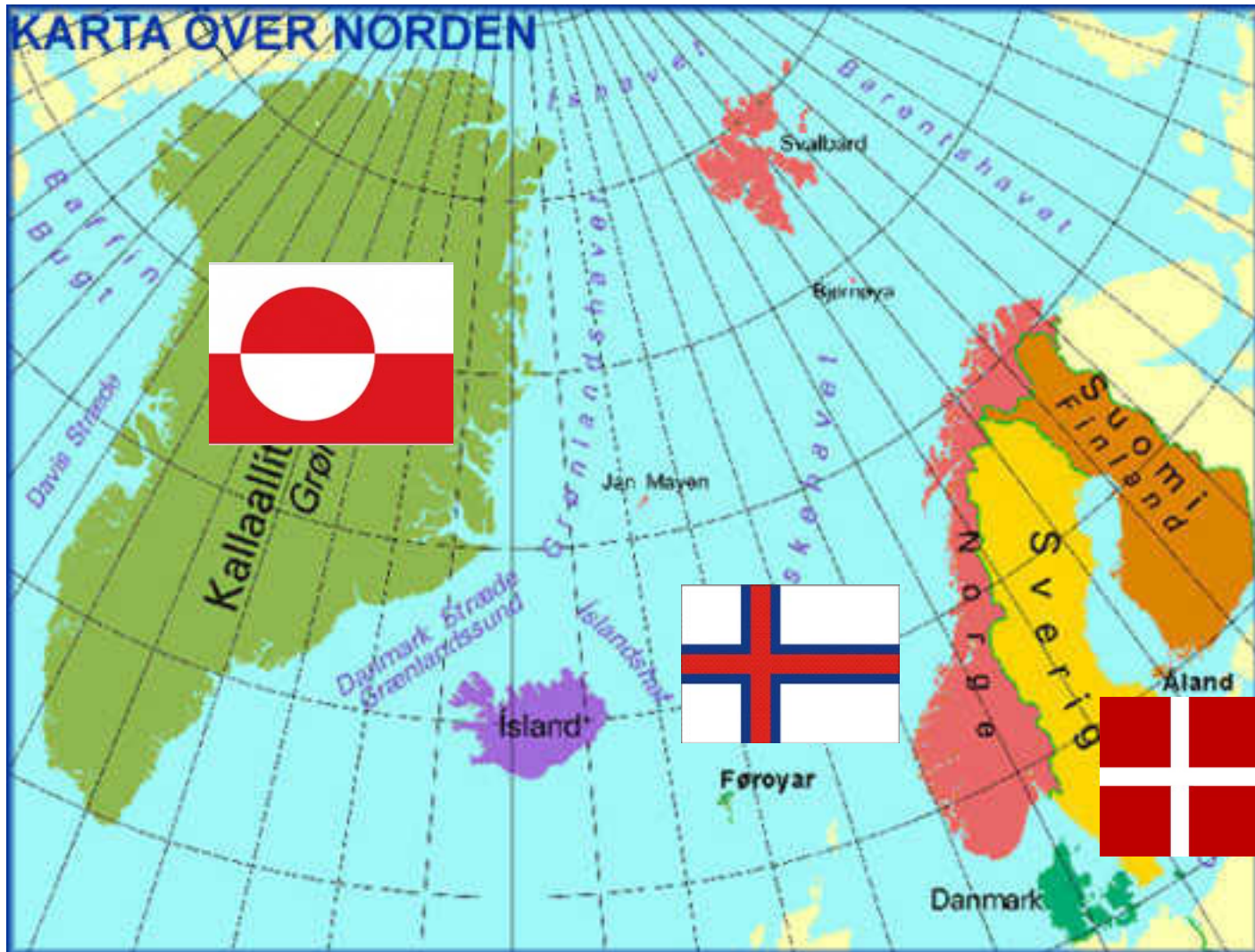








# Full PACS





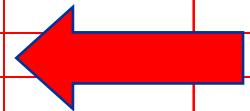
|                                 | X-ray | US   | CT   |
|---------------------------------|-------|------|------|
| Dronning Ingrid's Hospital Nuuk | 10000 | 1400 | 1000 |
| Ammassalik                      | 1067  |      |      |
| Qasigiaanguit                   | 565   |      |      |
| Aasiaat                         | 1418  |      |      |
| Paamit                          | 444   |      |      |
| Qeqertarsuaq                    | 388   |      |      |
| Sisimiut                        | 1116  |      |      |
| Ilulissat                       | 1477  |      |      |
| Quqortoq                        | 1487  |      |      |
| Nanortalik                      | 1208  |      |      |
| Narsaq                          | 935   |      |      |
| Ittoqqortoormit                 | 328   |      |      |
| Maritsoq                        | 680   |      |      |
| Qaanaaq                         | 217   |      |      |
| Ummaannaq                       | 495   |      |      |
| Upernavik                       | 690   |      |      |
| Nuuk Lægeklinik                 | 0     |      |      |

Radiolink – 2 mbit

Satellite – 64 kbit

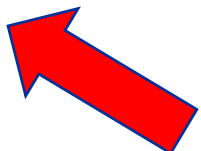


|                                 | X-ray | US   | CT   |
|---------------------------------|-------|------|------|
| Dronning Ingrid's Hospital Nuuk | 10000 | 1400 | 1000 |
| Ammassalik                      | 1067  |      |      |
| Qasigiaanguit                   | 565   |      |      |
| Aasiaat                         | 1418  |      |      |
| Paamit                          | 444   |      |      |
| Qeqertarsuaq                    | 388   |      |      |
| Sisimiut                        | 1116  |      |      |
| Ilulissat                       | 1477  |      |      |
| Quqortoq                        | 1487  |      |      |
| Nanortalik                      | 1208  |      |      |
| Narsaq                          | 935   |      |      |
| Ittoqqortoormit                 | 328   |      |      |
| Maritsoq                        | 680   |      |      |
| Qaanaaq                         | 217   |      |      |
| Ummaannaq                       | 495   |      |      |
| Upernavik                       | 690   |      |      |
| Nuuk Lægeklinik                 | 0     |      |      |

