



Latvian Geospatial
Information Agency

Geographical Name Processing for the Topographical Maps at the Latvian Geospatial Information Agency

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Group of Experts on Geographical Names (UNGEGN)
Warsaw, June 29 – July 01 2015





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Laboratory of Toponymy

Specialists of Laboratory of Toponymy develop and inspect toponymic data for maps and geospatial data produced by LGIA (develop – for map scale 1:50 000, inspect – the rest).

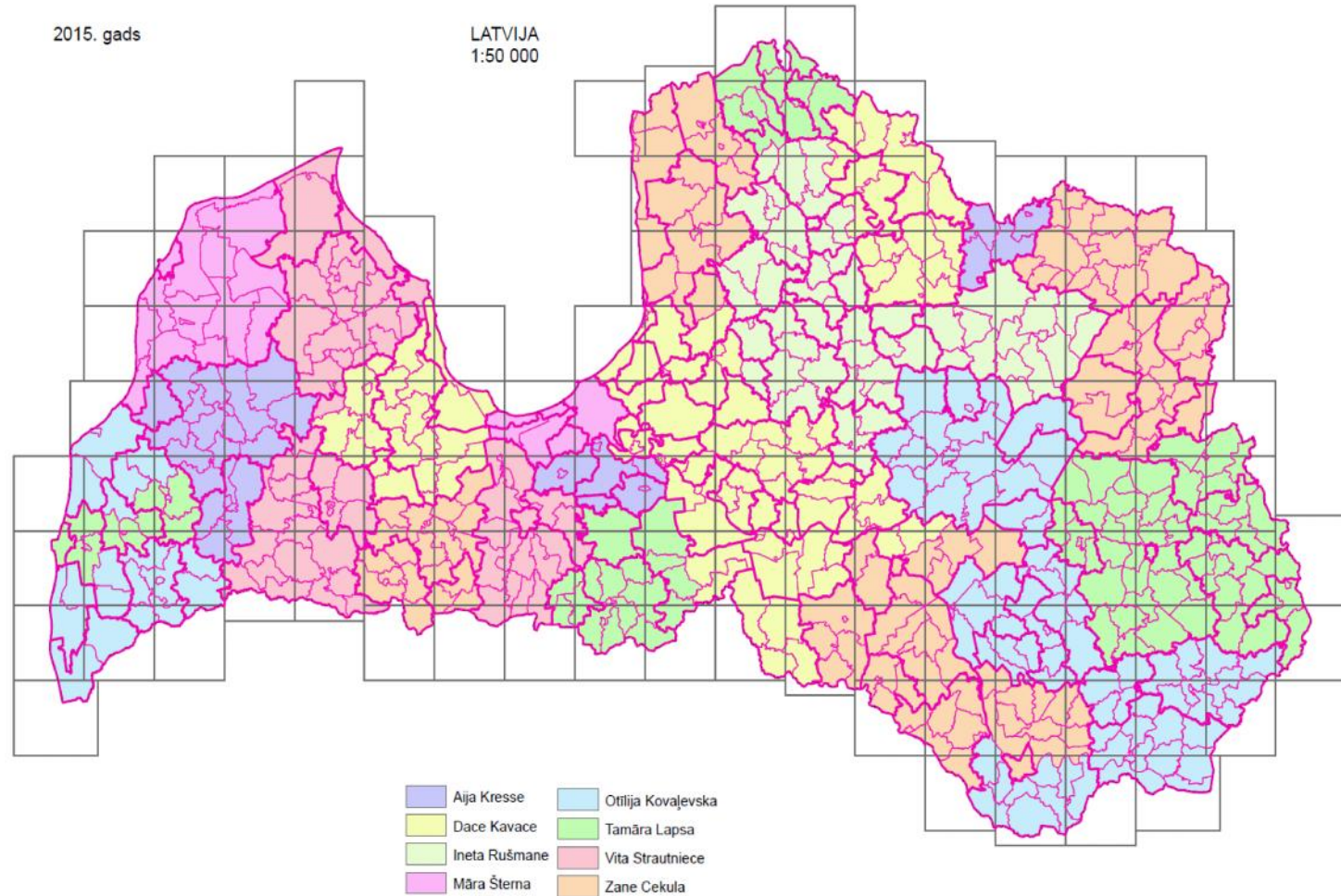
In year 2015 there are 9 employees in Laboratory of Toponymy. Each toponymist works with a definite area of Latvia (the whole territory of country – 64 000km²), for which almost all of them have gathered experience up to 10-20 years or even more. This experience is invaluable.

For the working area every toponymist develops everything – toponymic data for topographical maps in different scales, for Geographical Names Database (GNDB), for official naming of natural features, answers questions regarding toponymy submitted by LGIA cartographers and map editors, other institutions and stakeholders.



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Laboratory of Toponymy



Each toponymist works with a definite area of Latvia 3



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The main map scale specialists of Laboratory of Toponymy works for is 1:50 000.

At this scale Geographical Names Database data covers whole country.

Now the process of official naming of natural features is going at this scale, too.



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Topographic map at scale 1:50 000

131 sheets of the Topographical map at scale 1:50 000 (according to the TKS – 93 map sheet division), covers the whole territory of Latvia.

