

Problémamegoldás a térinformatika segítségével a TK Polimer projekt példáján

2023.11.15.

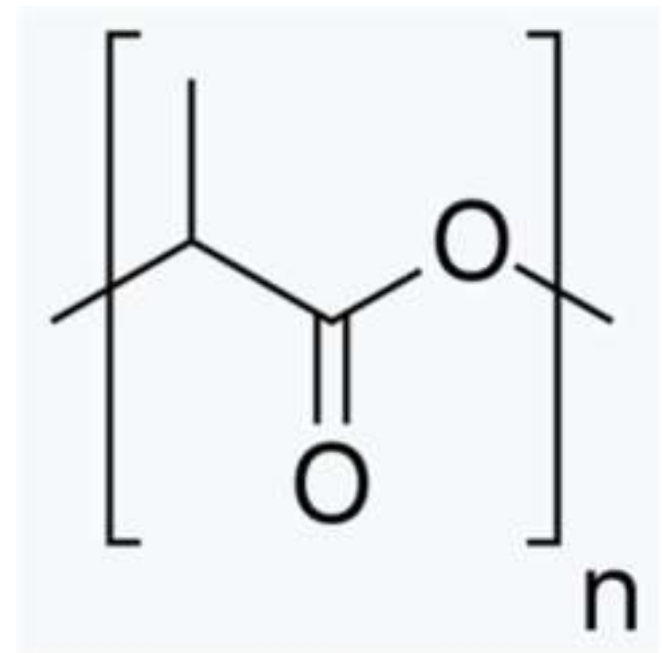
Bay Zoltán
Alkalmazott Kutatási
Közhasznú Nonprofit Kft.

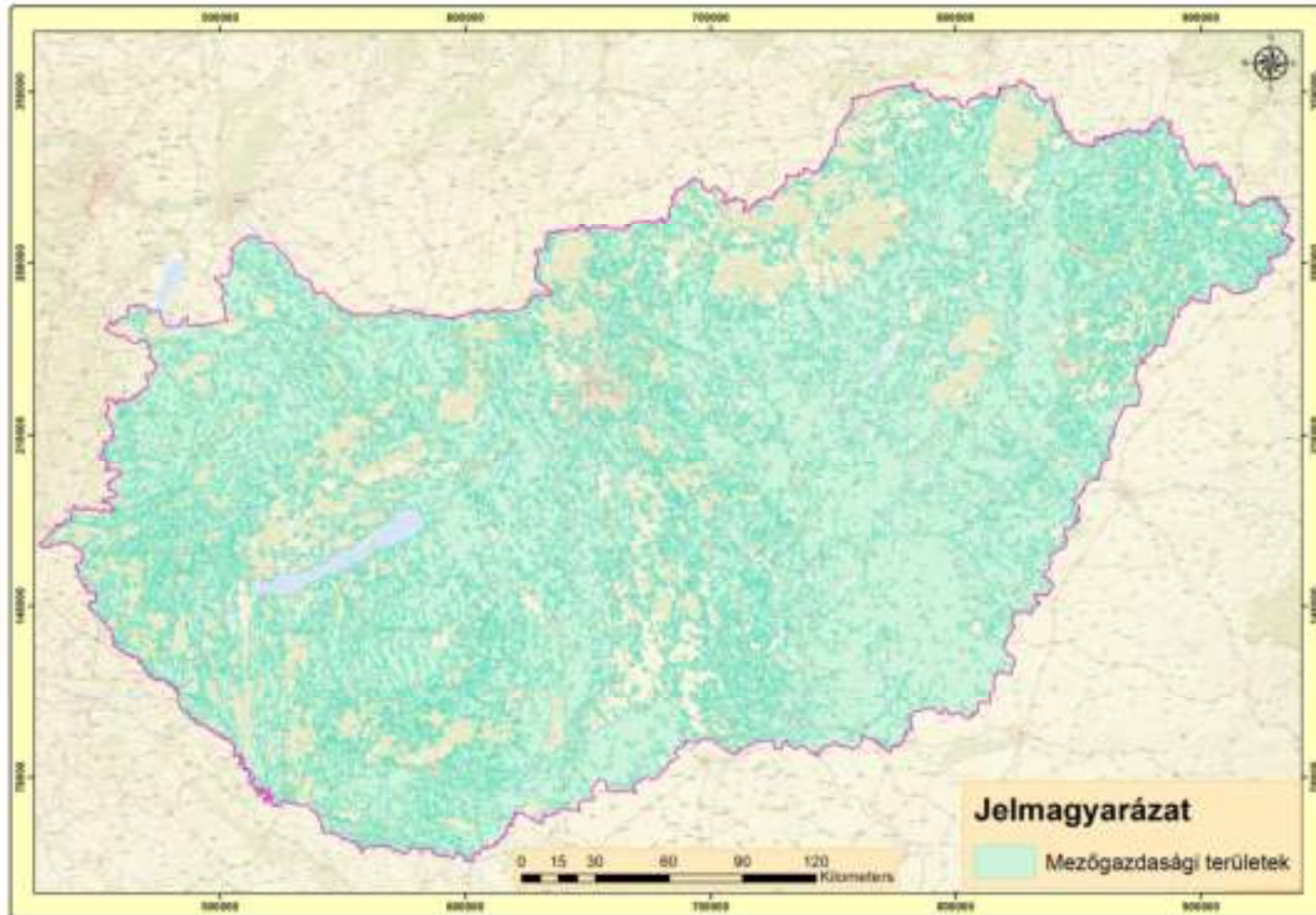