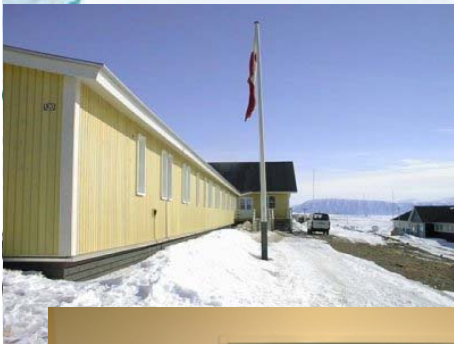


Radiolink – 2 mbit

Satellite – 64 kbit

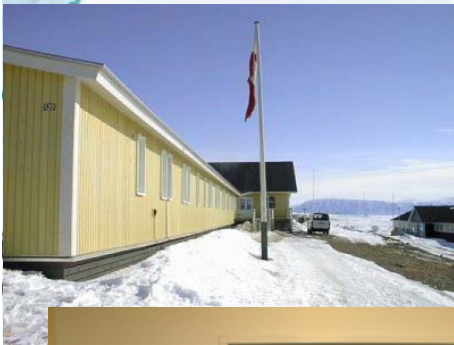








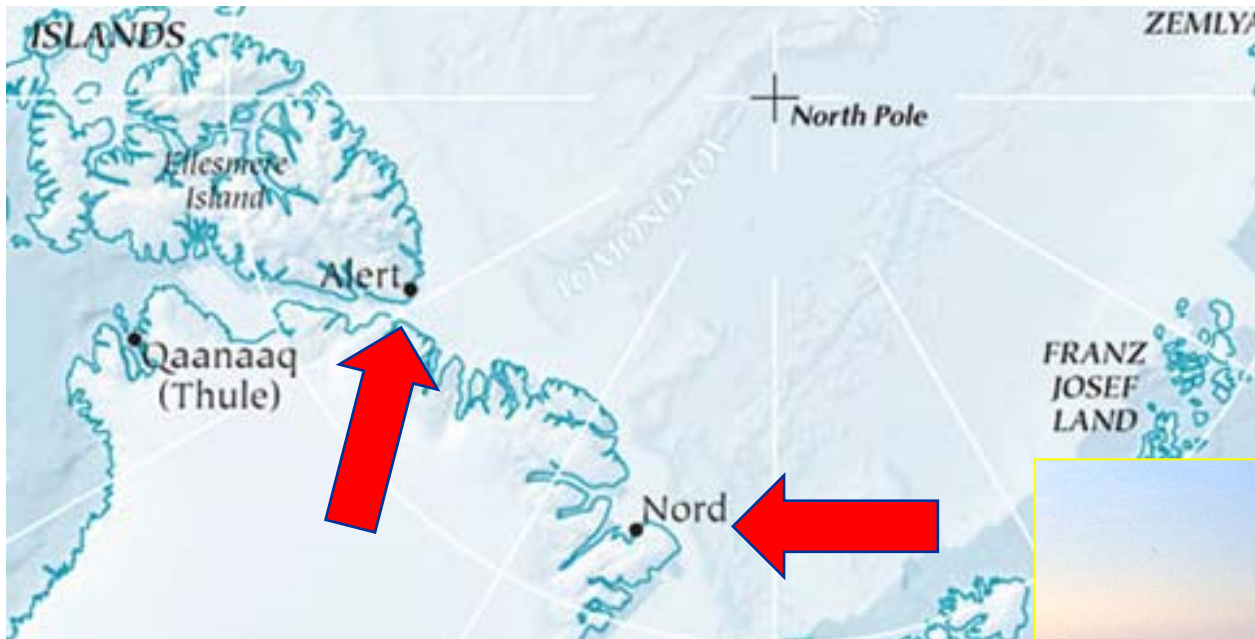
