

Whole Body Counting resources in the Nordic Region

overview

Number of Facilities

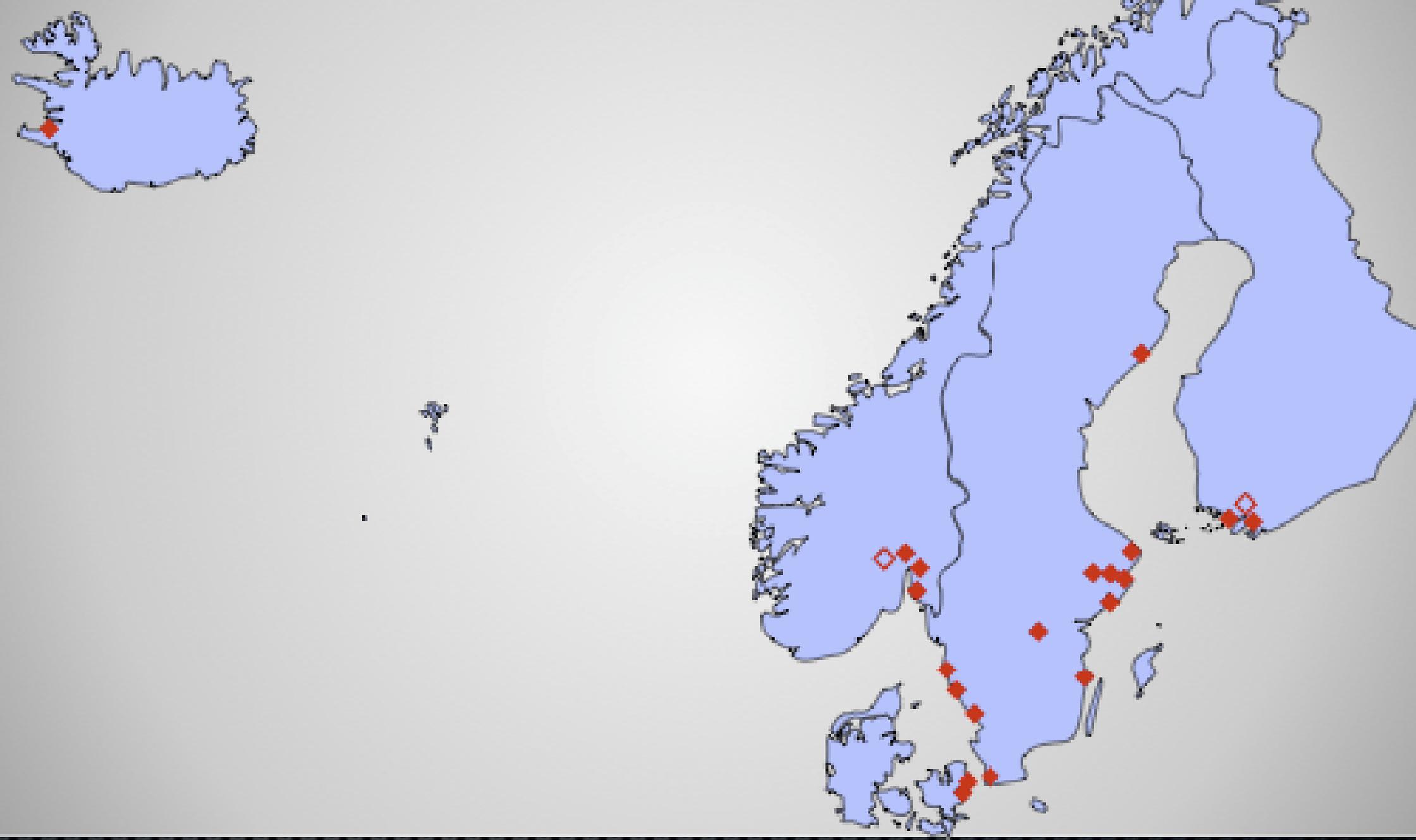
Denmark: 2 WBCs @Rigshospitalet

Finland: 2 WBCs @STUK + 1 @ Helsinki University

Iceland: 1 NaI WBC @Reykjavík University/Univ.
Hospital

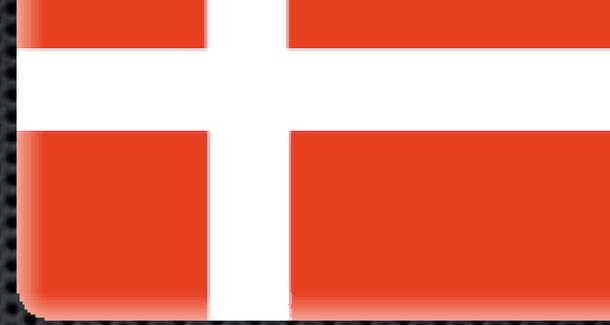
Norway: 2 WBCs @IFE + 2 @NRPA

Sweden: 12 facilities ...