Technológia /
Szakértelem /
Alkalmazott Kutatás /
Fejlesztés /
Versenyképesség /

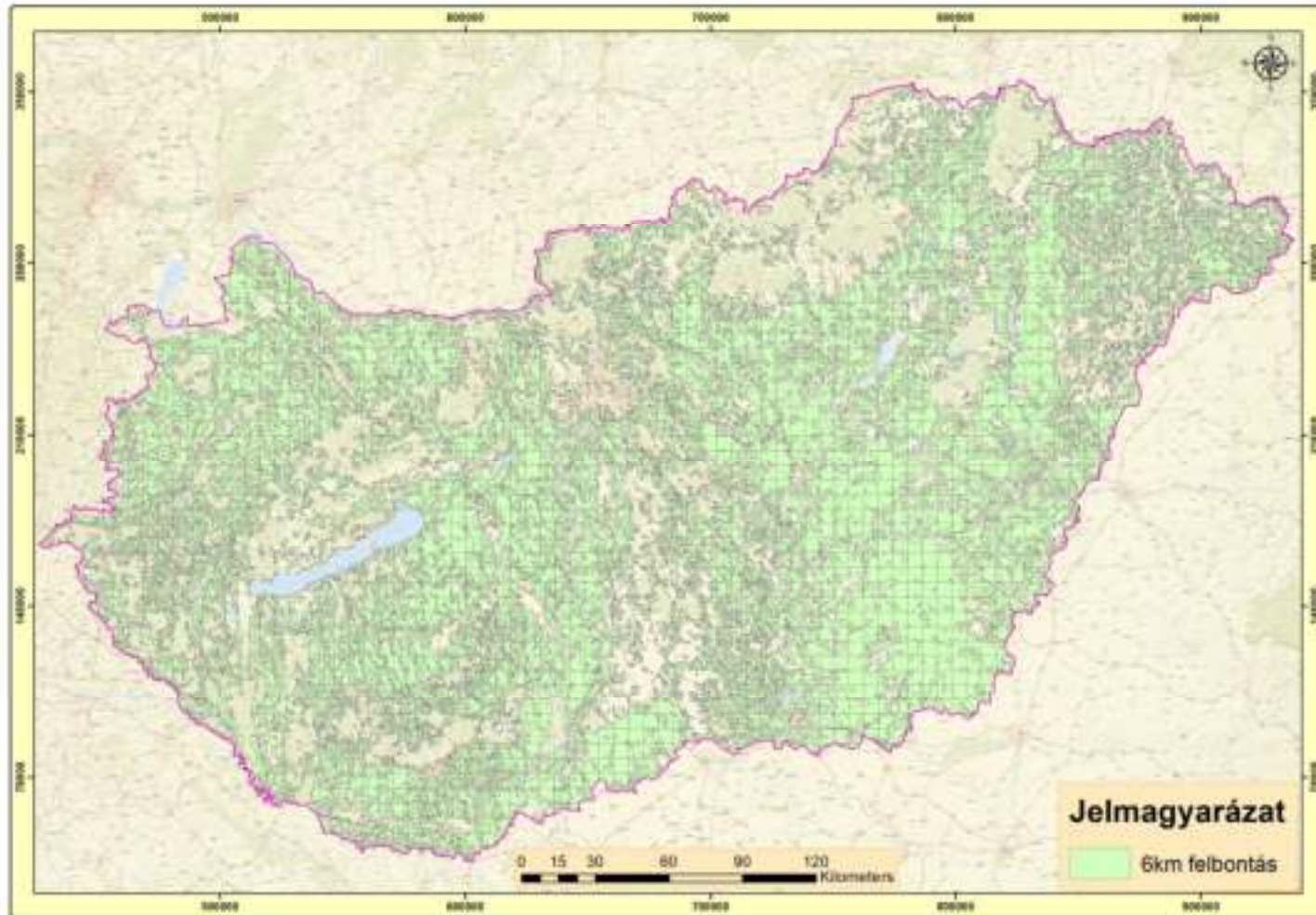
Siker a tudomány hullámhosszán

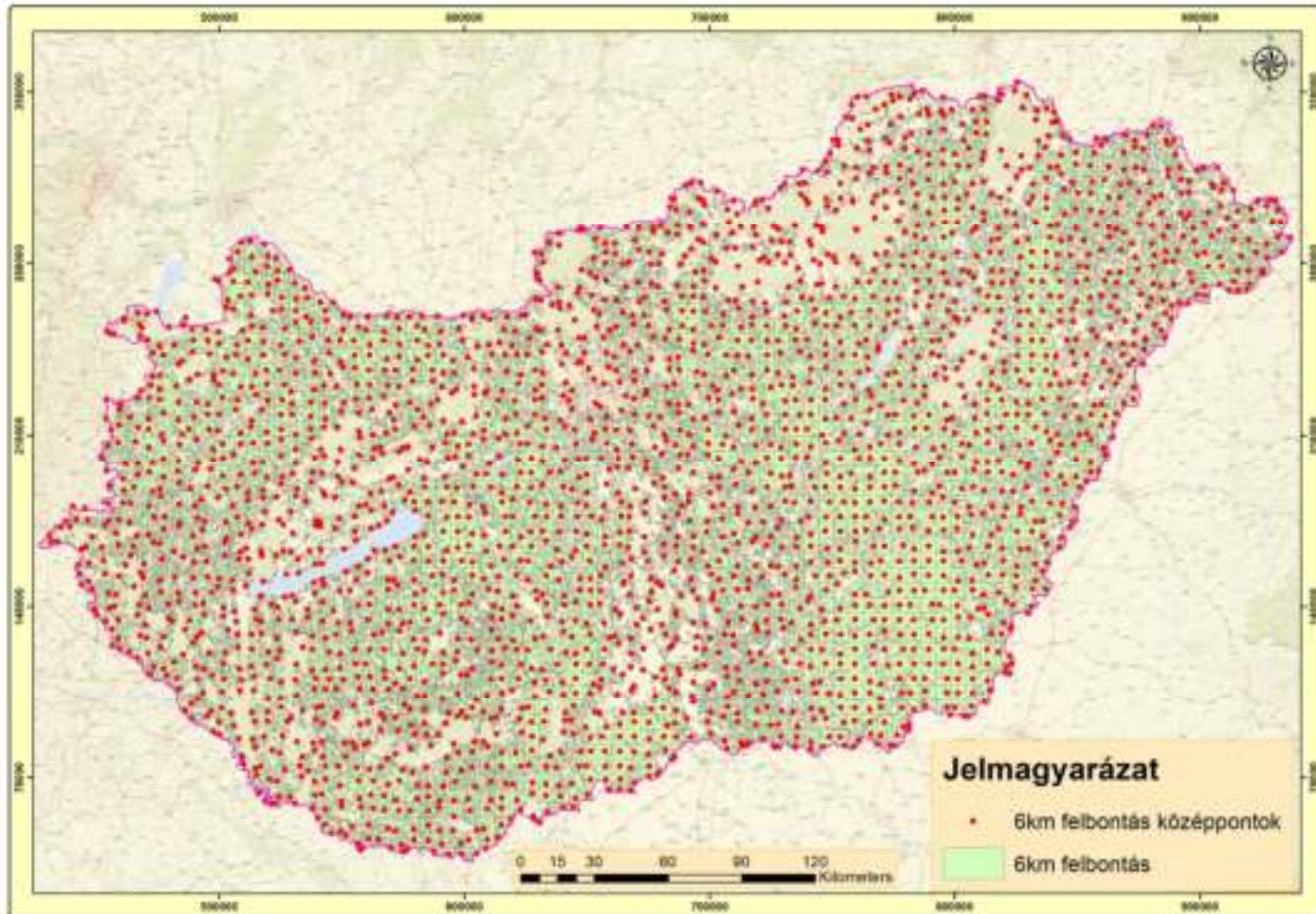
Politejsav (PLA - Polylactic acid)