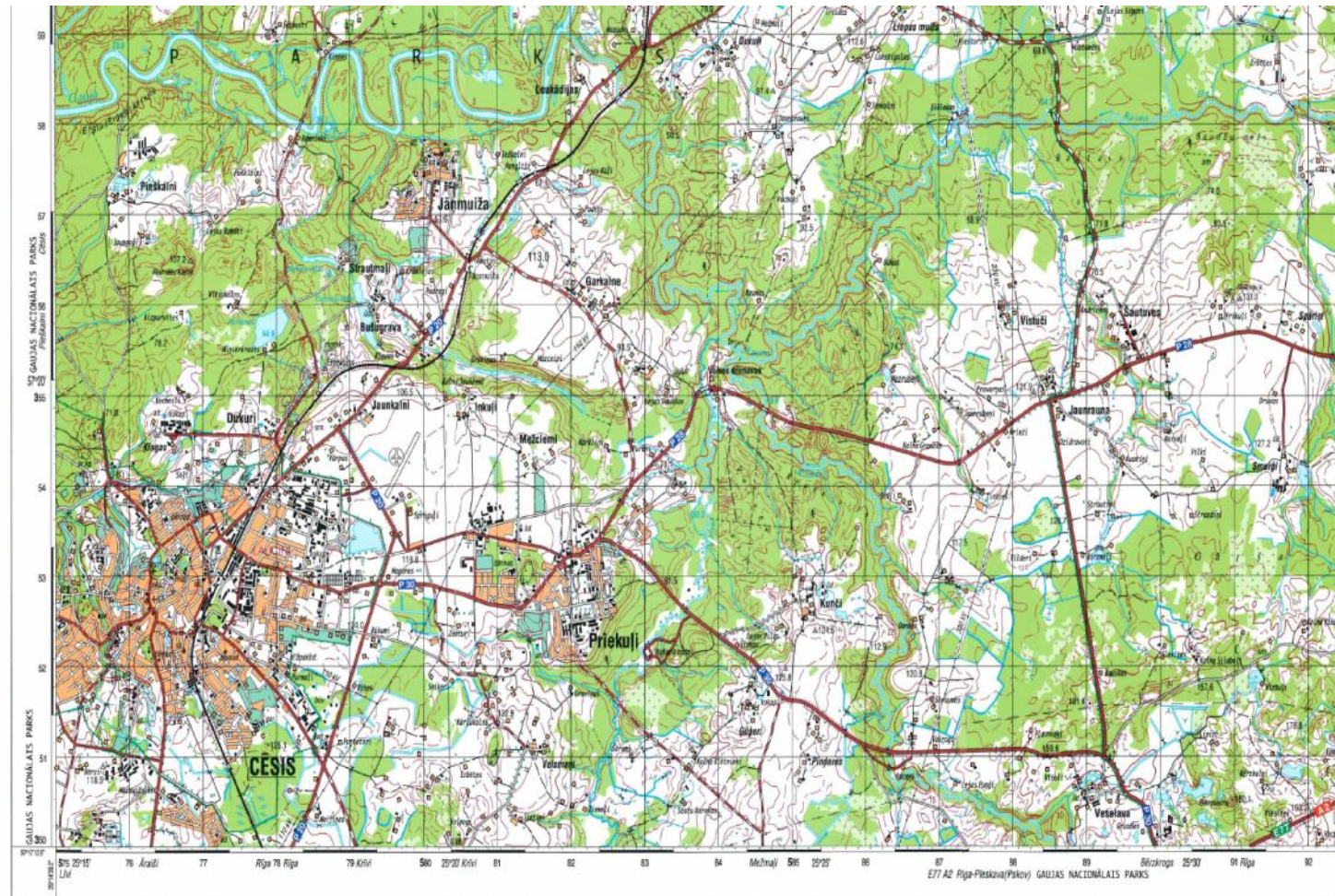
The first edition of this map was prepared in period from 1998 to 2007.

The second edition was prepared from 2005 to 2012.



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Topographic map at scale 1:50 000 the 2nd edition



4342 CĒSIS

4324 SKJENE



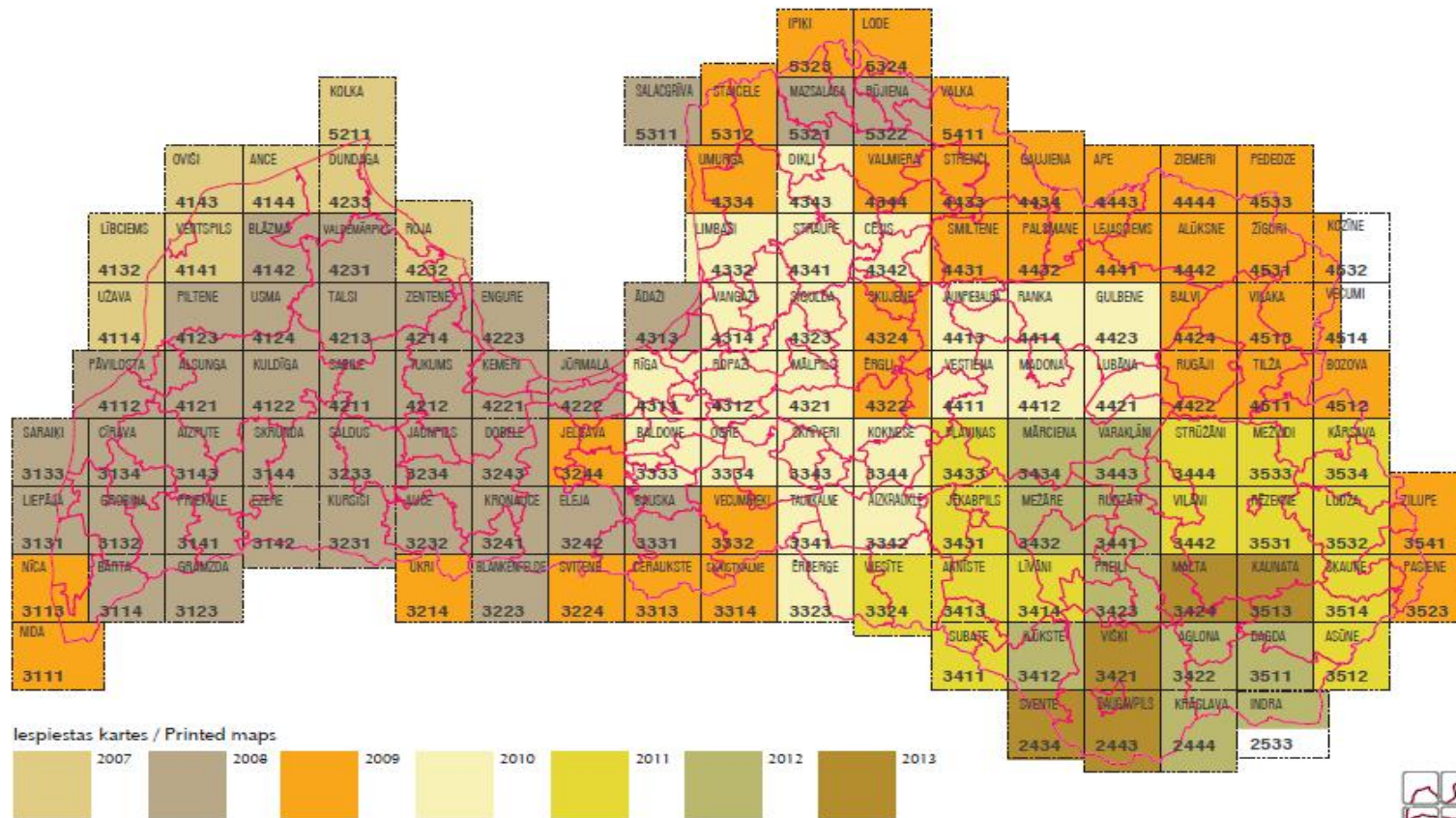
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Topographic map at scale 1:50 000 the 2nd edition

