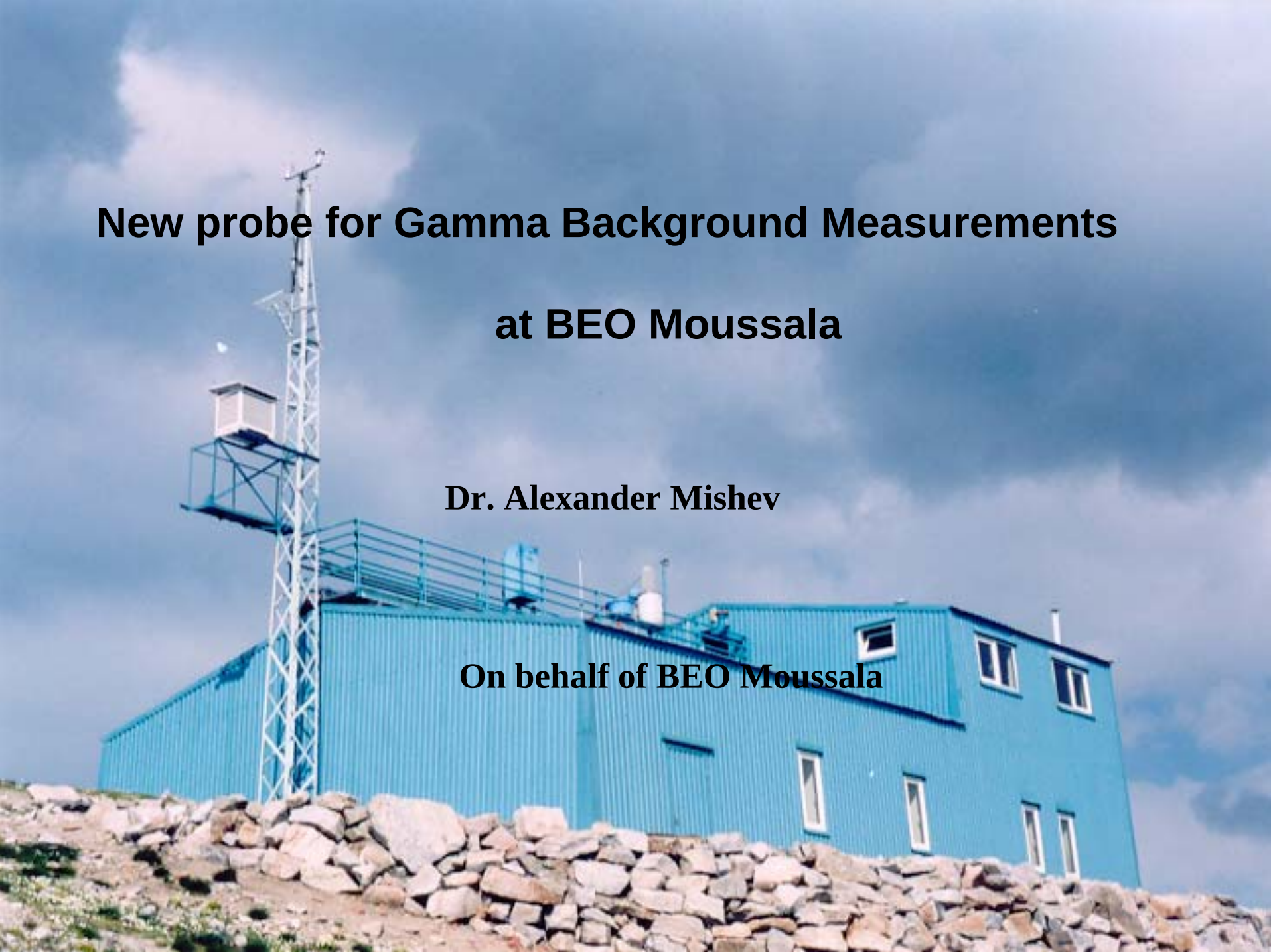


New probe for Gamma Background Measurements

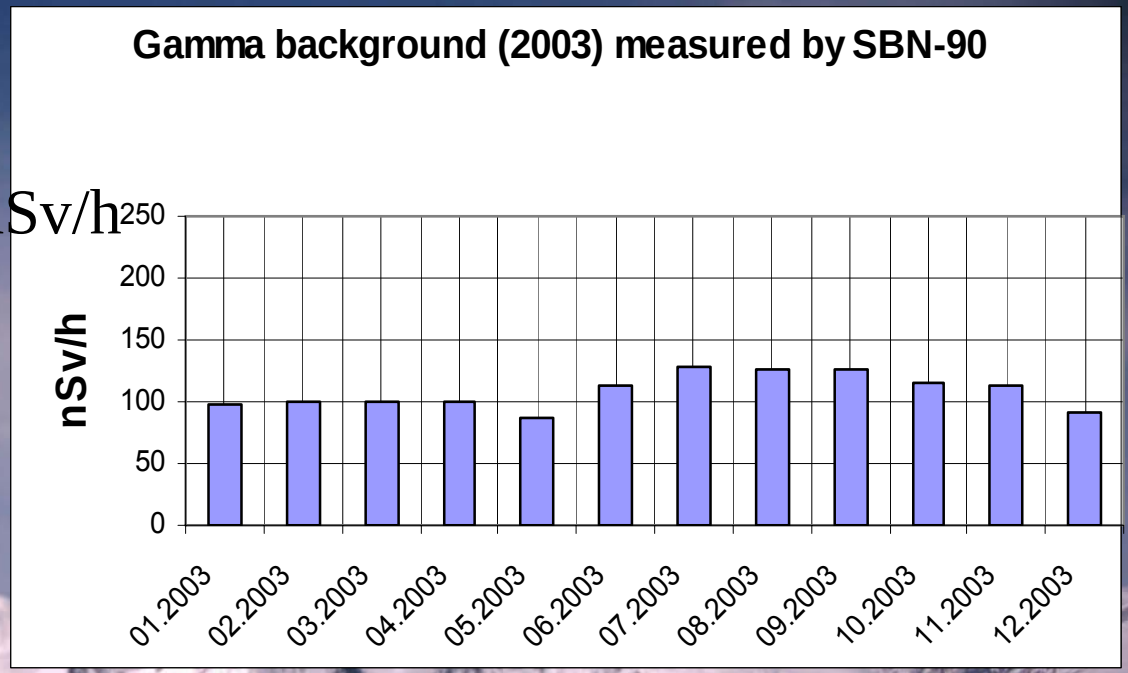
at BEO Moussala

Dr. Alexander Mishev

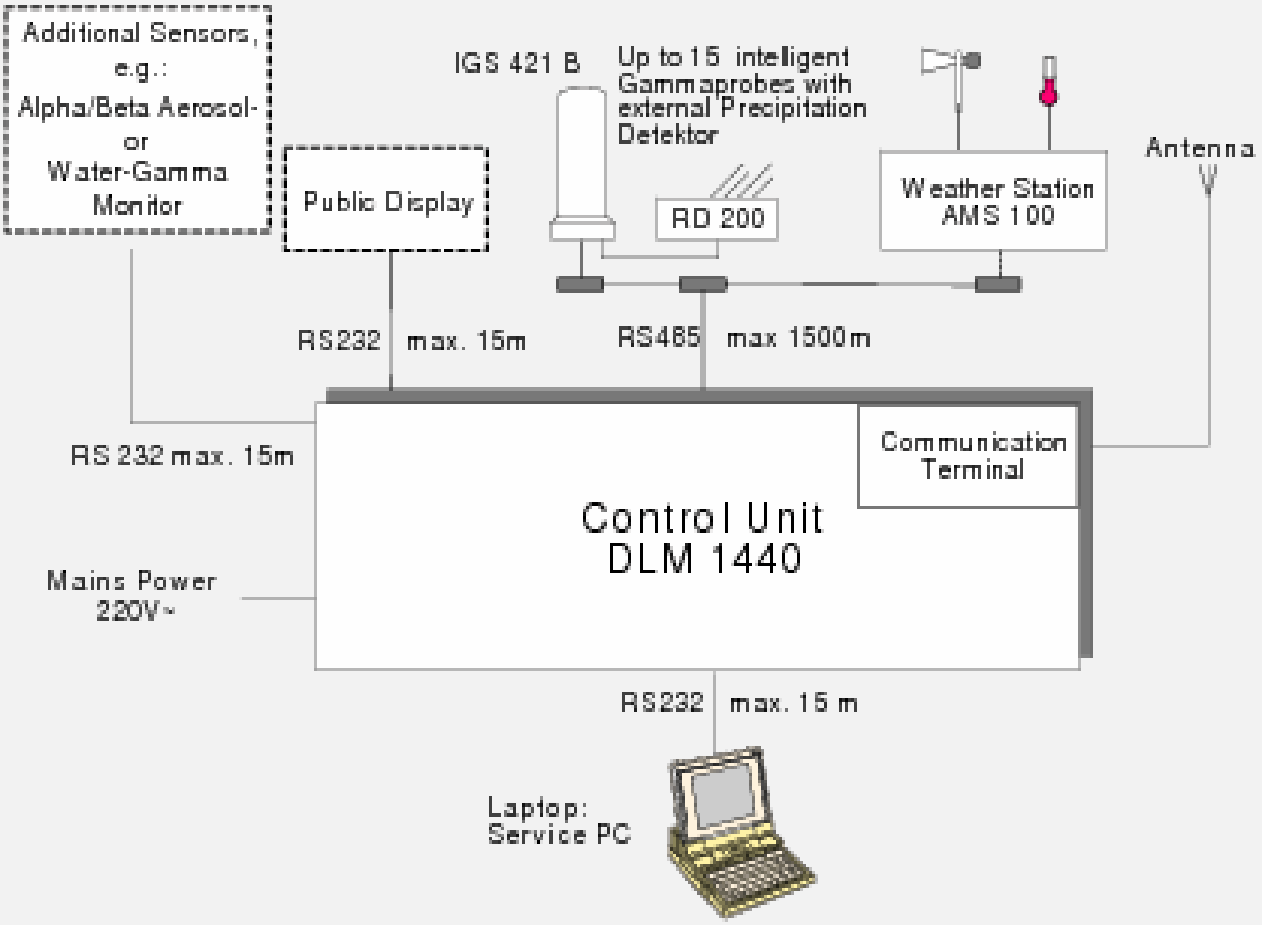