**78.13 N**





**Nord 81.36 N**

**933 km**



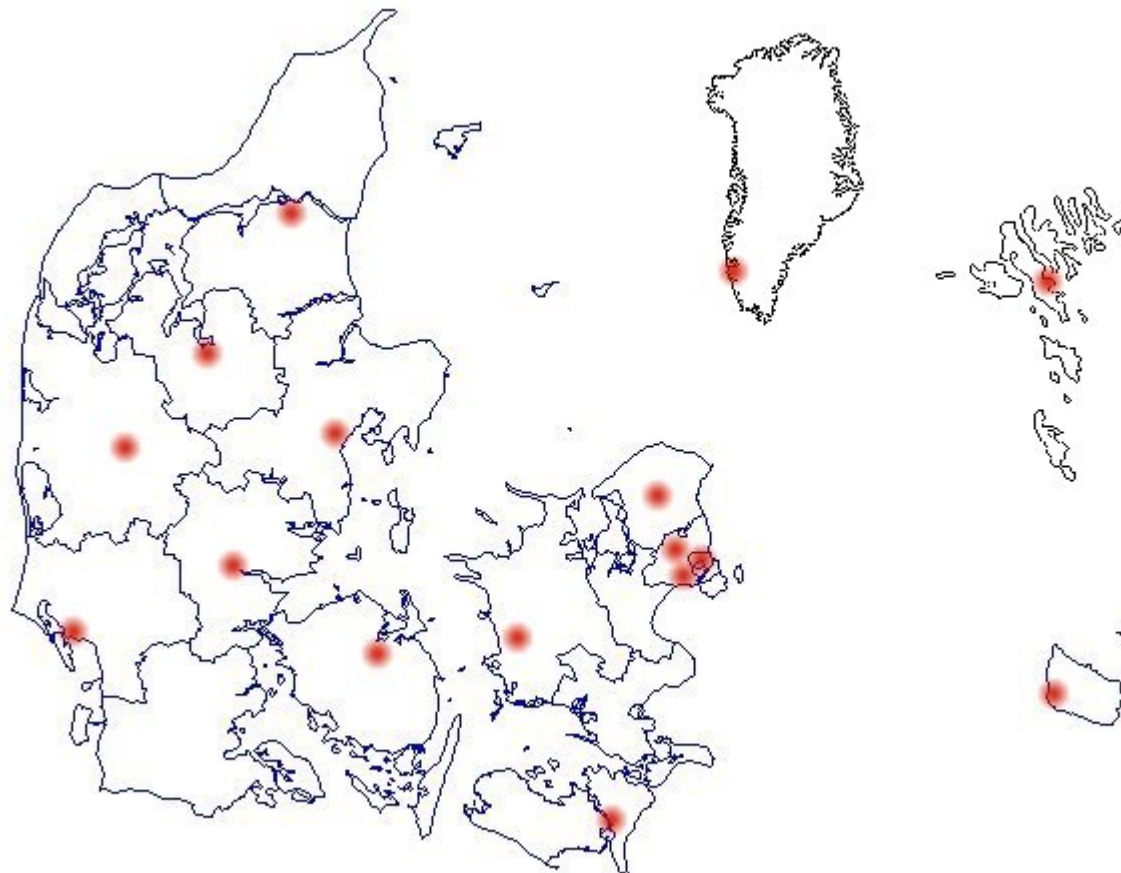
**Alert 82.28 N**

**817 km**



**Nord 81.36 N**