LATVIJAS TOPOGRĀFISKĀ KARTE MĒROGĀ 1 : 50 000 / TOPOGRAPHIC MAP OF LATVIA AT SCALE 1:50 000

2. izdevums / 2 edition

iespiestās kartes / printed maps





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Topographic map at scale 1:50 000 the 3rd edition

From year 2012 to 2013 the preparation of the third edition was started. The international standardized data coding system DFDD was used for the first time for this edition.

Preparation of the third edition goes in digital format only. Until this corrections and additions of toponymy were written by hand on printed map sheets.



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Some history

Preparation of the third edition of Topographic map at scale 1:50 000 in general is the fourth time when employees of Laboratory of Toponymy «walk all over» the territory of Latvia at scale 1:50 000.



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Some history

First time this «walk» was done in 1994-1999 after the Laboratory of Toponymy had been established for developing a geographical names coverage for the Satellite map. It was completely unique event - for the first time after the reinstating the independence the cartographic toponymy for the whole country was made in Latvian in so large scale.

Laboratory of Toponymy carried out an extremely large field work during this period - our specialists collected and checked geographical names and information regarding the corresponding populated places and nature features on the spot in each of more than 500 administrative units.

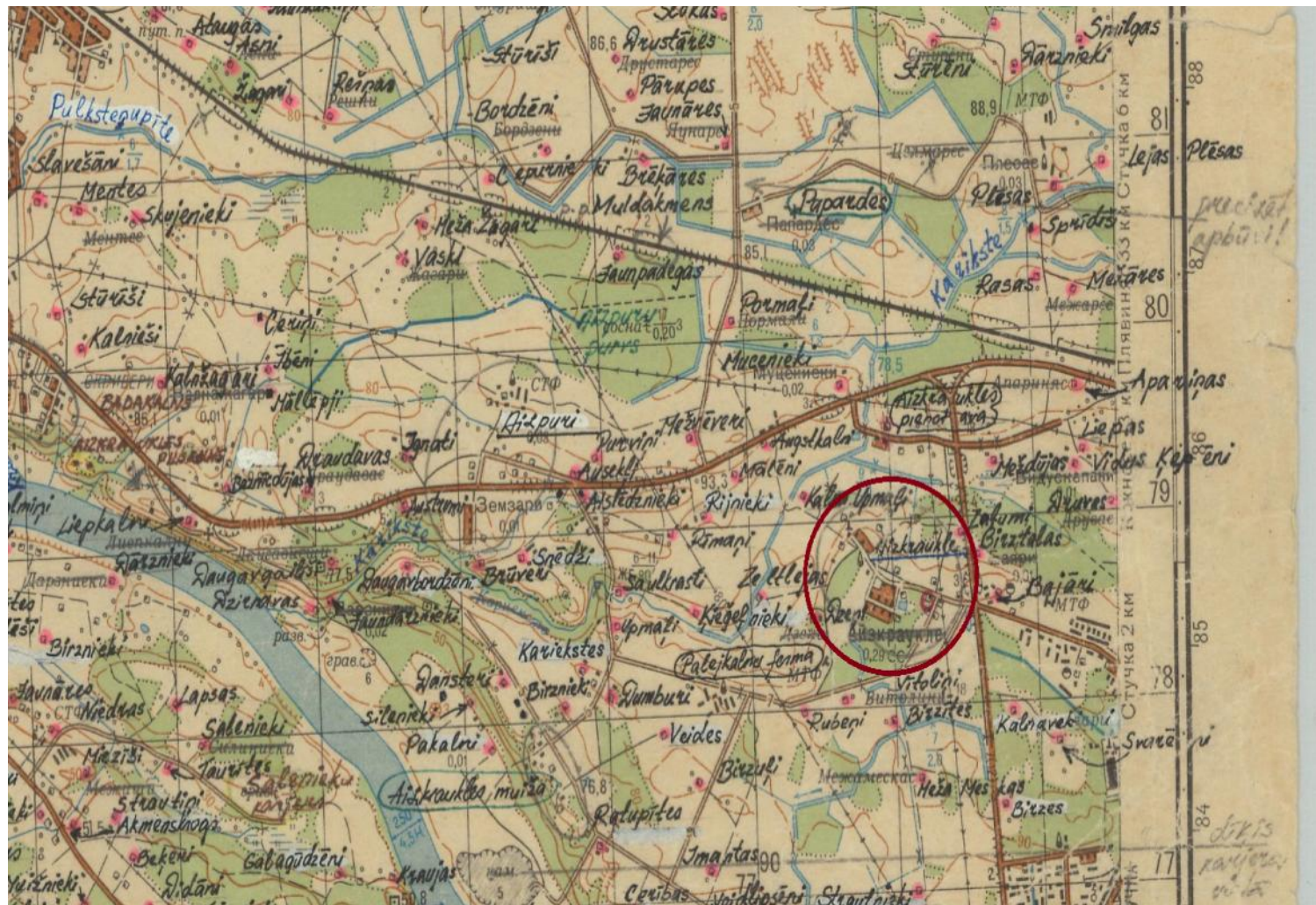
Today amount of field work is decreased radically. Communication via e-mail and phone has come instead.



