X-GIS Land Information service

User Guide

Estonian land board 2010

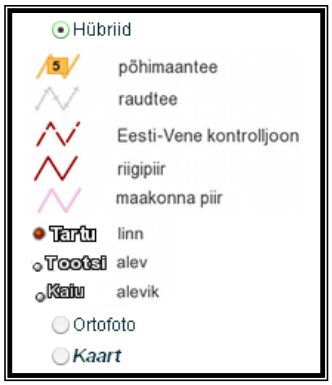
1. Flash Player – a necessary component for map applications

To display X-GIS FLASH map image, it is necessary to install a free component Macromedia Flash Player v8.0 or higher. If you do not have it or have an older version than v8.0, you are offered a download and it will be installed automatically when the user agrees to it and has been authorized to do it.
Go to Macromedia web page for a download of new Player

2. Buttons for Quick Selection of Backdrop Maps

Backdrop maps can be changed with the buttons in the upper left corner of the map window.

Backdrop maps can also be changed by using the radio buttons in the map legend.



3. Navigation in the Map Window

3.1 Quick Select Lists

For a quick navigation in the map window there are the following quick select lists:

3.1.1 Select County/Rural Municipality/Settlement

From the three options selections can be made in the descending order. County first, then rural municipality and then settlement unit. A smaller administrative unit cannot be defined when the bigger one is not selected.

3.1.2 Select Range

The selections in the list of map range define the width of the map window in nature. Selections can be made by predefined options or by manual input of the range value for which you have to choose „Other“.

3.1.3 Select Scale

From the scale list a suitable map scale can be selected. Selections

can be made by predefined options or by manual input of the scale value for which you have to choose „Other“.

3.2 Navigation – Moving around in the Map Window

In X-GIS map application there are several tools for navigation.

3.2.1 Pan

By using the “Pan” button it is possible to move in any direction or at any range the user wants.

3.2.2 Navigation Arrows on the Edge of Map Window

To move in the desired direction on the map, there are navigation arrows on the edges and at the corners of the map window. A mouse click on the arrow moves the image halfway across the window.

3.2.3 Back and Forward Navigation

Using the Back and Forward navigation buttons it is possible to restore accordingly either the previous or next view the user has earlier viewed.

3.3 Zooming of the Map Image

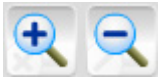
3.3.1 Zoom In and Zoom Out with Mouse Wheel

To zoom in or zoom out the map image, the mouse wheel can be used: when the mouse cursor is over the map, it is possible to zoom in/out with the wheel while the map center remains unchanged. By rotating the mouse wheel away from you, you zoom in and by rotating in the opposite direction you zoom out.

3.3.2 Zoom In and Zoom Out with Zoom Slider

On the right edge of the overview map there is zoom slider with the help of which it is possible to zoom in or out the area visible in the map window. To do that, mouse click on the button in the middle of slider and drag it up or down along the slider.

3.3.3 Zoom In and Zoom Out



To use the Zoom In or Zoom Out buttons, you have to select either of them and thereafter click on the map.

3.3.4 Zoom In and Zoom Out Using Keyboard Buttons Page Up and Page Down

To zoom in/out, also the keyboard buttons Page Up and Page Down can be used.

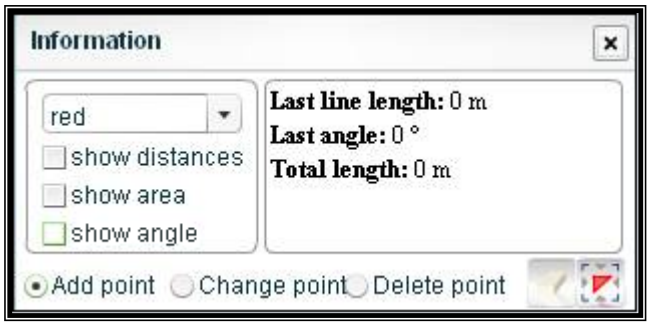
- By pressing or holding down the Page Up button the visible area decreases
- By pressing or holding down the Page Down button the visible area increases

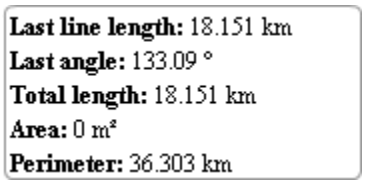
3.3.5 View of Entire Estonia in Map Window

In order to restore the view of entire Estonia, click "Fit All" in the button bar.