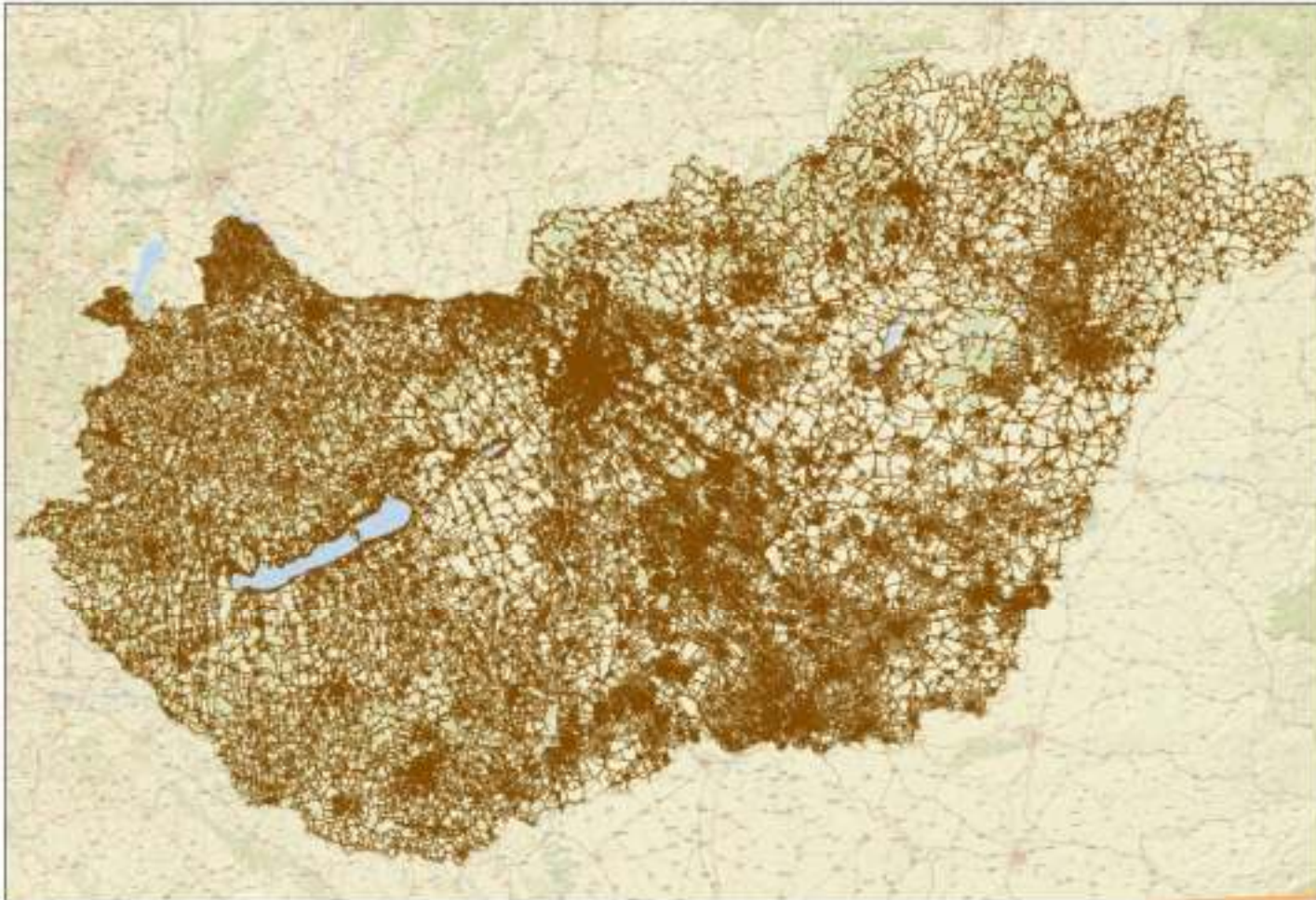
A műanyagiparnak – a közeljövőben – jelentős változásokra kell felkészülnie, az alapanyagok, a felhasználási területek, a hulladék-feldolgozás és -hasznosítás területén. Az alapanyagok tekintetében ezen változás egyik megnyilvánulása a fosszilis, nem megújuló erőforrások felhasználásával készült műanyagok biológiai eredetű alapanyagokból készült műanyagokkal, ún. biopolimerekkel való kiváltása.