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Some history

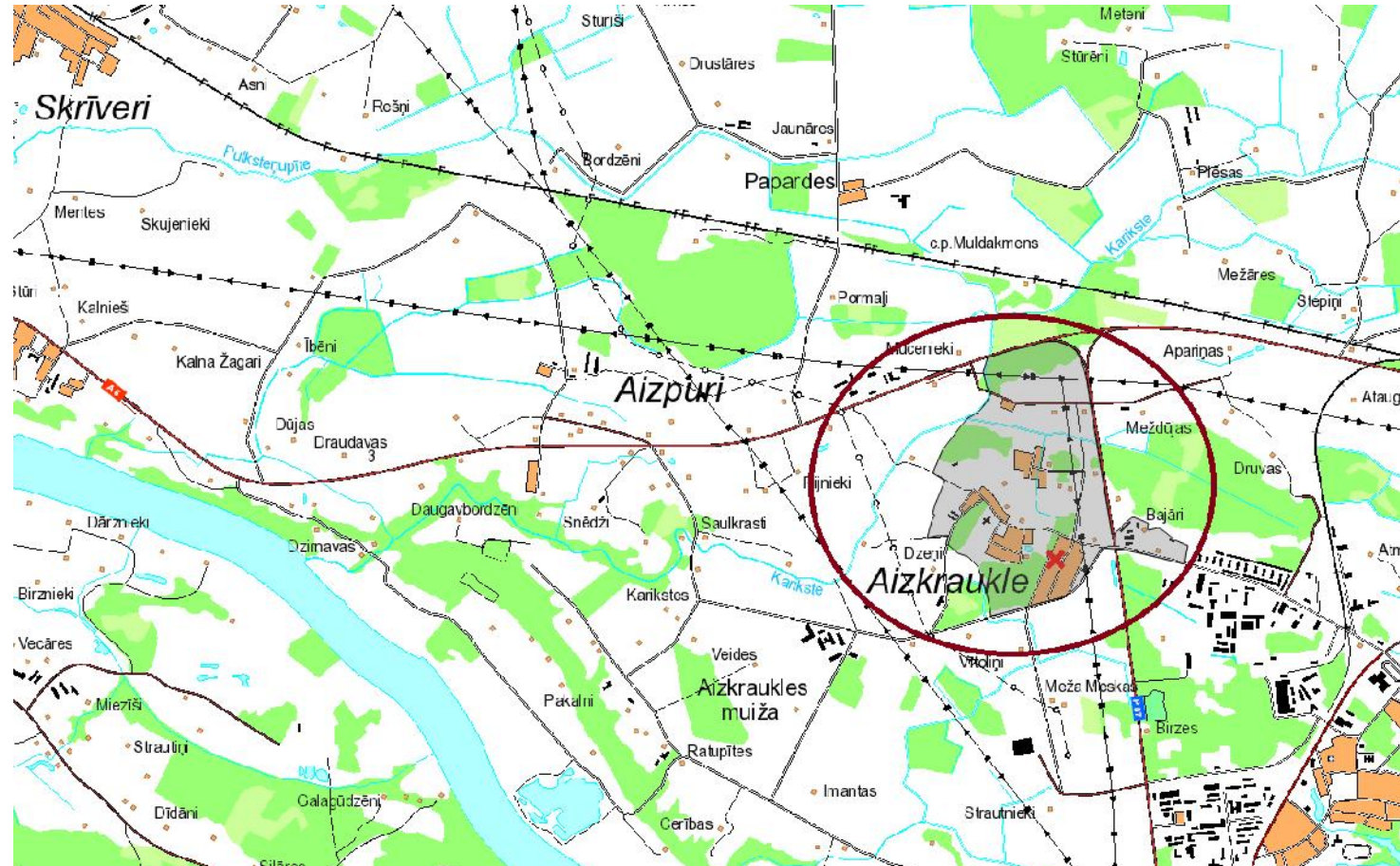
Geographical names draft for the Satellite map at
scale 1: 50 000





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Topographic map at scale 1:50 000 the 3rd edition



Toponym data updating and elaborating, drawing geometries

Topographic map at scale 1:50 000 the 3rd edition

The main data sources for geographical names updating:

1. Geographical Names Database
2. National Address Register
3. Regional planning materials and consultations with local governments
4. Previous editions of different state maps, especially the Satellite Map of Latvia
5. Toponymic field work data
6. Latvian Place Names Card Index at the Institute of Latvian Language, University of Latvia
7. Historical maps
8. Maps, compiled outside LGIA ("Jāsa ta" etc.)
9. Different publications, web resources (e.g. melioracija.lv, upes.lv, ezeri.lv)

Topographic map at scale 1:50 000 the 3rd edition.

