Server functionality includes:

Transmitters' localization Locate transmitter's location, even if it works very rarely, analysing long-term measurements using GRoA.

Radiofrequency assignment database Possibility to integrate existing third party license databases or use SKUDRA Server license database.

Monitoring results All measurement data is stored in one place, so that measurements, both current and historical, are accessible to everyone authorized.

Data analysis Possibility to search and visualise measurement data from various perspectives. Generate predefined reports.

Remote control Plan monitoring activities for multiple location from one place.

Supported receivers

R&S EB200; R&S ESMB; R&S PR100; R&S EM100; R&S ESMD; R&S DDF255; R&S EB500; R&S EB 510; Narda SignalShark Handheld, Narda SignalShark Remote.

For other receivers support please contact us.

Monitoring software SKUDRA has been developed:

- to automatically detect radio signal, aggregate measurement results, possible user identification, data analysis , store results and visualize them in most convenient way

- to draw conclusions about signal's origin and take further actions in a real time.

Electronic Communications Office of Latvia

The Electronic Communications Office of the Republic of Latvia

The State Joint-Stock Company Electronic Communication Office (ECO) is radiofrequency management authority in Latvia, monitoring and regulating the use of the radio frequency spectrum on the grounds of the Electronic Communications Law and other legislative acts.

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Skudra

SOFTWARE FOR MOBILE & FIXED RADIOMONITORING

SKUDRA in translation means *ant*.
Ants are a model of cooperation, hard work and productivity.

Core functionality
of "SKUDRA" includes:

Spectrum scanning
Cyclic sequential spectrum scanning divided into several adjustable frequency ranges.

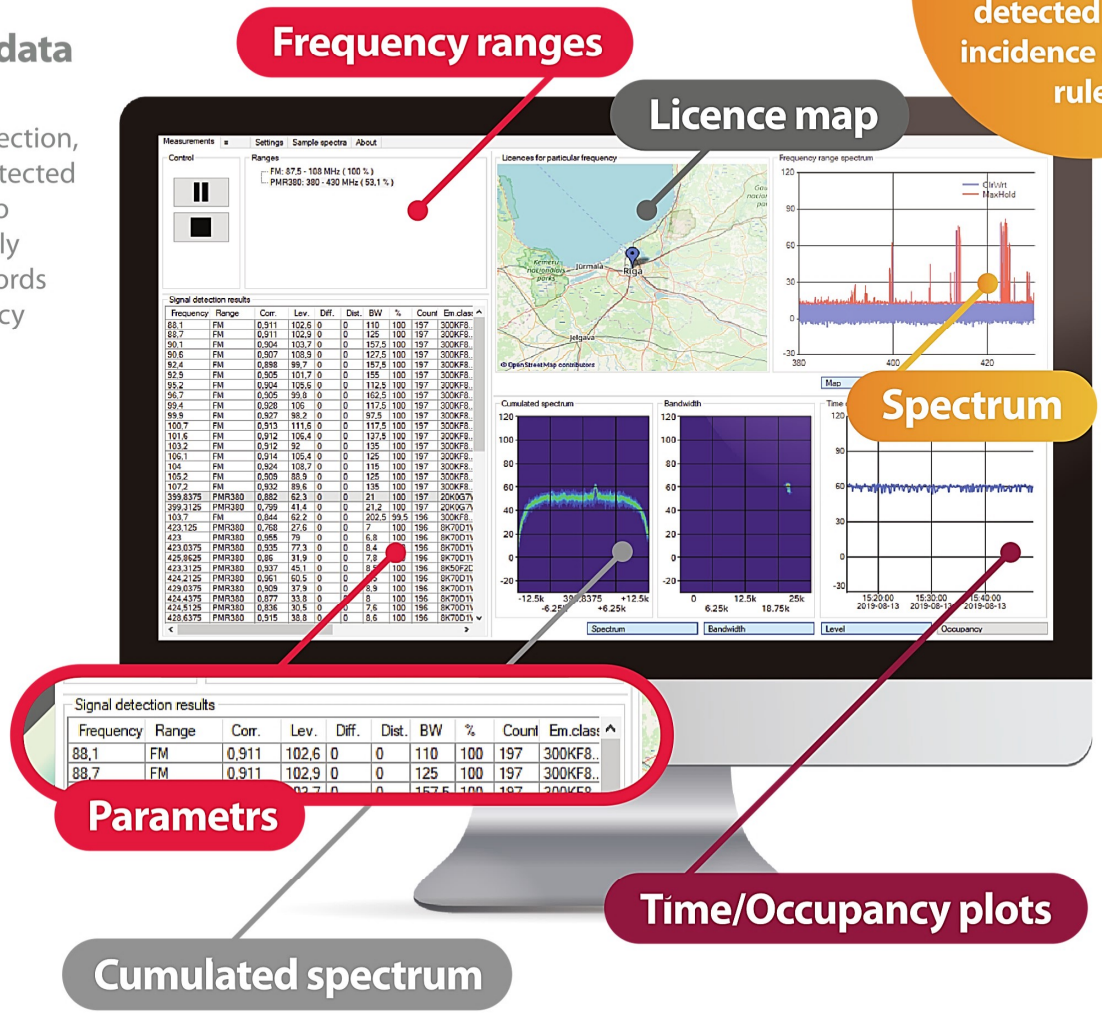
Automatic signal detection of signals
by shape of signal's spectrum.

Measurement data aggregation
In case of signal's detection, record is added to detected signal's list. In order to maintain records easily accessible, all the records having same frequency channel are merged.

Accumulated colour coded spectrum
All the spectra of signals detected in particular frequency channel are cumulated in one incidence - color - coded spectrum plot, so that diversity of detected signals, as well as most often detected signal is clearly visible at once.

Essential information at once
Each record in detected signal's list contains essential information about detected signals in particular frequency channel:
- Channel frequency;
- Field strength;
- Occupied bandwidth;
- Percentage of signals' occurrence;
- Signals' occurrence count;
- Possible spectrum user.

Unauthorized spectrum use with SKUDRA can be detected not by incidence but as a rule!



Spectrum user identification
Possible spectrum user is calculated by Hata-Davidson propagation model, taking into account transmitters' coordinates, power, antenna height, etc. The necessary licence information is provided by SKUDRA SERVER or European Frequency Information System.

Time plots
Field strength and occurrence of each signal on particular frequency channel can be presented as field strength versus time plot and occupancy plot respectively.

Long term storage
Monitoring results can be transferred to SKUDRA SERVER.

Additional capabilities:

Offline functionality
Full feature functionality offline (license data has to be prepared beforehand, and results stored afterwards), therefore perfectly suitable for mobile monitoring.

Offline map for visualising and altering
calculated licence owner.

Small database footprint
Storage of cumulated results render small local storage and database footprint.

Ability to set receivers frequency for manual monitoring (including aural) directly from detected signals' list.