



INTERNATIONAL PROJECT LAUNCHING WORKSHOP ORGANISED
BY NORWEGIAN MAPPING AUTHORITY KARTVERKET IN COOPERATION
WITH AGENCY FOR LAND RELATIONS AND CADASTRE OF MOLDOVA



Kartverket

BASEMAPS FOR DEVELOPMENT – STATUS OF THE PRODUCTION

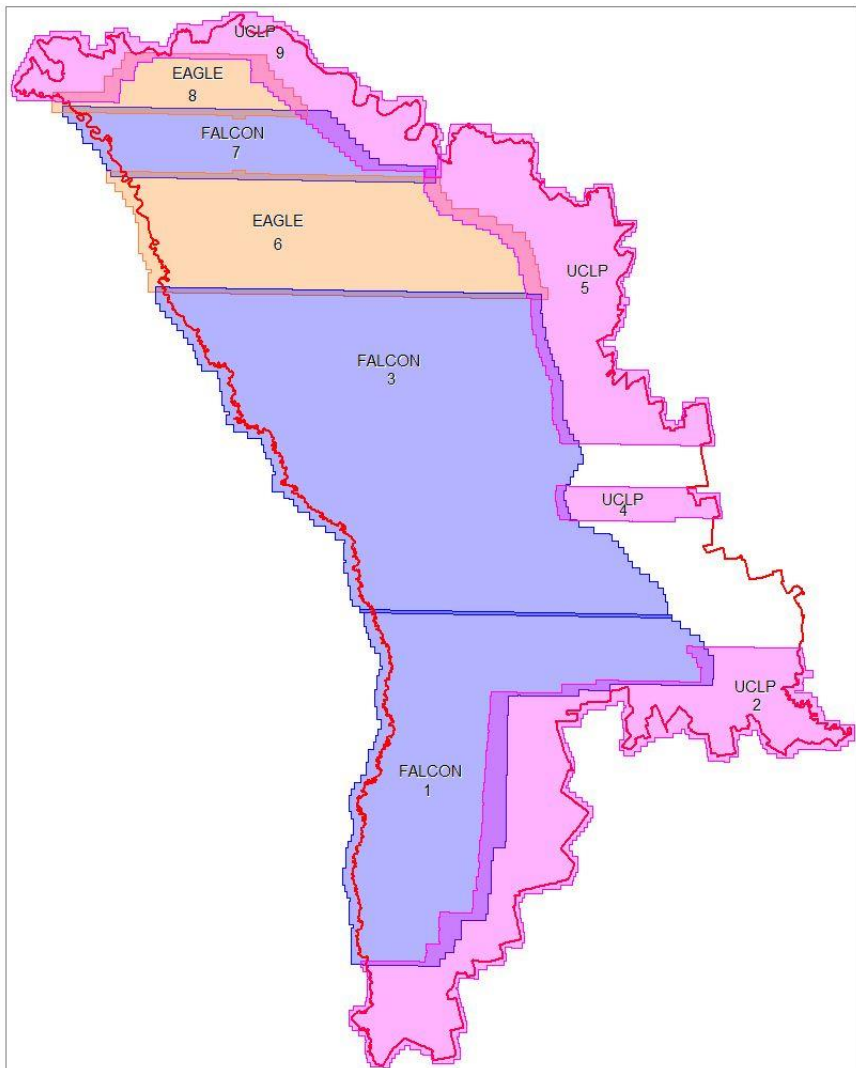
Mrs. Svetlana Zaharchina
Head of Photogrammetry and Mapping Department S.E. INGEOCAD



Проект «Система регистрации недвижимости для Молдовы - Карты»

- *Министерство иностранных дел Норвегии выделило грант на проект «Система регистрации недвижимости для Молдовы - Карты». SK – агентство картографии Норвегии реализовывает этот проект в тесном сотрудничестве с ALRC. Реализация началась в 2016 году, в 2019 проект перешел в свою завершающую стадию – стартовала третья фаза проекта.*
- *Основная цель проекта - создание новой общенациональной крупномасштабной электронной карты в векторном формате для поддержки надлежащего управления и экономического роста страны.*

Покрытие аэрофотосъемкой территории РМ в 2016 году



- Производство новой электронной карты основано на аэрофотоснимках, полученных в 2016 году в рамках проекта «Система регистрации недвижимости в Молдове - Ортофото».