Workflow for developing the toponymic data

1. Compiling of initial electronic data set (from the 2nd edition of the map, GNDB, National Address Register).

2. Finding out discrepancies between data from these sources, checking, correcting and updating homestead, village and other names and their locations in GNDB.

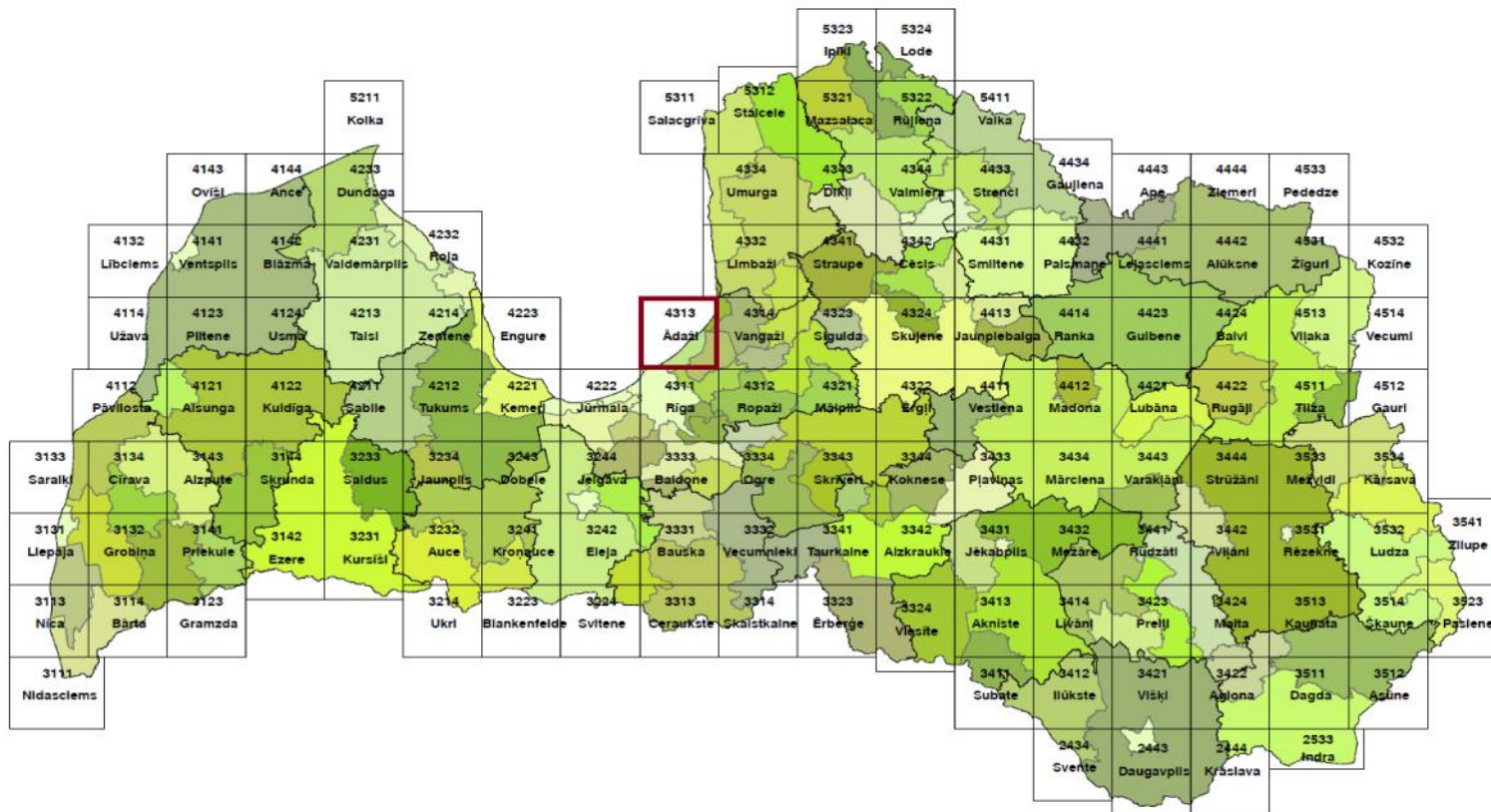
3. Drawing and elaborating feature geometries (mainly for villages and streams) in Geographical Names Database.

4. Extracting the new (elaborated and updated) toponymic data set from the GNDB and submitting to the Cartographic Division for updating the data on map.