Locations of facilities

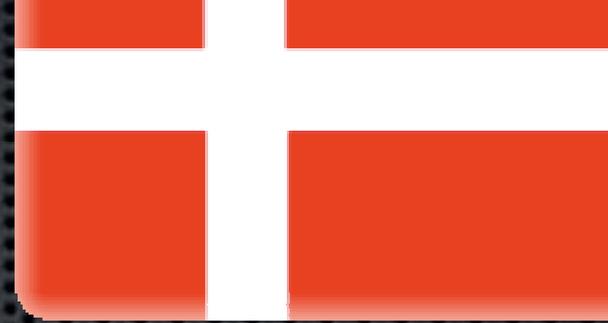
Denmark



Rigshospitalet WBC-1: Plastic scintillator bed

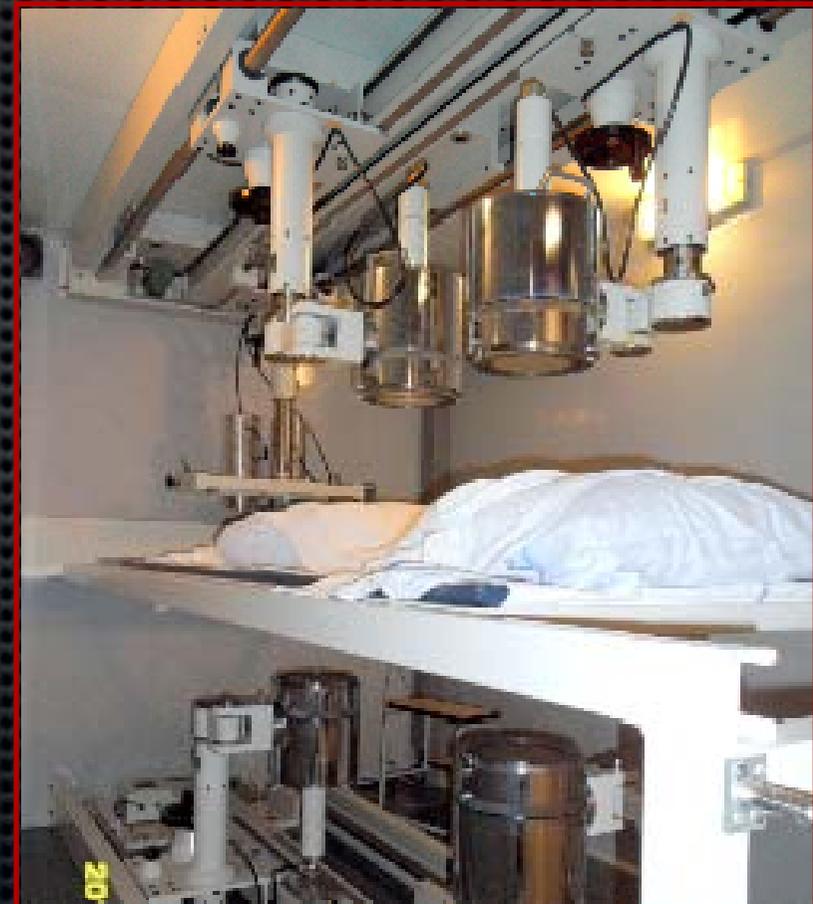


Denmark



Rigshospitalet WBC-1: Plastic scintillator bed

Rigshospitalet WBC-2: NaI bed



Finland



STUK: Stationary WBC, HPGe

+ mobile WBC HPGe

(See Jussi Huikari's presentation tomorrow)

University of Helsinki: Stationary NaI WBC

Finland cont.