**933 km**



**PHILIPS**

GE Healthcare



**AGFA** 

**SECTRA**

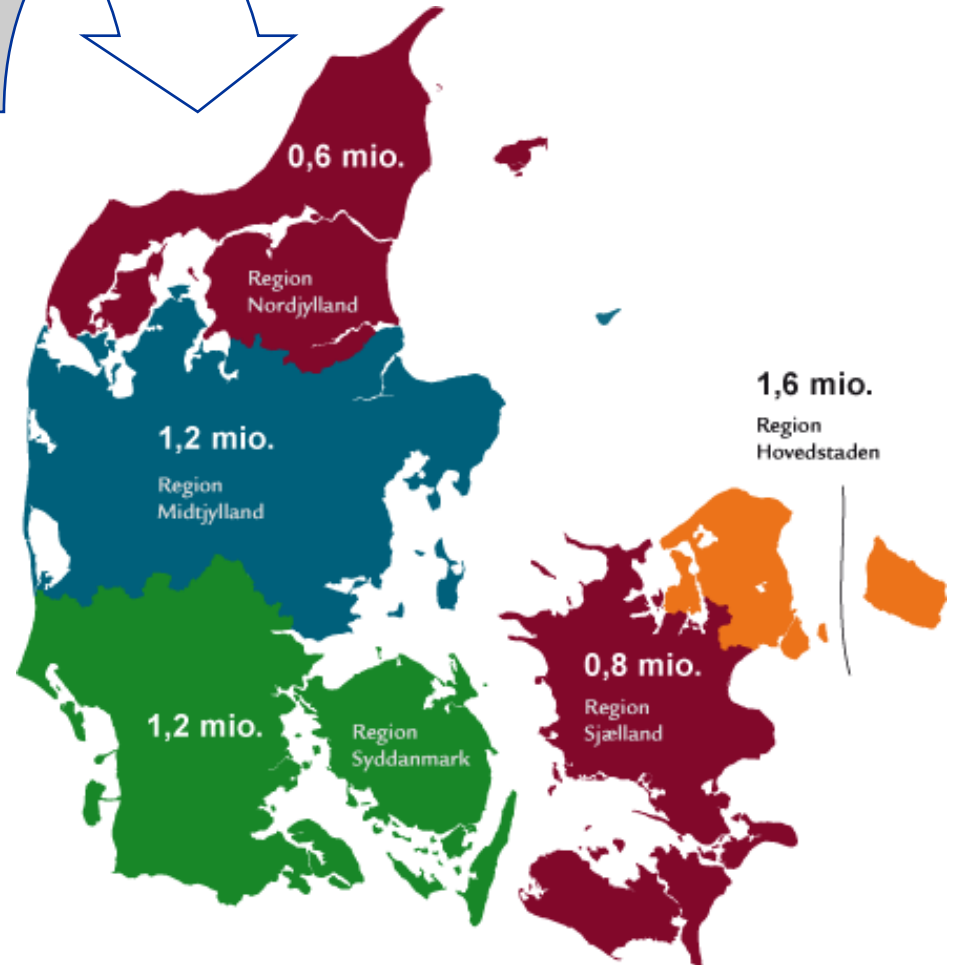
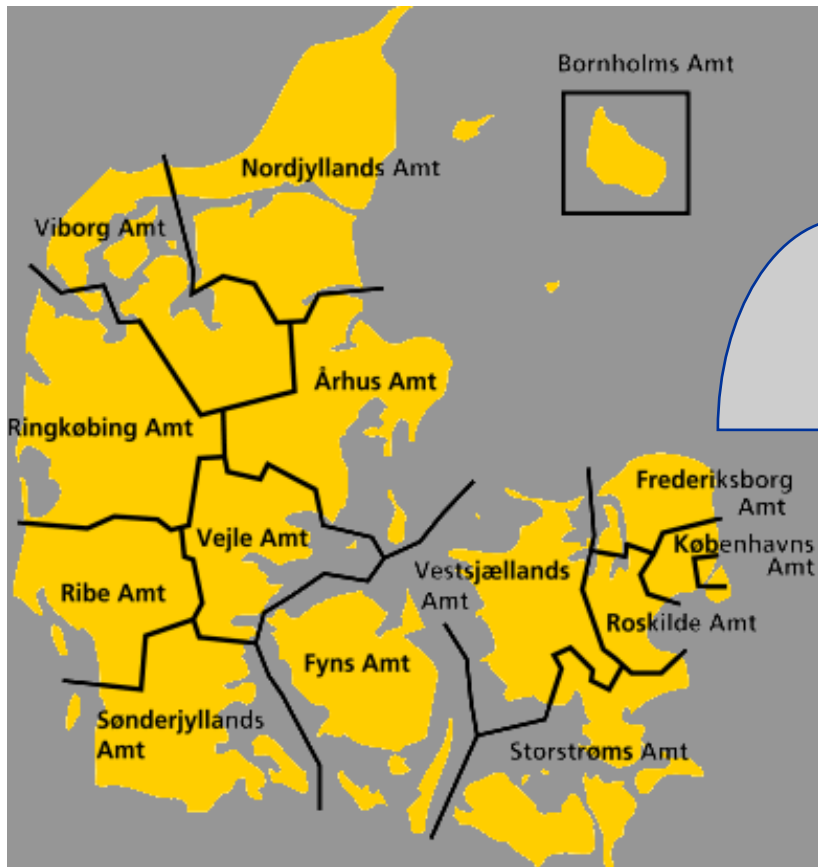
**SIEMENS**