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Topographic map at scale 1:50 000 the 3rd edition

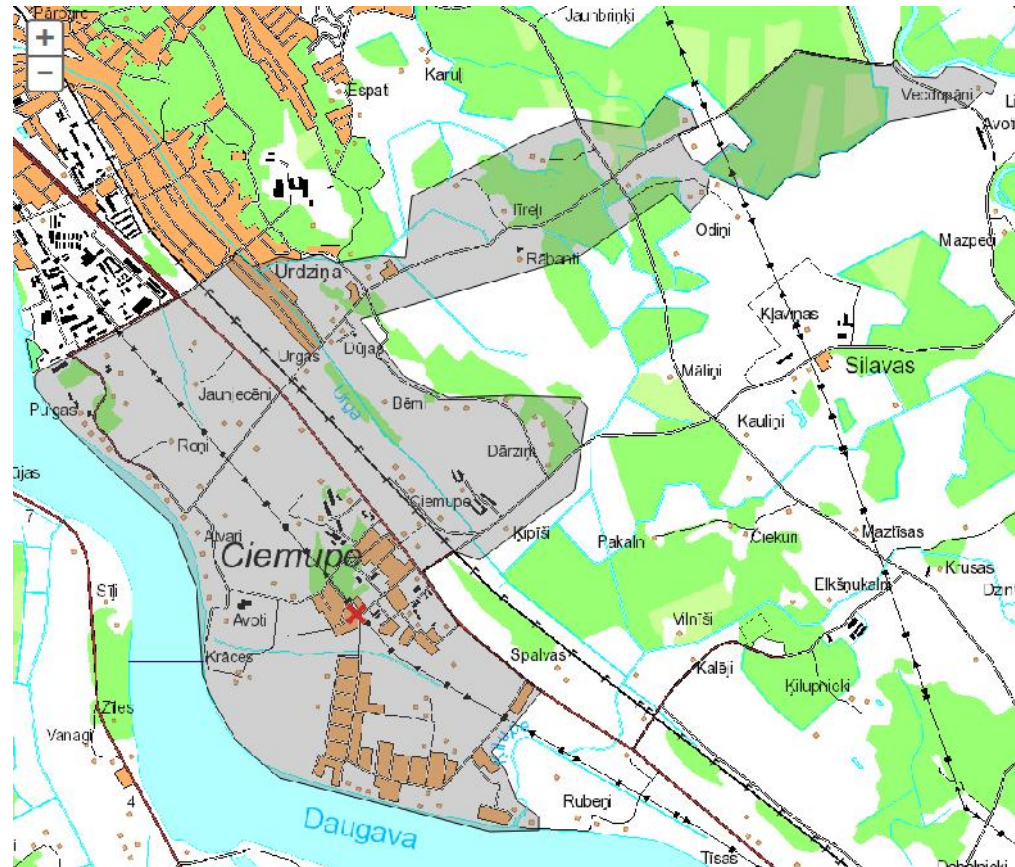


First sheets are going to be issued in the
second half of 2015

Topographic map at scale 1:50 000 the 3rd edition Challenges. Populated places

1. Lack of unified conception among self governments about what is village and where to draw its border. Even very distant houses, standing behind forests or swamps, are sometimes registered in village.
2. Sometimes villages registered as existing are uninhabited or even without any dwelling houses.
3. Homestead names are changing:
 - Owners can rename them quite easily, if they don't like the existing name.
 - Due the administrative-territorial reforms or eliminating villages – there should not be two or more houses with the identical names in the same rural municipality or the same village.
4. Spelling mistakes and other inaccuracies in officially approved names.

Topographic map at scale 1:50 000 the 3rd edition Challenges. Populated places



Very distant houses, even those standing behind forests or swamps, are sometimes registered in the willage

Topographic map at scale 1:50 000 the 3rd edition Challenges. Nature features

1. River lines need to be clarified, especially their upper courses since data maintained by different institutions are contradictory.
2. Name placement of areal features should be specified.
3. Sometimes it is impossible to check earlier collected data due to depopulation of rural areas.

Topographic map at scale 1:10 000

2792 sheets of the Topographical map at scale 1:10 000 according to the TKS – 93 map sheet division, covers the whole territory of Latvia.

Compiling and updating topographic maps at scale 1:10 000 by LGIA can be divided in three cycles.

1. Cycle. Compiling of maps (2000-2004).
2. Cycle. Updating of maps (2004-2009).
3. Cycle. Updating of maps (from 2009). The cycle is expected to be completed in year 2016. 370 map sheets is going to be prepared in 2015.
4. Cycle is planned to be started in 2016.

Topographic map at scale 1:10 000 the 3rd cycle

Toponymic layer is made by cartographers, using the GNDB as the main data source. Specialists of Laboratory of Toponymy give consultations in cases of uncertainties regarding:

- river upper course lines
- forest, bog, mire, swamp and named area names placement
- belonging of homesteads to particular villages
- cemetery names
- small natural feature names (microtoponyms), not included in cartographic data at scale 1:50 000
- usage of dialectal names
- variant and parallel names



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Topographic map at scale 1:10 000