4. Measuring Distances in Map Window

By clicking the button Measure Distances a dialog box for distance measurement will open in the map window. In order to measure distance from one point to another, make sure that the button Add point has been activated. Click on the map where you want to add the point. Change point mode allows to change the location of an already entered point. In order to delete a measurement point, Delete point mode must be activated.





Measurement data are displayed in the dialog box of distance measurement. Distances or the angle to North-South direction can be displayed also on the map, for that either show distances or show angle must be activated.

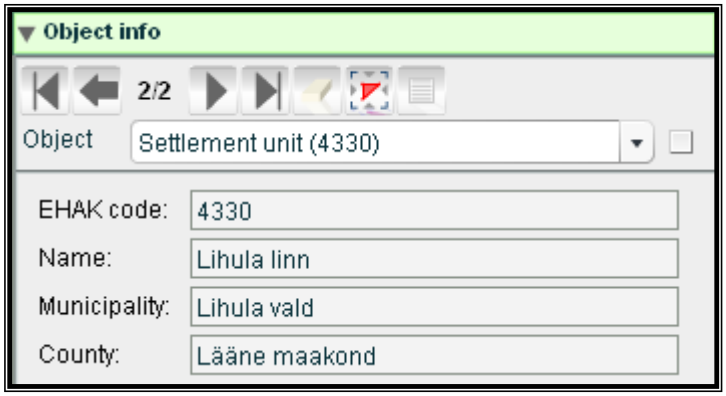
The colour of the line displayed on the map can be changed from the drop down menu of colour.

It is also possible to measure distances with a circle and radius. For that click on the map, hold down the mouse button and draw a circle of needed size.
To display the entire measurement in the map window, press the button Fix  .
To delete the previous measurement click the button  .

5. Information Queries

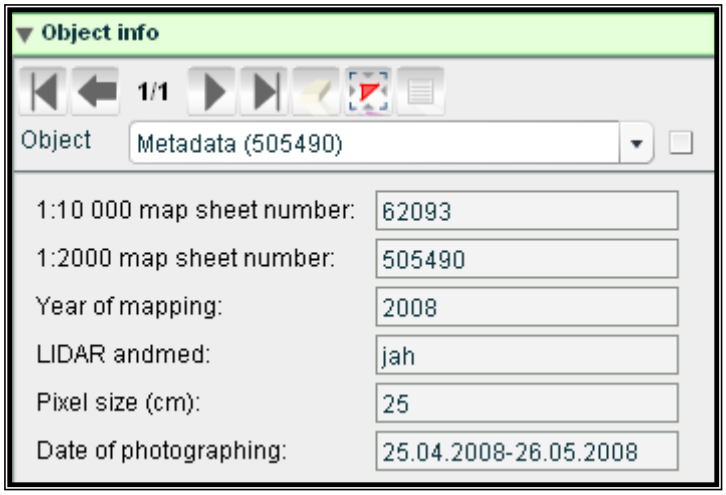
5.1 Map Layer Query

Performing a query on the object selected in the map window. The object for which you request information must belong to a recognizable feature class. In the legend window a corresponding layer must be selected. In order to get information about a map object, you shall press the button Information in the button bar and thereafter click on the map in place of interest. The query result will open in the Object Info panel.



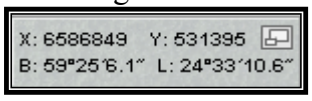
5.2 Metadata Query

This query gives information on which map sheet the queried object is located. Also an info panel will open showing the year of basic mapping, orthophoto production as well as the pixel size and time of flight.



