

Notes to the installation of gamma dose rate devices in the monitoring network of SHMI

(the situation on May 2016)

Dudince and Hurbanovo

1. The location of detector: at the one of the poles of Automatic meteorological station (AMS). To use one without devices with laser. But picture with **real dimensions of detector** is needed because approval from provider of AMS is necessary (AMS is still under the guarantee). In Hurbanovo detector will be installed at the own pole.
2. Electric supply is possible from near connection.
3. Data connection:

A/: Detector will be added to the equipment of AMS as one next device through **standard interface RS-485**. Detector **waits on the request** from AMS data-logger and answer every 10 minutes and send value of 10 minutes average. Data-logger of AMS creates from all devices in the meteorological garden one common report in the **format SXSQ39** and send it to the center in Bratislava through private institute network. No extra telecommunication cost for your side.

This is installation that fulfils all standards in our network and there is no much room how to do things differently. Keeping this standards is asked from all devices in the professional meteorological gardens.

Question: Are there possibility to add standard interface RS-485 to the detector? Last year when Canberra-Packard detectors were installed to our network similar problem was solved with successful result.

B/: I have consulted again with my colleagues from IT department possibility to use former suggestion that was created before our network renovation. Server on Bratislava-Koliba with translation software for coded report from detectors are **not supported for safety reason**. They suggested solution with transmitting data from detector through our **SIM card to the APN** (because this is safe connection within our network). But there is essential request to send data in the format SXSQ39. And it is possible only for detector with own data-logger. No extra telecommunication cost for your side.

C/: Third but **the least suitable** for me is to send **coded data from your detector to Budapest** and send me it in the package of data from your side together with another data from your network in EURDEP format. Only to add data from these three station to package of data from your side. But it is solution if I had known it at the beginning of this process I would have not agreed with installation on our station. And in the case of such solution your detector **have to be installed standalone** on own pole, not on our AMS because in the future we will have to install own detector there with direct data transmitting to our database.

Kaľna nad Hronom

1. Location on the lawn near the municipality is possible but **question of safety** have to be solved.

2. Transmitting data from detector through **our SIM card to the APN** (because this is safe connection within our network). But there is essential request again to send data in the format **SXSQ39**. And it is possible only for detector with own data-logger.
3. Transmitting data **in the format EURDEP through internet to directory on the ftp-server** of our institute. Problem with translation to this format again needs own data-logger or PC.
4. The same solution as in the **C/**; but as I mentioned the least suitable for me despite possible.

Possibility to have SIM card from SHMI for data transmission to Budapest:

I have consulted this problem with my colleagues. There is possibility to have SIM card with the access to internet (not part of our APN). It will be bought by our institute and maintained through provider of telecommunication services for our institute and the payment will be part of our bill without necessity to refund it from your side. But I have to obtain approval of IT Department director. I will inform you. This SIM card can serve for data transmission to Budapest in case A:/ and C/; solution as well.

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24.5.2016