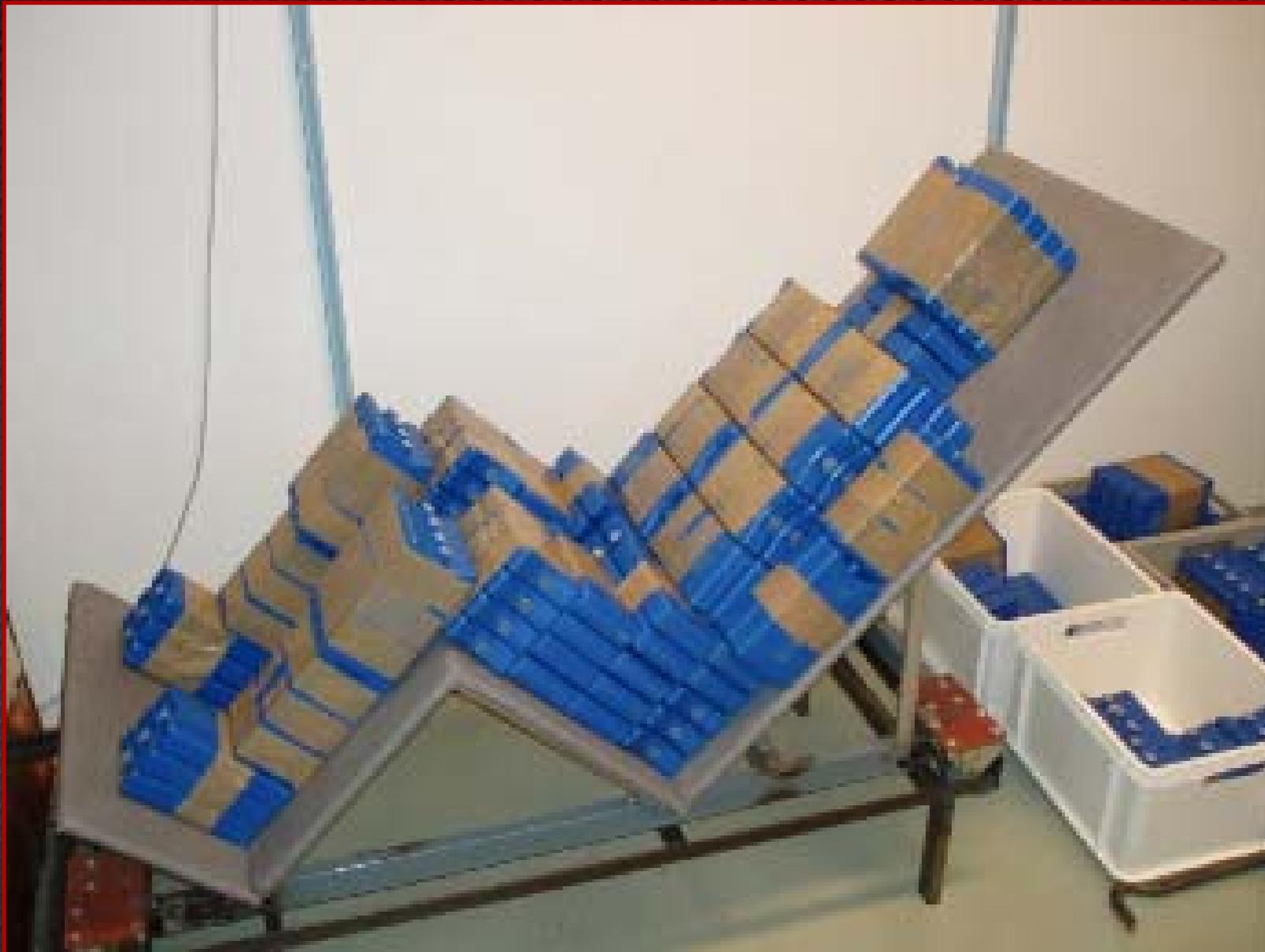


TUK: Stationary lab



STUK: Mobile lab

Finland cont.



Iceland



Lack of societal driver

No routine measurements -> Little experience

Interest and competence:

- Gammaspectrometry
- Equipment



Iceland cont.



Stationary NaI WBC @ University of Reykjavík.



Iceland cont.