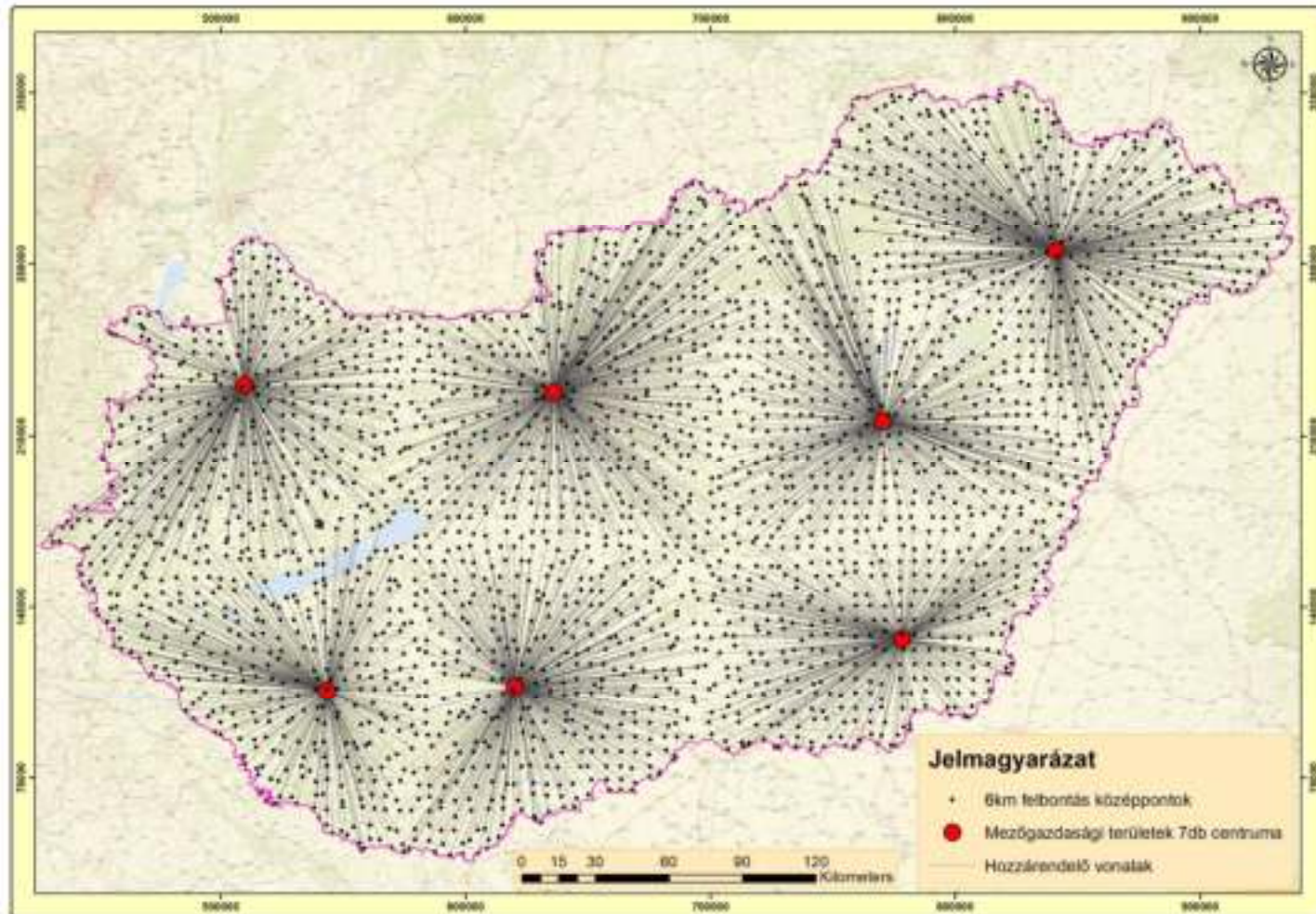