Общая площадь аэрофотосъемки 31675 км²

Спецификации проекта

Спецификации определяют базовые слои карты, описывают требования и правила сбора информации, необходимую точность и полноту отображения графической информации



Technical Specifications

for procurement of
mapping of flood risk areas in Moldova
Project LIN 09903

for delivery to the
Agency for Land Relations and Cadastre of the Republic of
Moldova (ALRC)
Case number 10/04278

Open procedure
based on part 1 and part 12 of the regulation on
for procurement above the EEA threshold value

LINE MAPS UML SCHEMAS AND FEATURE TABLE

LINE MAPS FOR DEVELOPMENT

Layer	ObjType	Medium	Href	B-std	C-std	Subjects for discussions	Definitions	Minimum Size
1000	ProjectBoundary	L			M	M	Delimitation of project boundary	
1001	AdministrativeBoundary	L						

Layer	ObjType	Medium	Href	B-std	C-std	Subjects for discussions	Definitions	Minimum Size
2001	ContourLine	L					Line in the terrain with a fixed height value (z value) above the reference height.	
2003	DepressionContourLine	L					Line in the terrain with a fixed height value (z value) which describes a depression in the terrain.	
2101	SpotHeightPeak	P					Point with a measured height value located on a pronounced elevation or peak in the terrain.	Peaks higher than 25 m. Always on islands less than 25 m above lake level.
2102	SpotHeightDepression	P					Point with a measured height value, located in a pronounced depression in the terrain.	Depressions deeper than 5 m
2200	BreakLine	L					Line used where the terrain pronouncedly changes slope and/or direction (across the terrain line). Terrain lines are typically to be used in depressions, on ridges and peaks, at the bottom of depressions, saddles or on flat areas with little other height.	
2201	CuttingEdge	L					Excavation in original terrain delimited by the cutting slope and the edge/formation of the road.	
2202	EmbankmentBoundary	L					Embankment on the original terrain delimited by the embankment slope and edge/formation of the road.	
2300	Grid	P						

QUALITY GUIDELINES

LINE MAPS FOR DEVELOPMENT

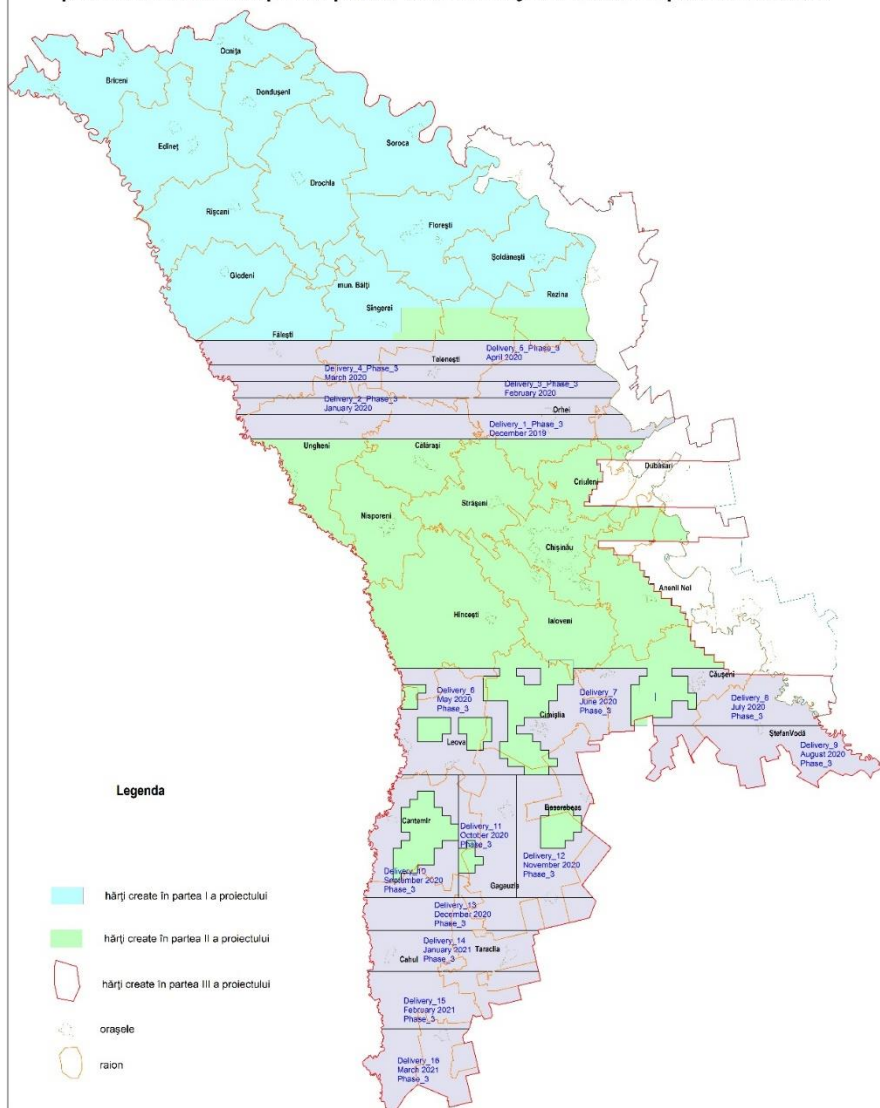
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2201	CuttingEdge	L					Excavation in original terrain delimited by the cutting slope and the edge/formation of the road.	
2202	EmbankmentBoundary	L					Embankment on the original terrain delimited by the embankment slope and edge/formation of the road.	
2300	Grid	P						