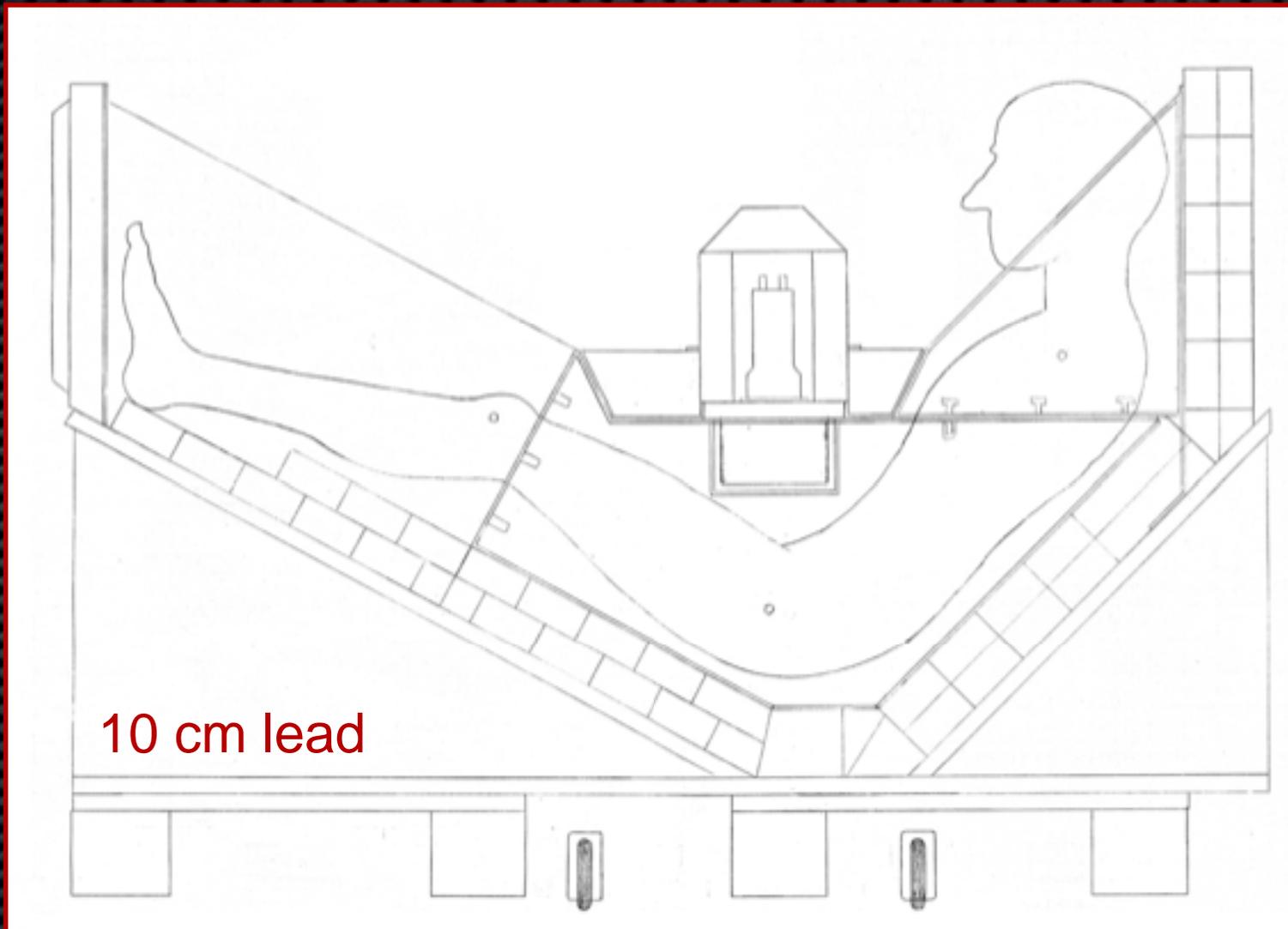
Stationary NaI WBC @ University of Reykjavík.



Iceland cont.



Stationary NaI WBC @ University of Reykjavík.