On behalf of BEO Moussala

Gamma background measurements with SAPHYMO

Mean dose-rate ~ 120-130 nSv/h




Technidata gamma probe
based on GM tubes



Sensitivity range
10 nGy/h …10 Gy/h

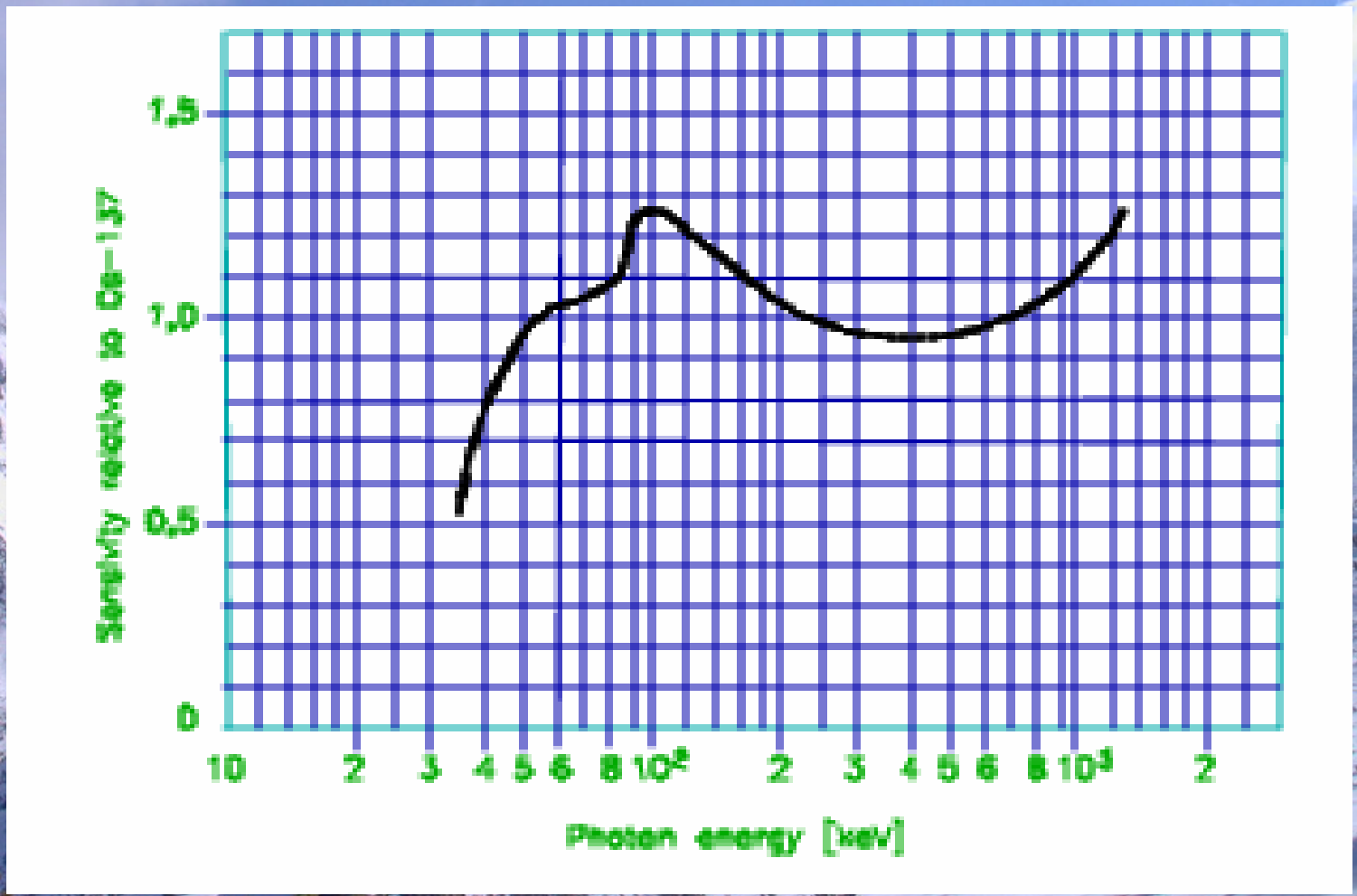