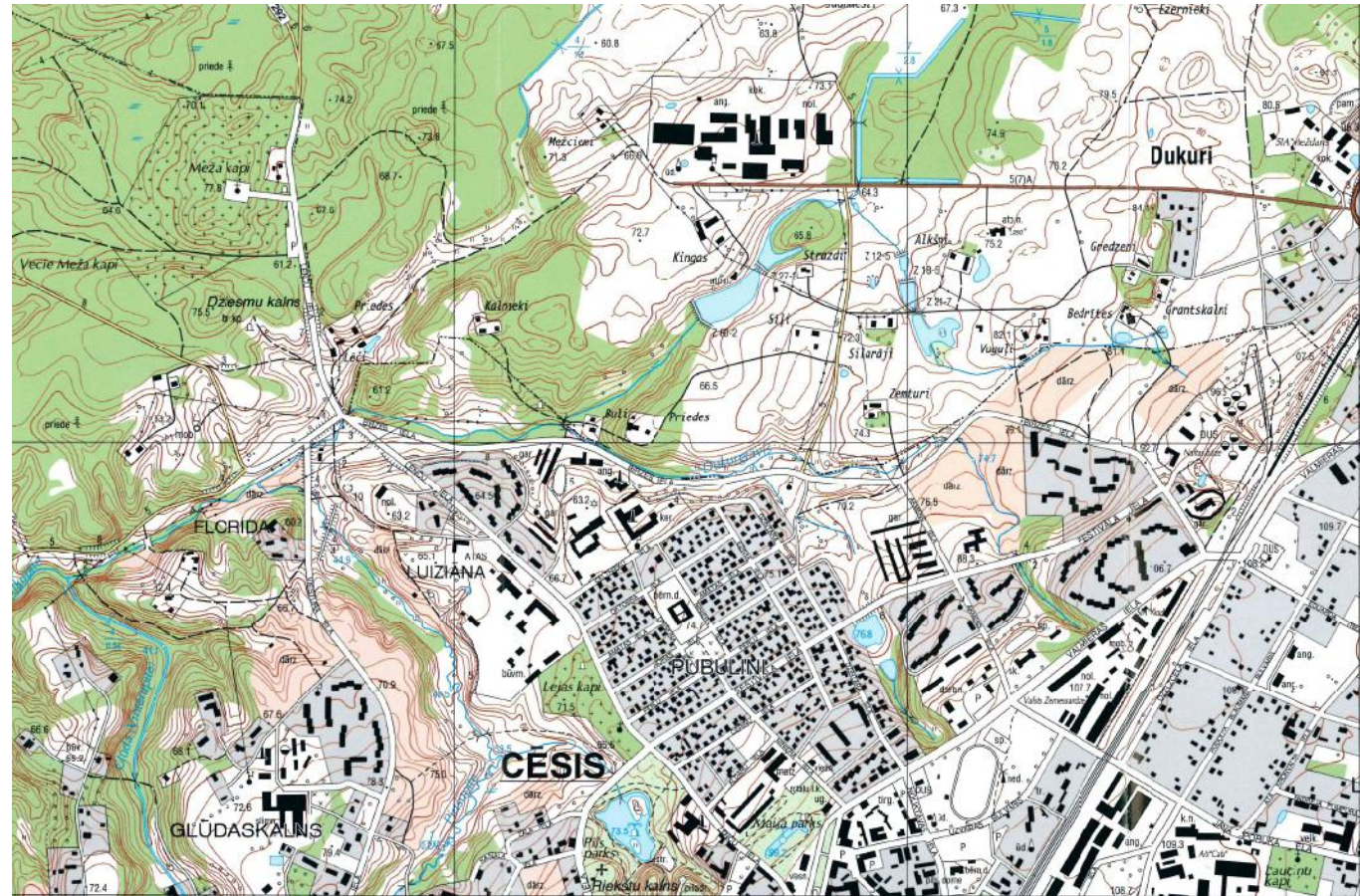
Two versions of the map are available: the simplified (without relief contour lines) and the full version.

Starting in 2010, the development of full version 1:10 000 topographic map is suspended now.



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Topographic map at scale 1:10 000