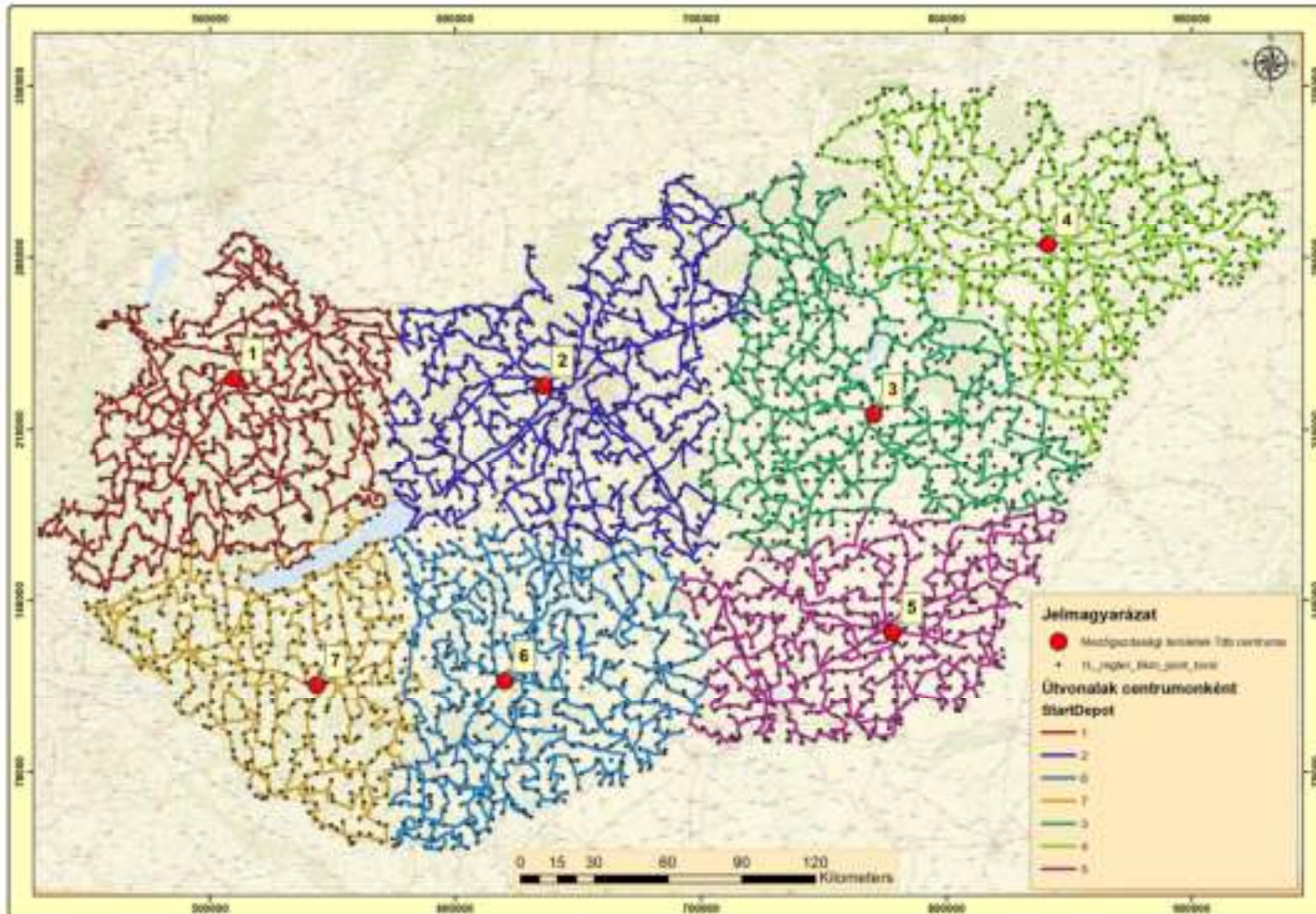