medical

**Carestream**   
HEALTH

  
**Medical Insight**

**nexus/ag**  
e-health solutions



Counties to Regions  
All have multivendor  
PACS

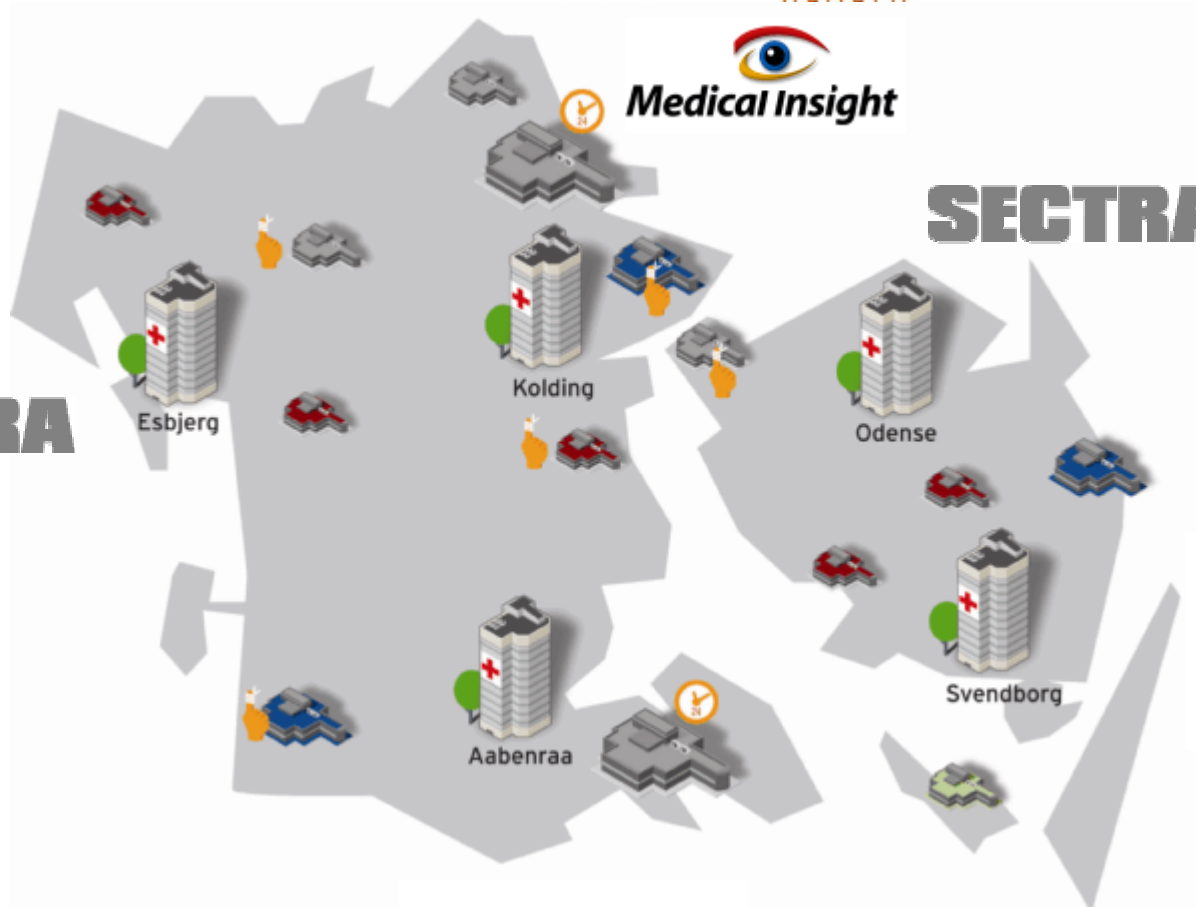
Carestream  
HEALTH



Medical Insight

**SECTRA**

**SECTRA**



GE Healthcare



GE Healthcare





## Before the end of 2013 each region must have:

- A regional Electronic Patient Record (EPR)
- A uniform clinical portal
- Single sign on
- Digital dictation
- A plan for implementing Speech Recognition





## The Electronic Patient Record must have:

- Clinical notes
- Medicine
- Ordering
- Booking
- Patient Administration System (PAS)
- Access to pathology, microbiology and lab results
- Access to PACS images !!



## Before the end of 2012:

- All PACS data must be available and exchangeable
- Between all PACS systems in Denmark

## Achievable only by:

- Streaming technology
- Virtual PACS databases





## National Personal Identifier CPR number



## Personal Digital Login Nem ID



Computer Methods and Programs in Biomedicine 66 (2001) 87–90

Computer Methods  
and Programs  
in Biomedicine

www.elsevier.com/locate/cmpb

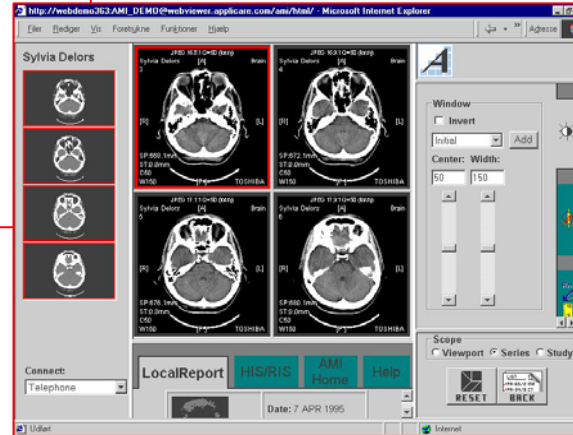
Vejle og Give Sygehus  
**Vejle**



## WEB technology — the future of teleradiology?

Finn K. Mathiesen \*

Department of Radiology, Vejle County Hospital, Kabbeltoft 25, DK-7100 Vejle, Denmark



## SJRS 1998 Kobe

## Streaming technology – The future of teleradiology ?

## SJRS 2010 Vejle