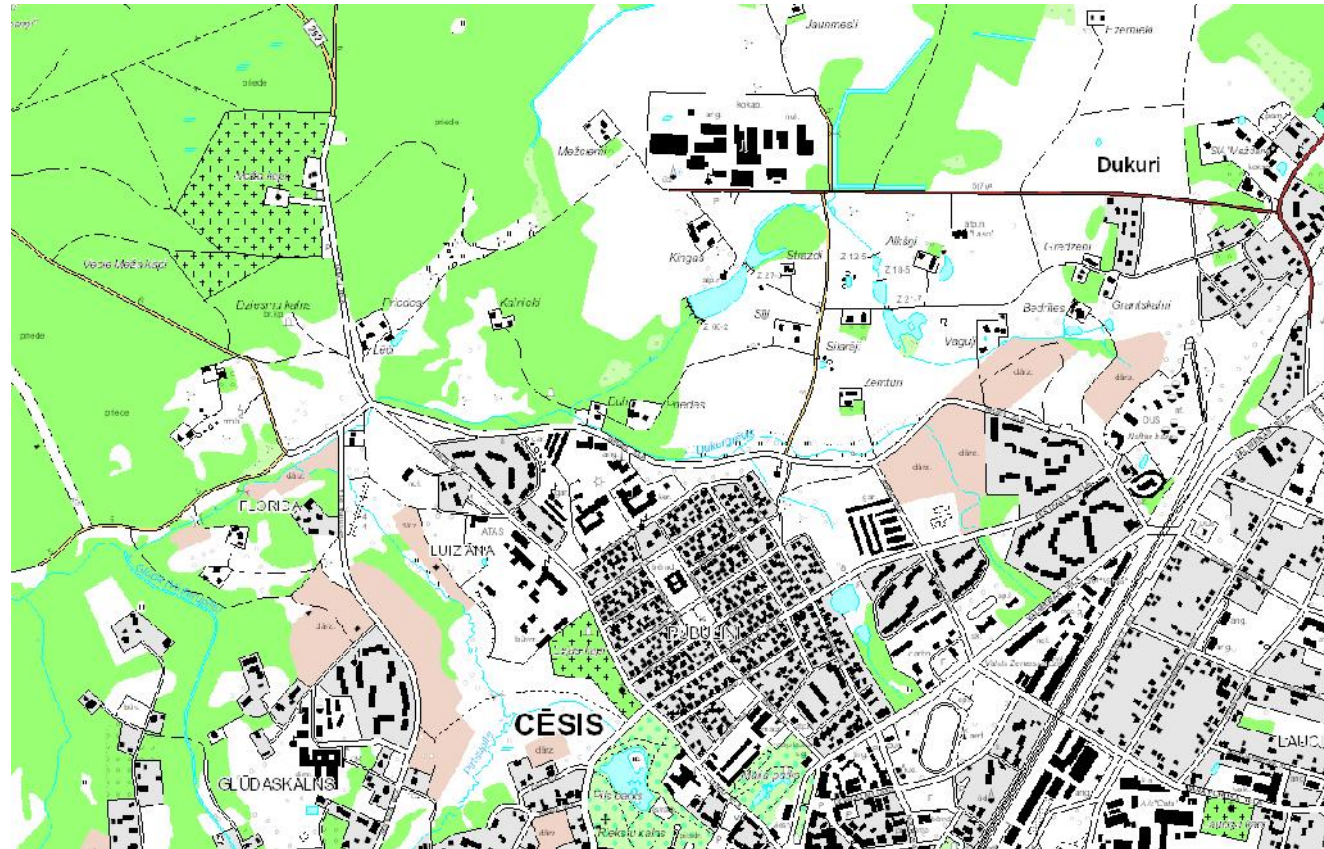


The full version



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Topographic map at scale 1:10 000



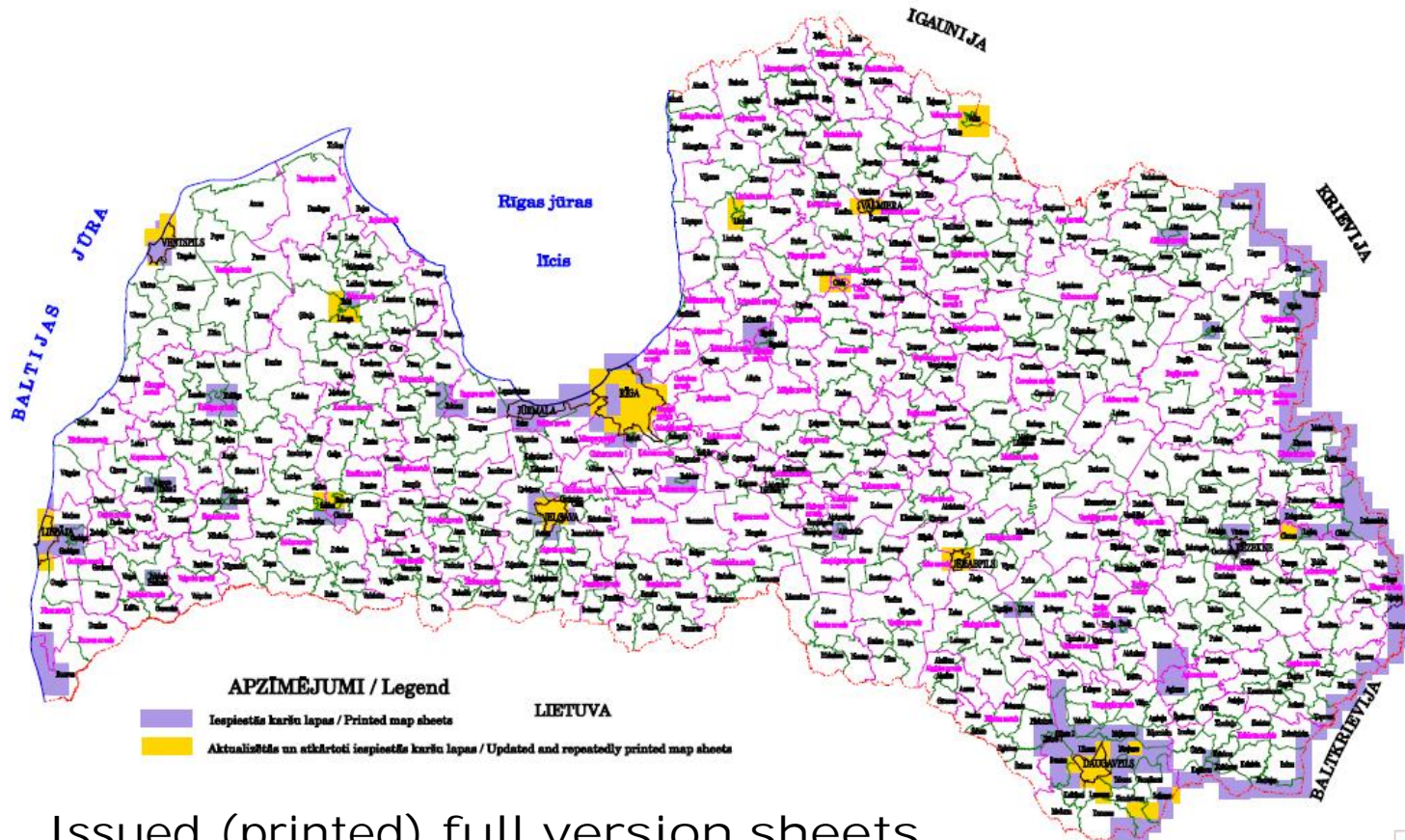
The simplified version



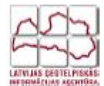
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Topographic map at scale 1:10 000

TIRAZĒTĀS PILNĀS TOPOGRĀFISKĀS KARTES M 1: 10 000
Reproduced Full Topographic Maps at Scale 1:10 000



Issued (printed) full version sheets
are marked in yellow and violet



Overview Map of the Republic of Latvia, at scale 1:250 000

Toponymic layer is compiled by cartographers, specialists of the Laboratory of Toponymy inspect and update the layer during the updating of the map.

The map consists of three sheets, which, glued together, can form a large-size wall map.

1st edition is released in 2008.

2nd edition is released in 2012.



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Overview Map of the Republic of Latvia at scale 1:250 000 2nd edition





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Thank You for Your attention!

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