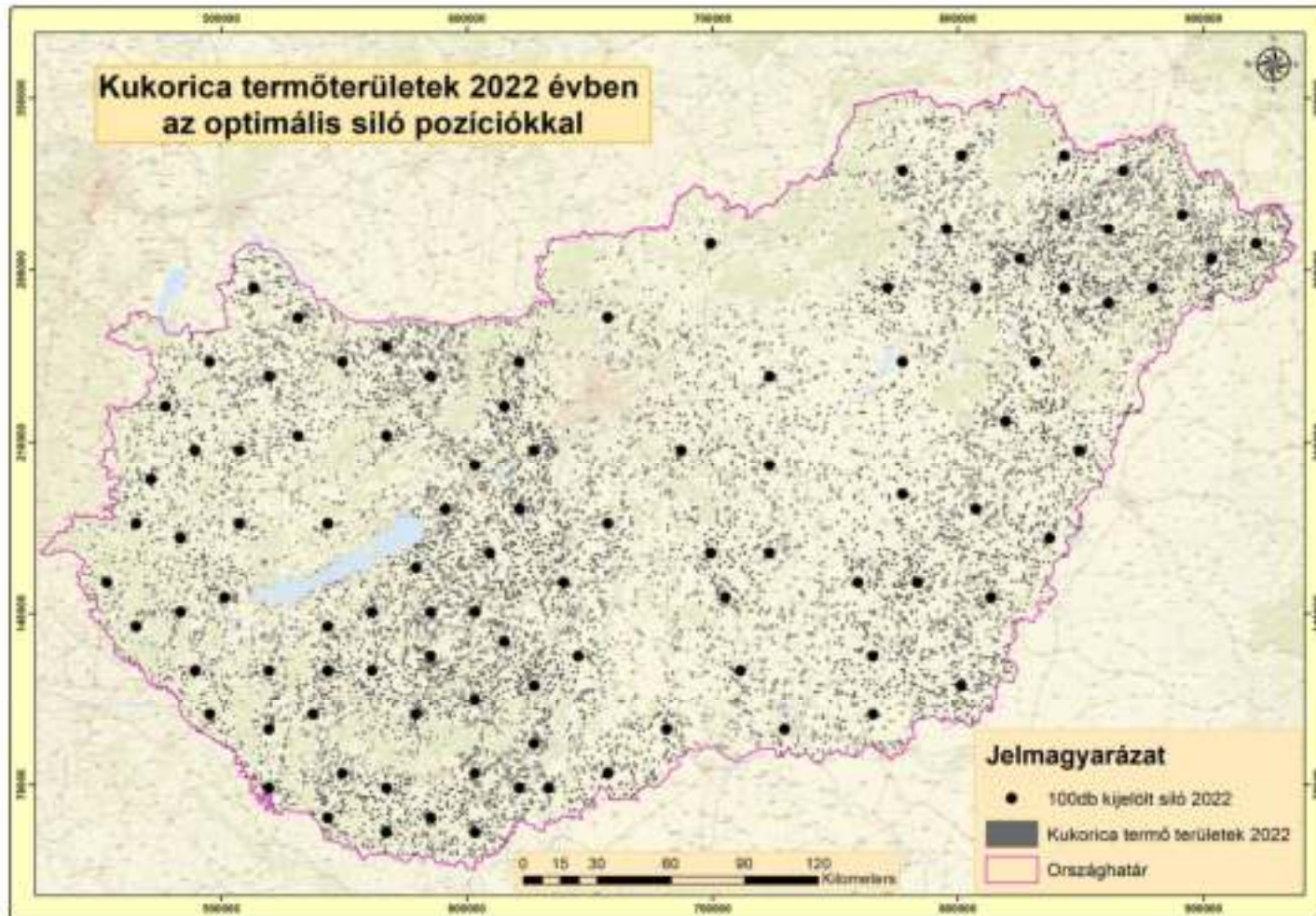