6. Coordinate Panel

In the right corner of the map window there is a semitransparent coordinate bar (the



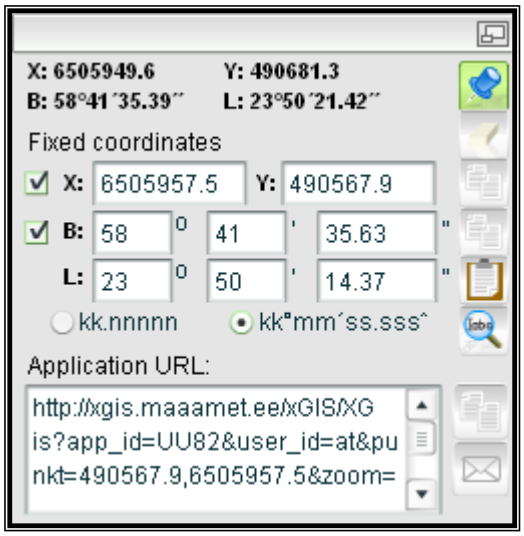
panel can be moved around in the map window). With its screen button it is possible to open and close an enlarged window. In standard mode the coordinate bar shows the cursor coordinates, by opening the window it will be possible to use an additional functionality. The coordinate panel can be dragged into a suitable place in the map window. To view the additional functionality, click the button  .

By opening the form, the data field Application URL will be filled with the address of the active map image and it will be refreshed automatically when the map image is changed.

6.1.1 Coordinate Marking

 With the button Coordinate Marker a point can be selected on the map that will be marked with a rectangular marker with pulsating red circle and the coordinates of which will be displayed in the form fields Fixed coordinates.
When the point is selected on the map, the address of the map image contains the coordinates of the point.

With the button Clear  the selected point will be deselected, the fields of Fixed coordinates will be cleared and the point's reference will be removed from the address.



6.1.2 Copying of Coordinates and Application Link

The tool Copy coordinates is for copying the coordinates on map or the application link/range into some other text redactor, e.g. e-mail, text document, table calculation programme or some other programme.

6.1.2.1 Copy L-Est Coordinates

With the button Copy L-Est Coordinates the fixed coordinates will be copied to the clipboard in the form 6572552, 611766.

6.1.2.2 Copy Geographical Coordinates

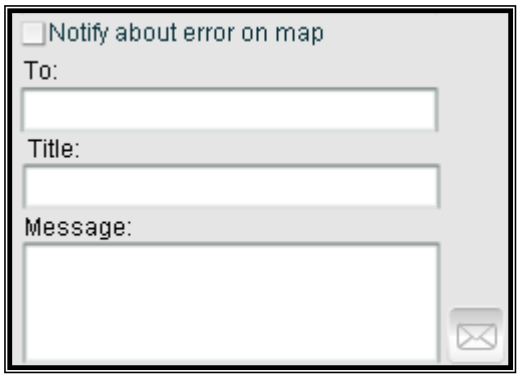
With the button Copy Geographical Coordinates the fixed coordinates will be copied to the clipboard in the form 59°16'35.5'', 25° 57'38.3''.

6.1.2.3 Copy Link

With the button Copy Link the map image address from the data field Application URL will be copied to the clipboard.

6.1.3 Send E-Mail

From the form it is possible to send e-mail with the map application address. By clicking the screen button Send E-mail  fields for e-mail address, title and short message will appear as well as the button for sending. The map image address can be saved or sent to an e-mail address either with or without the selected point. When the point is not selected such URL will be sent that contains BBOX coordinates of the selected map image.



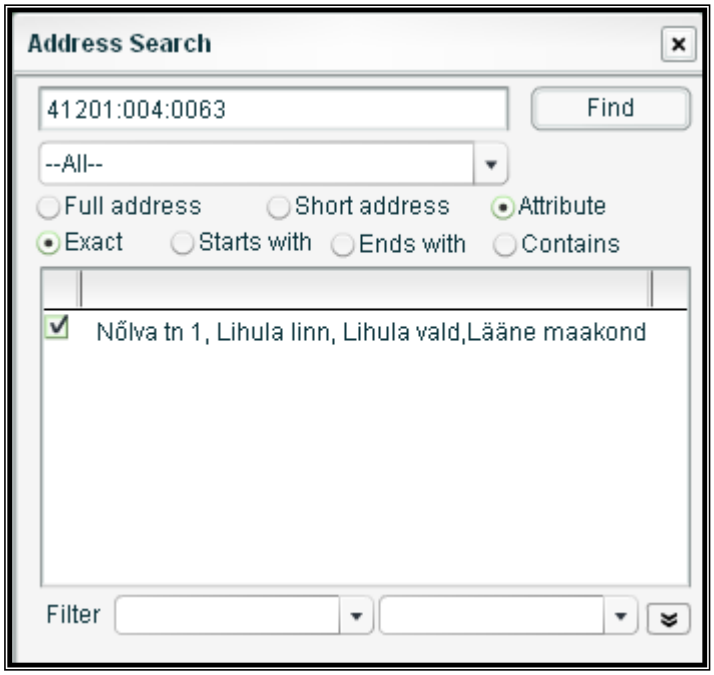
E-mail is sent with the button  - Send Link to E-mail. Before sending e-mail it is checked whether the fields for e-mail address and title are filled, otherwise a corresponding message will be displayed to the user. When the sending of e-mail is successful, a message that e-mail has been sent will be displayed to the user.