Feature Table Moldova

Layer	ADMINISTRATION	ObjType	Medium	Href	B-std	C-std	Subjects for discussions	Definitions	Minimum Size
1000	ProjectBoundary	L				M	M	Delimitation of project boundary	
1001	AdministrativeBoundary	L							
Layer	TERRAIN	ObjType	Medium	Href	B-std	C-std	Subjects for discussions	Definitions	Minimum Size
2001	ContourLine	L					To be produced from Laser Scanning, see Technical Specifications, Chapter 6	Line in the terrain with a fixed height value (z value) above the reference height.	
2003	DepressionContourLine	L					To be produced from Laser Scanning, see Technical Specifications, Chapter 6	Line in the terrain with a fixed height value (z value) which describes a depression in the terrain.	
2101	SpotHeightPeak	P					To be produced from Laser Scanning, see Technical Specifications, Chapter 6	Point with a measured height value located on a pronounced elevation or peak in the terrain.	Peaks higher than 25 m. Always on islands less than 25 m above lake level.
2102	SpotHeightDepression	P					To be produced from Laser Scanning, see Technical Specifications, Chapter 6	Point with a measured height value, located in a pronounced depression in the terrain.	Depressions deeper than 5 m
2200	BreakLine	L						Line used where the terrain pronouncedly changes slope and/or direction (across the terrain line). Terrain lines are typically to be used in depressions, on ridges and peaks, at the bottom of depressions, saddles or on flat areas with little other height.	
2201	CuttingEdge	L					Digitised as closed polygon	Excavation in original terrain delimited by the cutting slope and the edge/formation of the road.	
2202	EmbankmentBoundary	L					Digitised as closed polygon	Embankment on the original terrain delimited by the embankment slope and edge/formation of the road.	
2300	Grid	P							

Schema
privind lucrările îndeplinite pentru crearea hărții de bază a Republicii Moldova