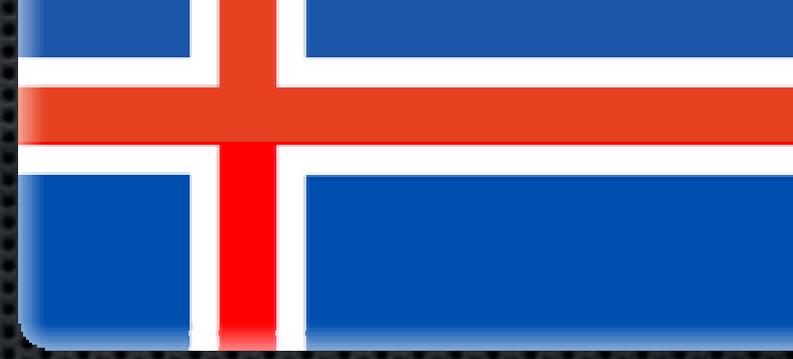
celand cont.



Stationary NaI WBC @ University of Reykjavík.



Iceland cont.



Stationary NaI WBC @ University of Reykjavík.



Iceland cont.



Stationary NaI WBC @ University of Reykjavík.

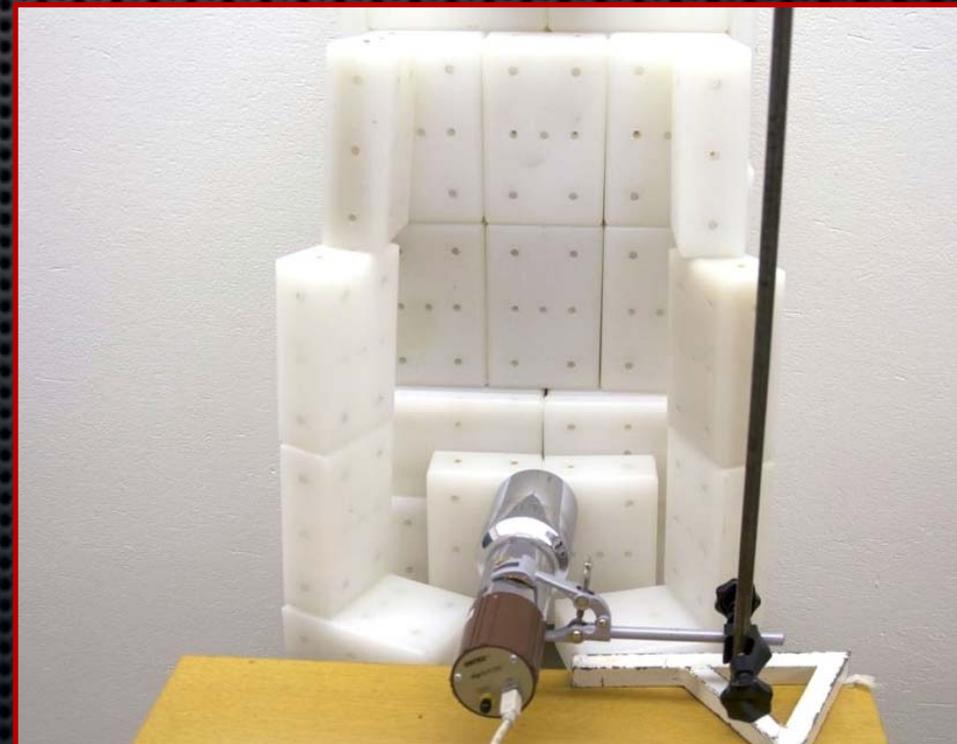
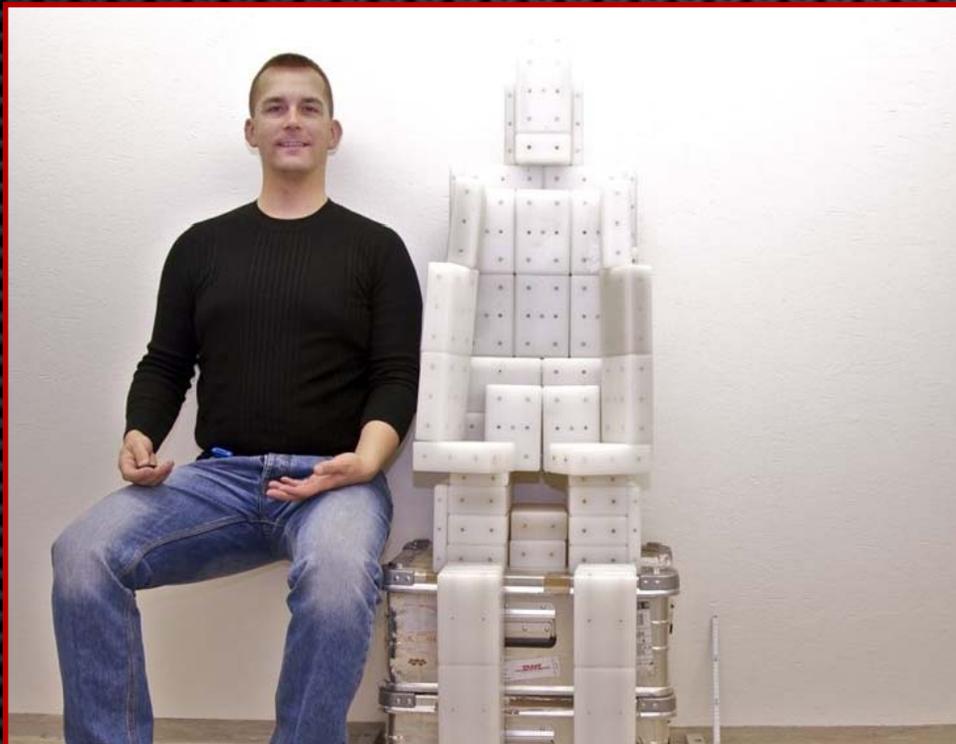