7. Searches

7.1 Address Search

By clicking the button Address Search the following form will open. As a next step, select from the dataset field a suitable dataset, it is possible to use by default <All> in case of which the search is performed from all datasets.

The address search can further be specified by: Street address, Full address or Parcel identifier. The default selection is Full address. To search by the identifier, you have to know the exact identifier. Full address and street address enable searches also by the beginning, end or any other part of the address. To perform the search by address, enter the address or part thereof into the input field.
Location query can be performed by the exact address, beginning/end of



the address or whatever part of the address, for that activate one of the four radio buttons:

To limit the search, list filters of different counties and rural municipalities can be used.

The results are displayed on the map with a cross that is surrounded by a blinking circle. By moving the cursor to the cross, a text characterizing the object (e.g. address) will be displayed next to it.

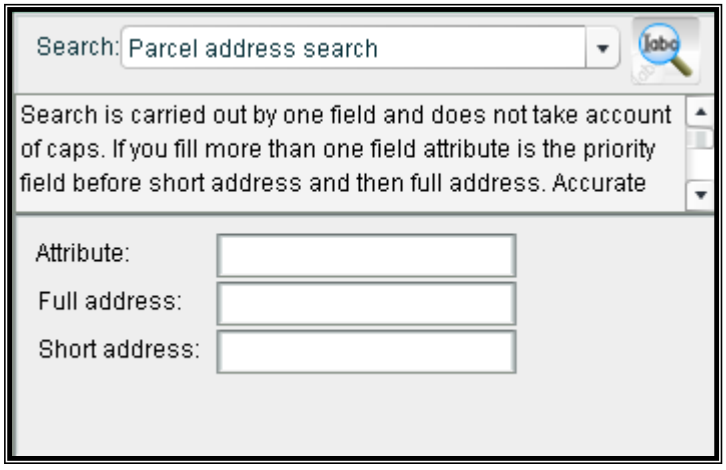
7.2 Alphanumeric Searches - WFS Searches

7.2.1 Parcel Search

In the Land Information Service queries to find cadastral parcels can be performed from two different search engines.

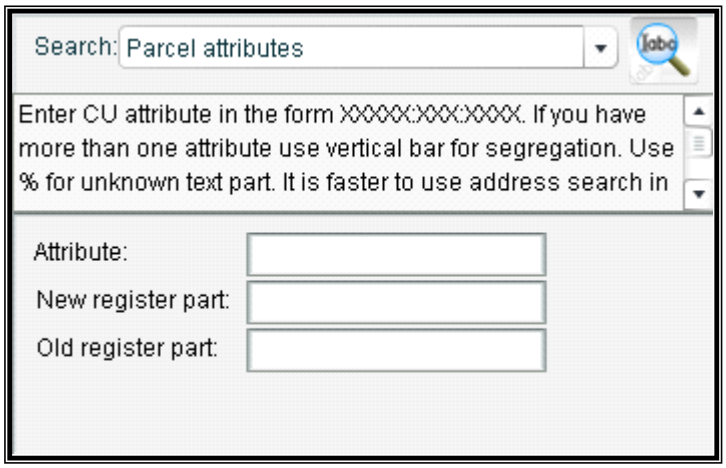
7.2.1.1 Parcel Address Search

Parcel address search can be performed by the parcel identifier, street address and full address. In text fields a % mark can be used to denote whatever part of the text. Searching by the identifier can be performed either by one identifier or several identifiers that have been separated by a vertical bar, or by a part of single identifier using asterisk to denote whatever part. E.g. 63601:*:0940 or 63601:003:*



7.2.1.2 Parcel Identifier Search

The parcel identifier(s) must be entered in the form: XXXXX:XXX:XXXX. Entering several identifiers, they must be separated by a vertical bar (|). Properties can be searched also by the register part number, using either the old or new register part number.