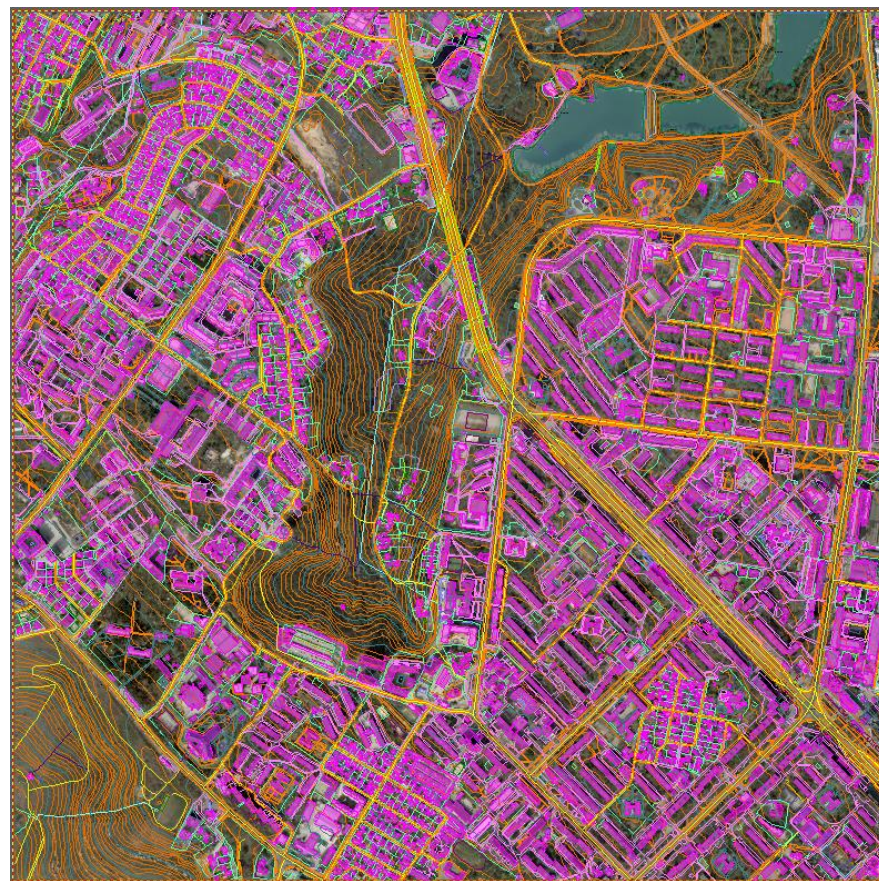
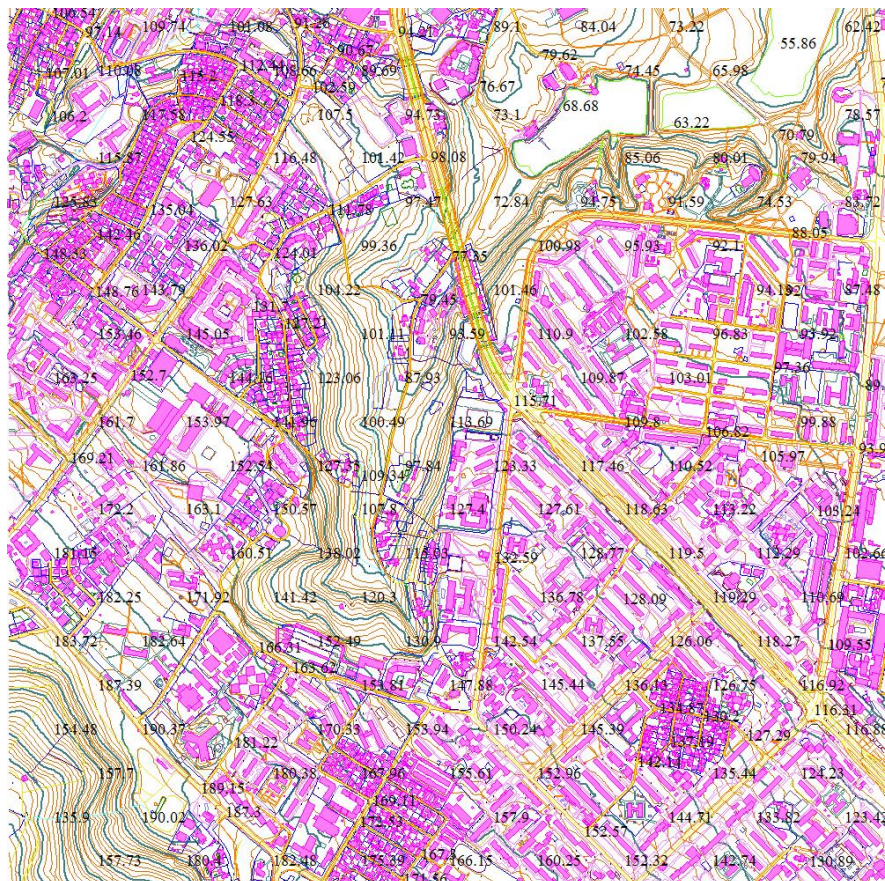


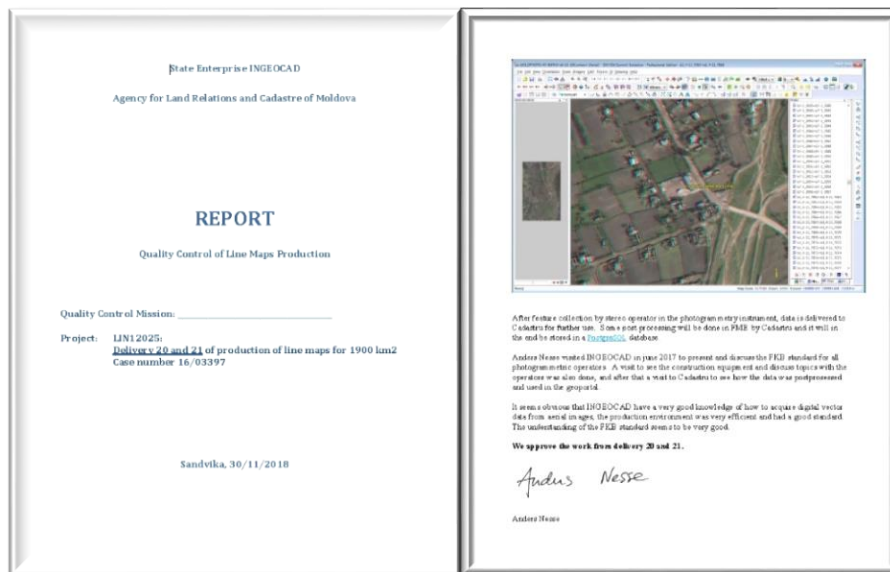
Проект «THE PRODUCTION OF LARGE SCALE BASEMAPS FOR MOLDOVA» начался с выполнения пилотного проекта и после его завершения был разделен на 3 фазы