Iceland cont.



Stationary NaI WBC @ University of Reykjavík.

Mobile detector (NaI, sitting/Palmer geometry)



Iceland cont.



One fixed facility (at the University of Reykjavík)

Mobile detector (NaI, sitting/Palmer geometry)

In development, imminent equipment replacement

Norway



NRPA: HPGe field lab WBC, sitting geometry

+ Stationary lab (?)

IFE, Kjeller: NaI WBC, sitting geometry

IFE, Halden: NaI WBC, sitting geometry

Norway



Norway



Sweden



Fuzamark

Low background

Stationary
Sitting

1 HpGe 53%

10 mm

Empty and
blank 14 h

Genie 1.85



Wahlhouse

Low background

Stationary
Jung
counter
Bed, static
detection

2 HpGe 50%

40 mm

Blank 2 days

^{14}C

In house
method



Ringshals

Low background

Stationary
Sitting

1 NaI 3x3"
(thy)

8 mm

Empty
100000 s

^{137}I

GammaVision

1 HpGe 66%

^{60}Co , ^{137}Cs ,
 ^{228}Ac , ^{228}Th ,
 ^{232}Th



Os-kars-hamn

Low background
Collimated
detectors

Stationary
Dedicated
chair

1 NaI 1x
1.5" (thy)

10 mm

Empty 63 h

^{137}I , ^{138}Ba

Genie 2101

WIKI 6000

2 HpGe 70%

10 mm

^{40}K , ^{137}Cs ,
 ^{228}Ac , ^{228}Th ,
 ^{232}Th , ^{235}U ,
 ^{238}U



Stadsverk

Low background

Stationary
Sitting

1 Coaxial Ge
50 %

10 mm

Empty 14 h

^{137}Cs , ^{40}K ,
 ^{238}U

Genie 2101



Low

Stationary

1 HpGe 55

10 mm

Empty 10 h

^{137}Cs , ^{40}K

GammaVision

Sweden cont.



Sweden cont.



Sweden cont.