7.2.2 Other Searches

Task – The user can perform searches also in the task layer. To find a task, its number and/or street address shall be entered.

Settlement Unit – It allows performing searches for different settlement units – cities, towns, small towns, villages

Map Sheets 1:10 000 – The user can perform searches by the map sheet index of the Estonian Basic Map 1:10 000.

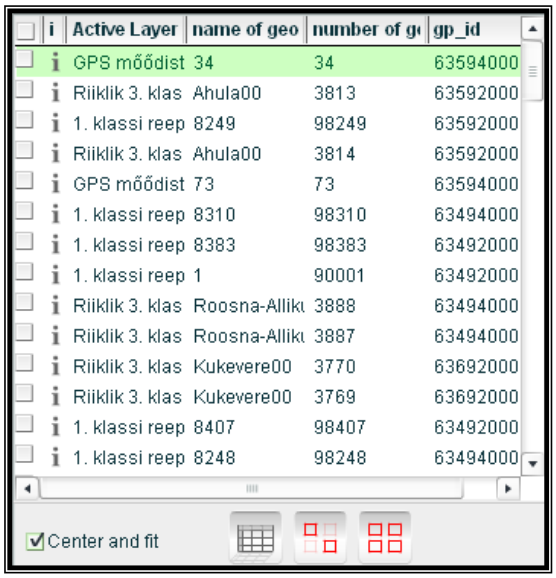
Map Sheets 1: 2000 - The user can perform searches by the map sheet index of the 1:2000 maps.

Geodetic Points (I and II Order) - The user can search for the I and II order geodetic points.

Geodetic Points (other) - The user can search for the III order and other geodetic points.

7.2.3 Display of Search Results

The user can display search results on the map as a marker one by one by clicking the desired table row. When the Center and fit box is checked, centering and fitting will be performed; otherwise the map will not be refreshed when the map range is the same as search results total BBOX.



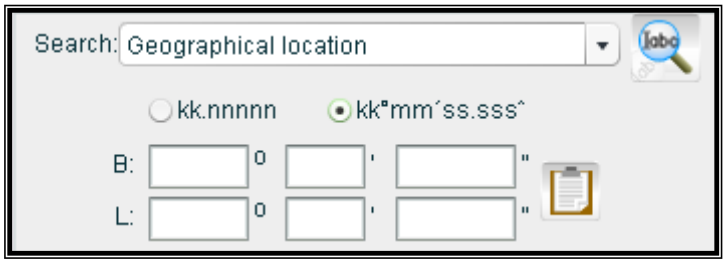
7.3 Special Searches by Coordinates

7.3.1 Search by Lambert-Est Coordinates

Coordinates can be entered into the search fields manually, e.g. in the form X = 6506629.5 and Y= 493380.0. Coordinates can also be copied from the coordinates panel by using the button Paste.

7.3.2 Search by Geographical Coordinates

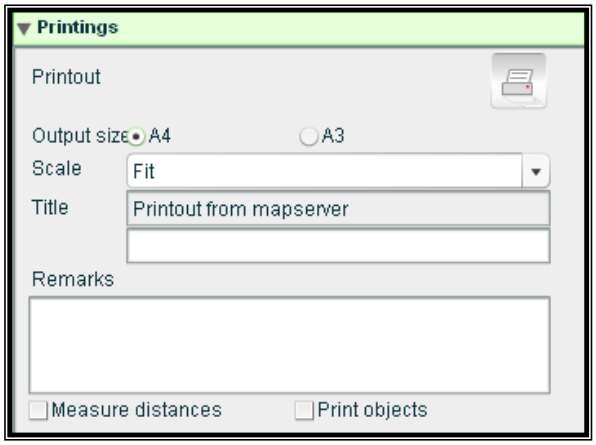
Coordinates can be entered manually in two ways: in decimal system and when the option kk◦mm′ss.ss′ is selected, in sexagesimal system. Coordinates can also be copied from the coordinates panel by using the button Paste.



8. Printouts

8.1 Printout Design (html, pdf)

Printing panel is one option to print out the map image. From the panel it is possible to change the printout within the predefined options.