	Volume, sqkm	
	urban	rural
Phase I	1048	8955
Phase II	957	7538
Phase III	941	10278
Total	2947	26770

Цифровая базовая карта

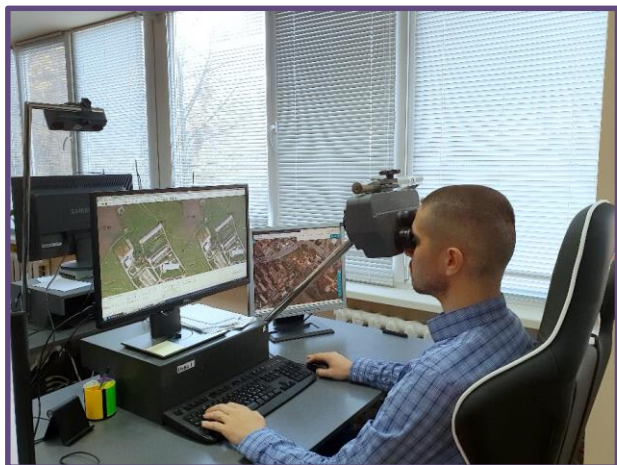
- Цифровая базовая карта (Line Map) создана в системе координат MoldRef 99, в формате shape, по планшетам размером 2,5х2,5 км, это размеры планшетов сетки масштаба 1:5000.



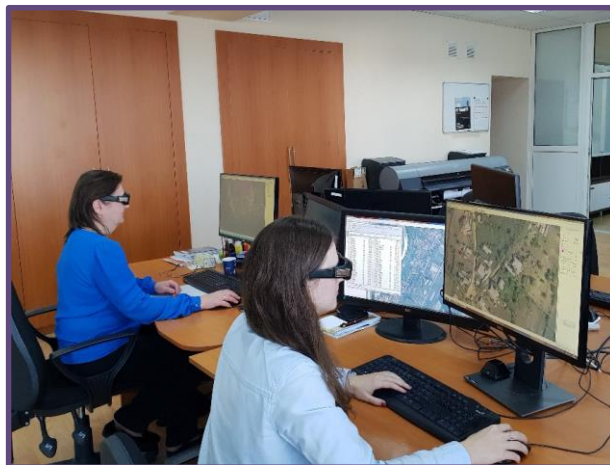


moldova-map.md

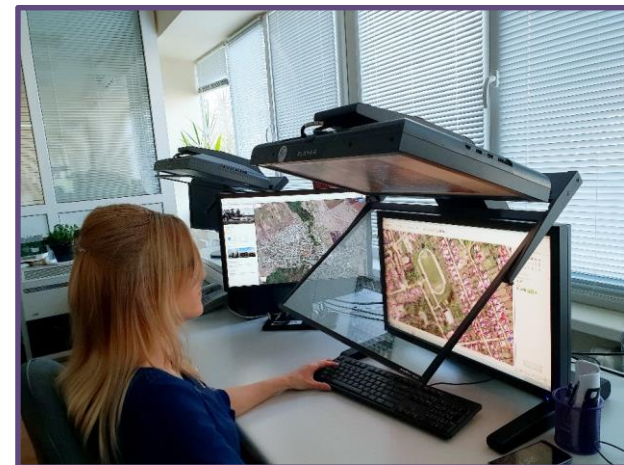
Цифровые фотограмметрические станции, использованные для создания базовой карты