Accuracy
~ 15% resp. to Cs-137

Operating tem.
-40 deg. C …+ 60 deg. C

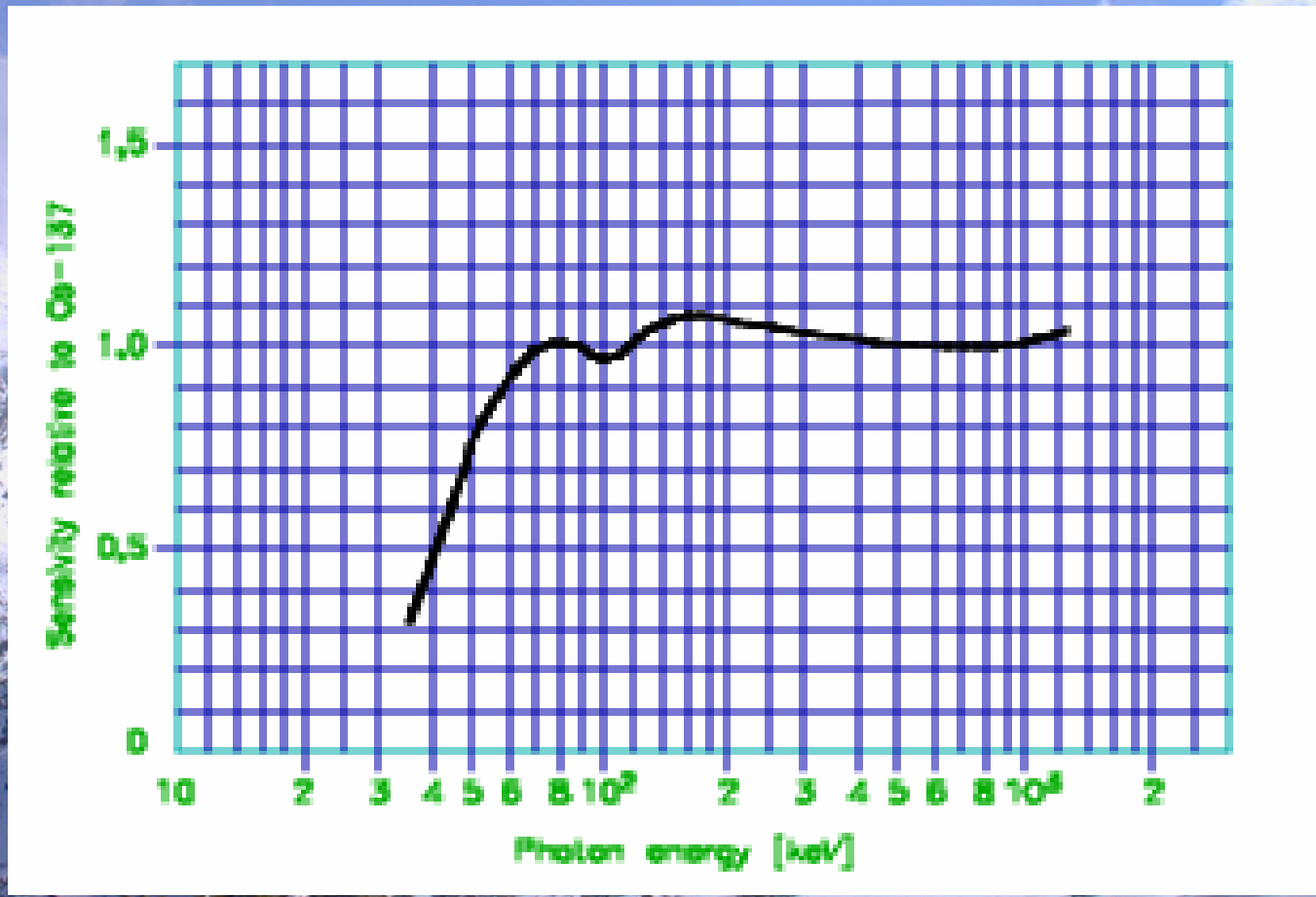
Dimensions
80/115mm x 635 mm
~ 2300 g

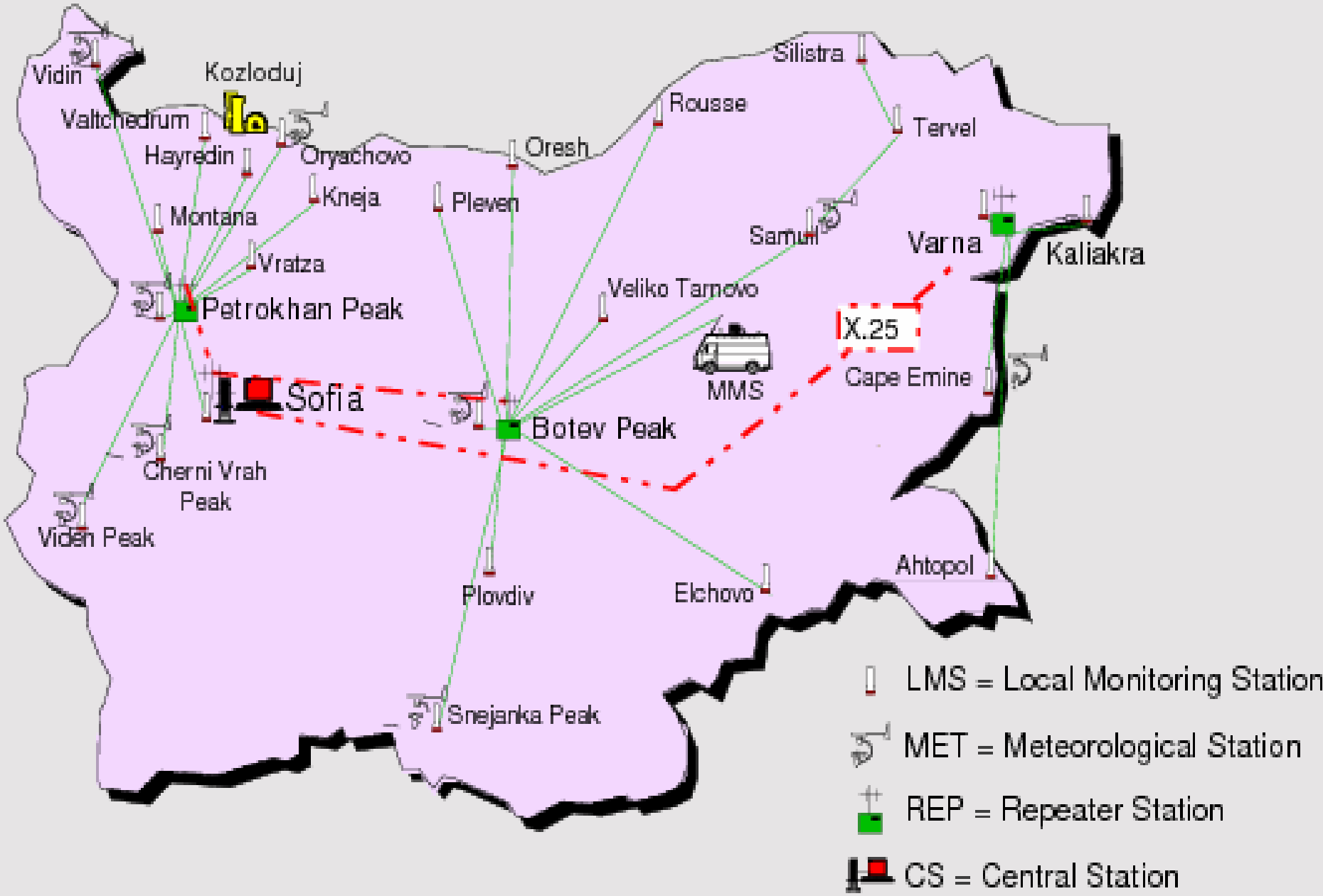
Interface ~RS-232 (up to 15m direct connection) or RS-485

Detector 2x GM tubes 20031E
Range 10nGy/h … 2mGy/h
Sensitivity 1976 counts/min ~ mGy/h
Detector background 38 counts/min ~ 38nGy/h
Energy range 40 keV …1.25 MeV



Detector GM tube 20018E
Range 0.1mGy/h … 10 Gy/h
Sensitivity 1.24 counts/min ~ µGy/h
Energy range 50 keV …1.25 MeV





RaMo Bulgaria: Country-wide Radiation Monitoring in real-time.

Future plans and work

Till the end of the year 1 detector installed at BEO Moussala

Next year second detector installed at INRNE

We acknowledge warmly the Technidata

The staff at BEO Moussala

The staff of Lomnicki stit