8.2 Quick PDF Printout

From the map image it is possible to make a quick pdf-file. A file in which the printable information has been configured beforehand. The user shall only press the button Print and thereafter either open the printout in the Internet browser window or save the pdf-file in his/her computer and open it with an appropriate program. In both cases it is possible to print the file after opening. Even the map legend will be added to the printout.

8.3 Printout in PNG- Format

When you are interested only in the map image, the easiest way to print it out is to make a png-format image of it and to save it in your own computer or open it in the Internet browser window and print it from your computer.

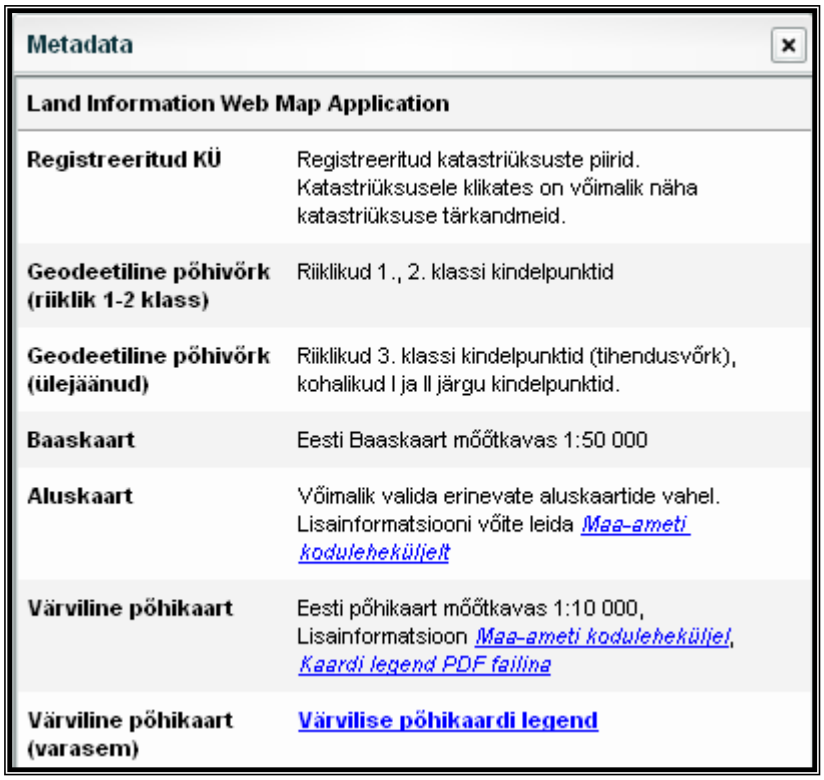
9. Map Layer Selection and Legend

Map Layer Selection and Legend. The legend window is meant for managing the map layers in the map window.

To open/close the legend window, click the button Map Layer Selection and Legend. In the legend window there will be displayed a list of map layers. The layers to be displayed in the list depend on the zoom level of the map window, as the display of layers can be limited by the visibility range. The layers displayed in the map window have their check boxes ticked off in the legend window; unselected layers are not activated, if necessary, the user can activate them. The map image will be refreshed automatically after the selection or deselection of the layers.

One map layer can contain several features, which appear into the window only in case the map layer's check box is ticked off. By selecting the check box of the set of map layers (MapSet) the entire set of map layers is activated. The name of layer set is written in the legend in Bold and Italic. E.g. ***Cadastral Map*** and ***National Geodetic Network.*** When there is a check box in front of the map layer, the layer can be activated or deactivated. When there is an additional icon  , it is possible to activate or deactivate the display of information in the object information cell in the accordion panel. In order to display the object information, the respective layer in the legend must be checked and the information icon activated and by using the query tool to click in the map window on the object for which information is requested, an accordion panel for that object will be opened. When there is no need to display the map layer information in the info panel, the first check box can be deactivated.

To display the textual information on the map layers, click in the legend window the button Map Layer Metadata  as a result of a metadata window will be opened in a separate window. In the metadata window information will be displayed both on the application, i.e. map set, the legend groups and legend feature classes. Information will be displayed only for these layers for which metadata have been input.



10. Support

If you have any problems or questions regarding the use of the application, please send an e-mail with the description of problem or question to kaardirakendus@maaamet.ee or call (+372) 6750866. A more detailed information about the data in the Land Information Service can be obtained from the Land Board's geoportal at the address: http://geoportaal.maaamet.ee/index.php?lang_id=1&page_id=106