ЦФС Delta



ЦФС 3 D Vision

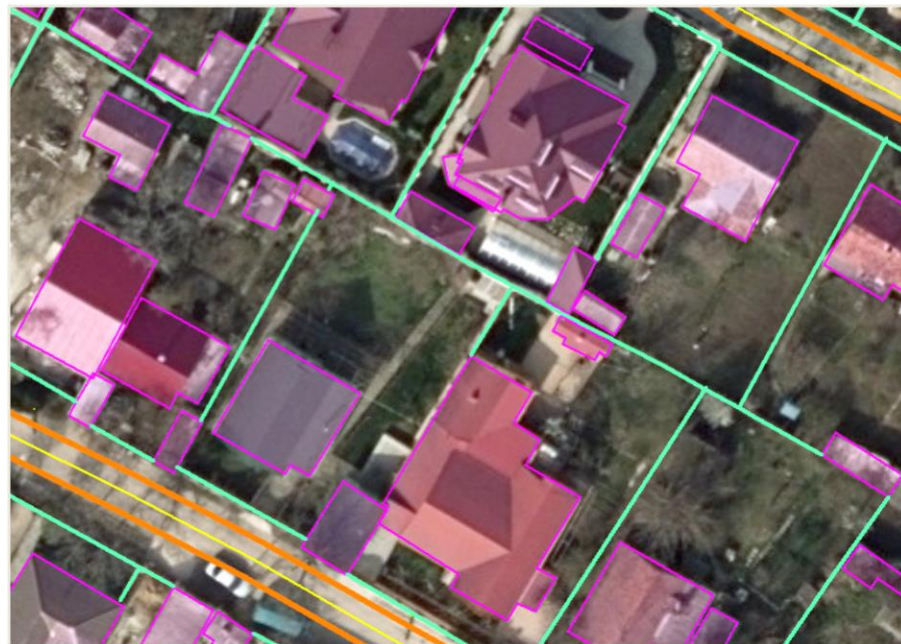


ЦФС Planar

Строения



Ограждения



Дорожная сеть



Железные дороги