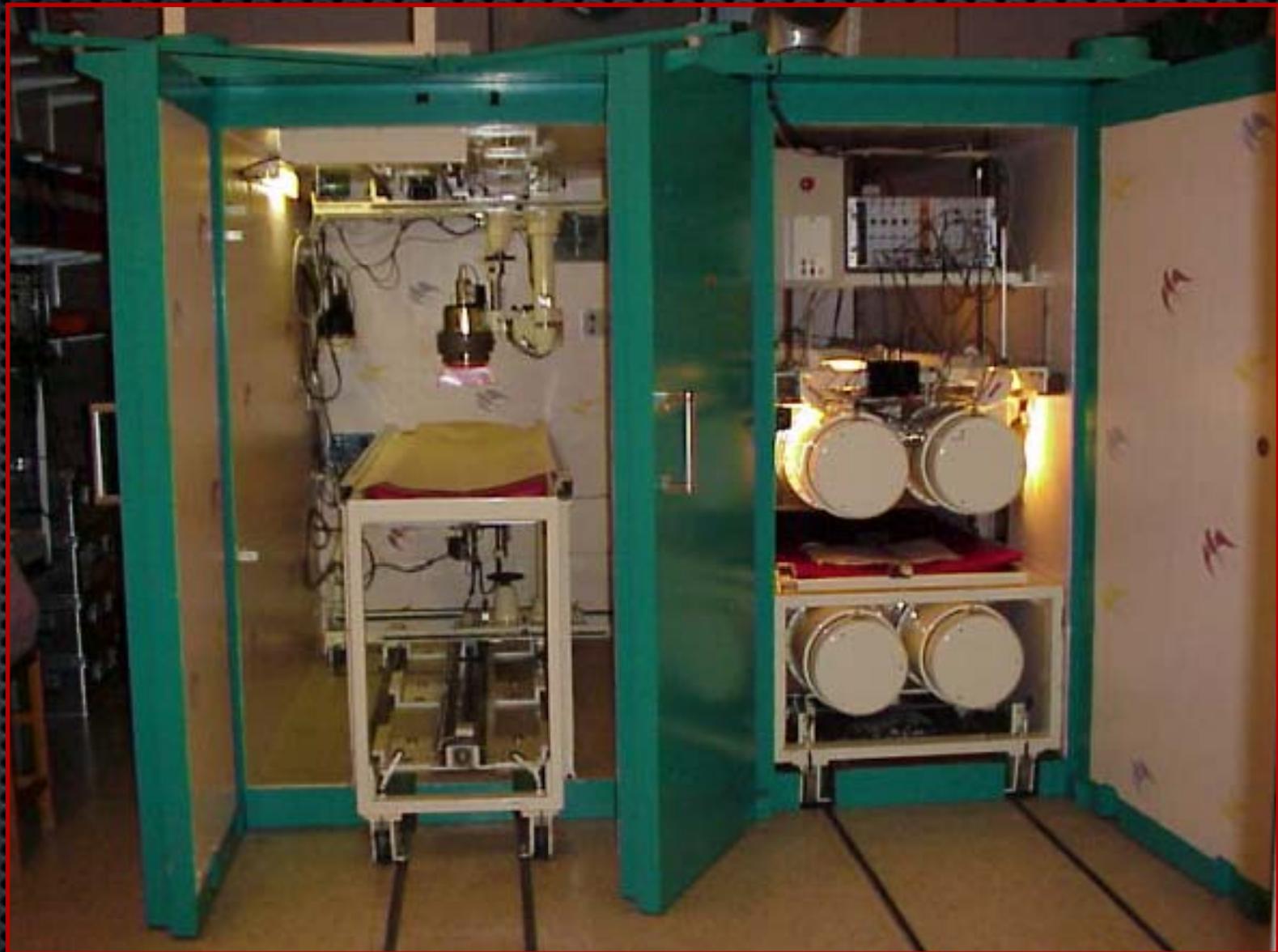


 Umeå	Collimated detectors	Field lab Max geom. efficiency	1 NaI 2x2" (thy)	1000 haz 1000 bec	Empty and blank 15 h	^{131}I , ^{132}Ia	Gamma-ray spec.
 Lund University Malmö U11	Low background	Stationary Bed, stahr detectors	11 $\text{I}^{\text{p}}\text{Ge}$ 50% 4 NaI plastic	1000 haz	Empty and blank	^{137}Cs , ^{40}K , ^{226}Ra , ^{232}Th ^{137}Cs , ^{40}K	Maestro and in house method
 Gäddedebyrå Linköping	Collimated detectors	Stationary Scanning stahr bed with scanning detectors	2 NaI	30 - 60 min	Empty	^{226}Ra , ^{137}Cs , ^{132}I	In house
 Stockholm University	Low background Collimated detectors	Stationary Scanning bed with stahr detectors	6 NaI	20 min	Blank 1 h	^{40}K	In house
 Lund University Göteborg	Low background	Stationary Scanning stahr detector stahr bed	2 NaI 5x6" 1 NaI 5x16" 4 NaI plastic 91x76x24 cm	varying	Empty	^{40}K , ^{226}Ra , ^{232}Th , ^{137}Cs , ^{60}Co	Accuspec and in house manual calculation

Sweden cont.



Sweden



Sweden cont.



Sweden