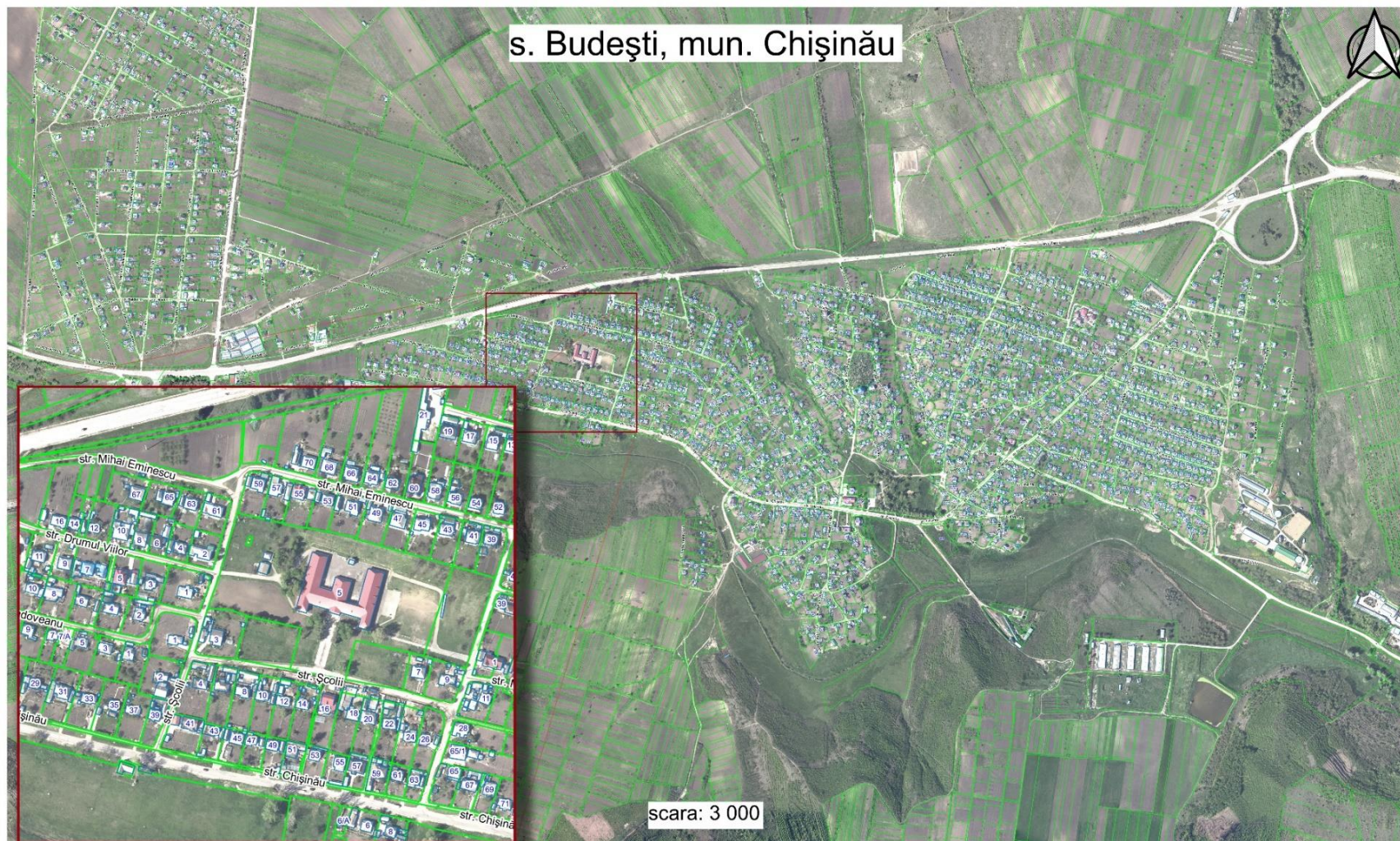


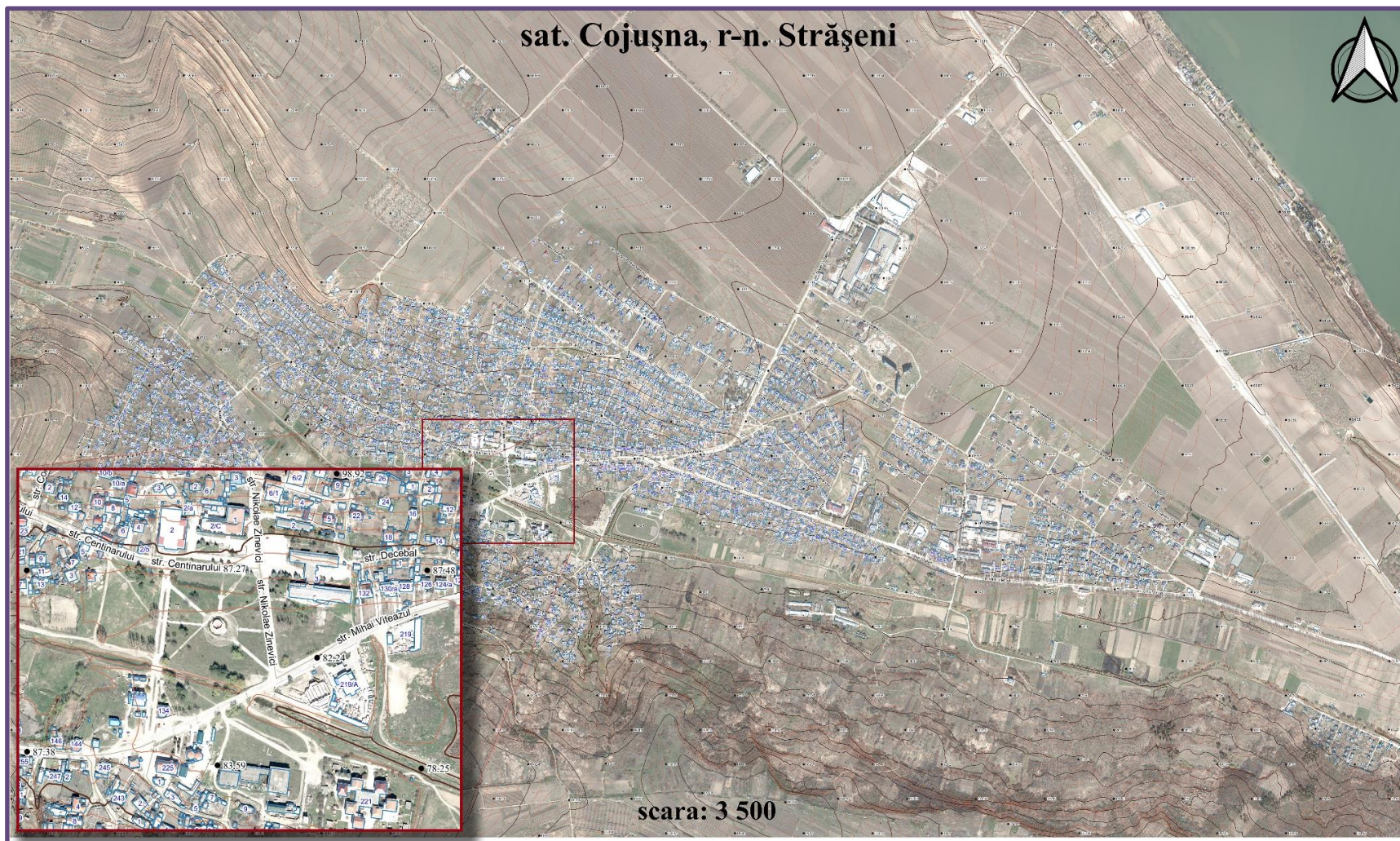


УТИЛИТЫ





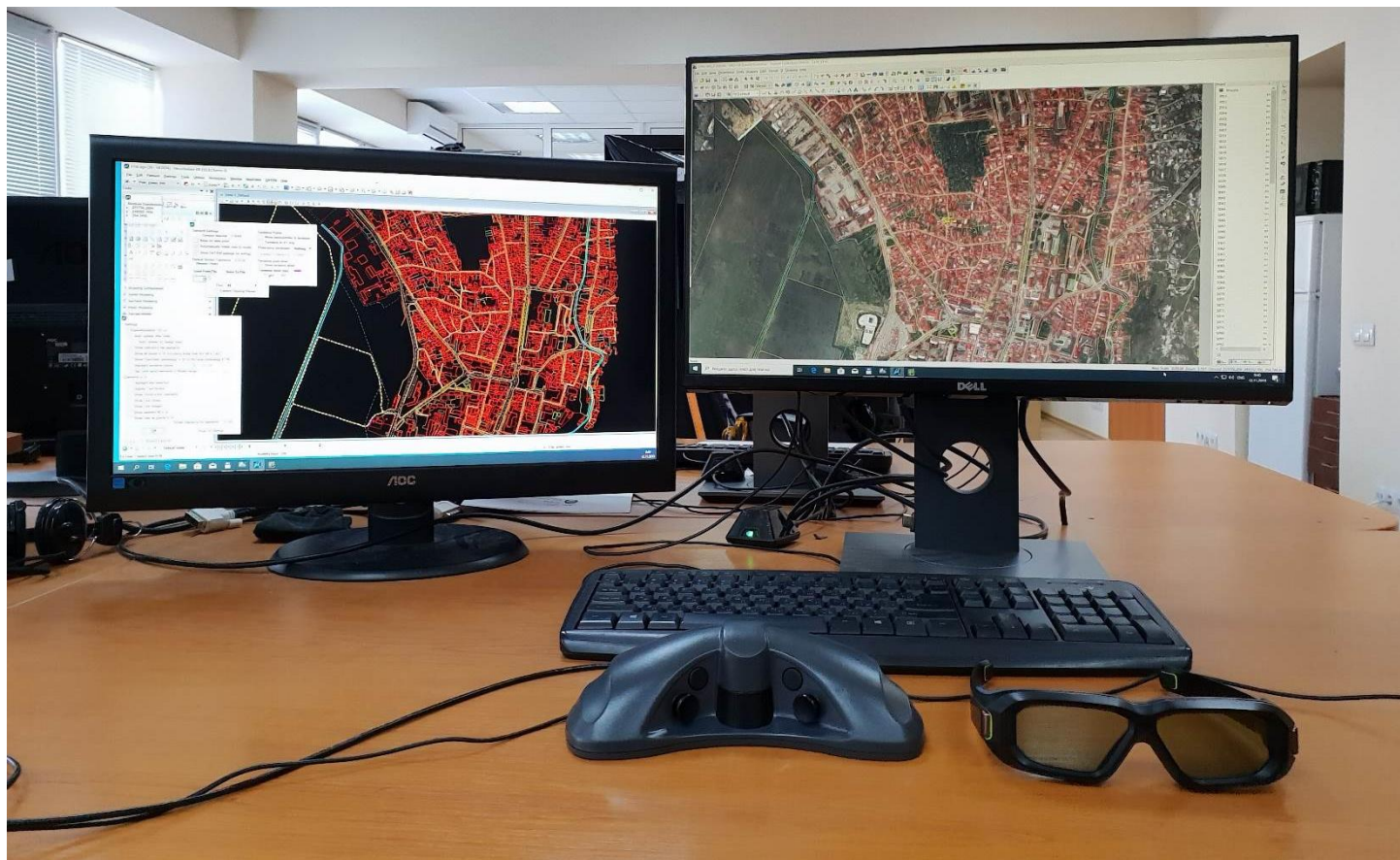




Chisinau 3d Map



Техническая поддержка





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Thank you for attention

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