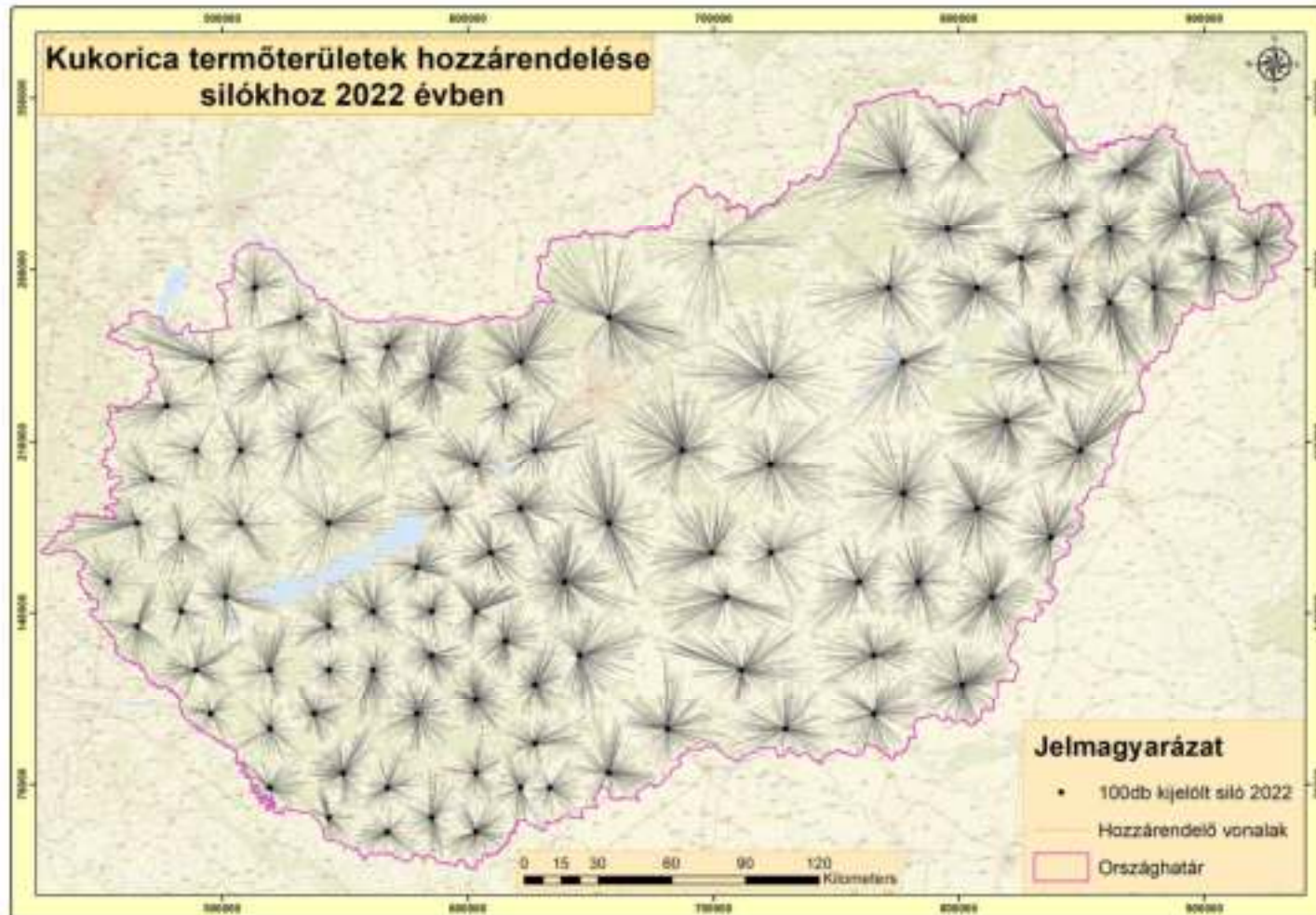


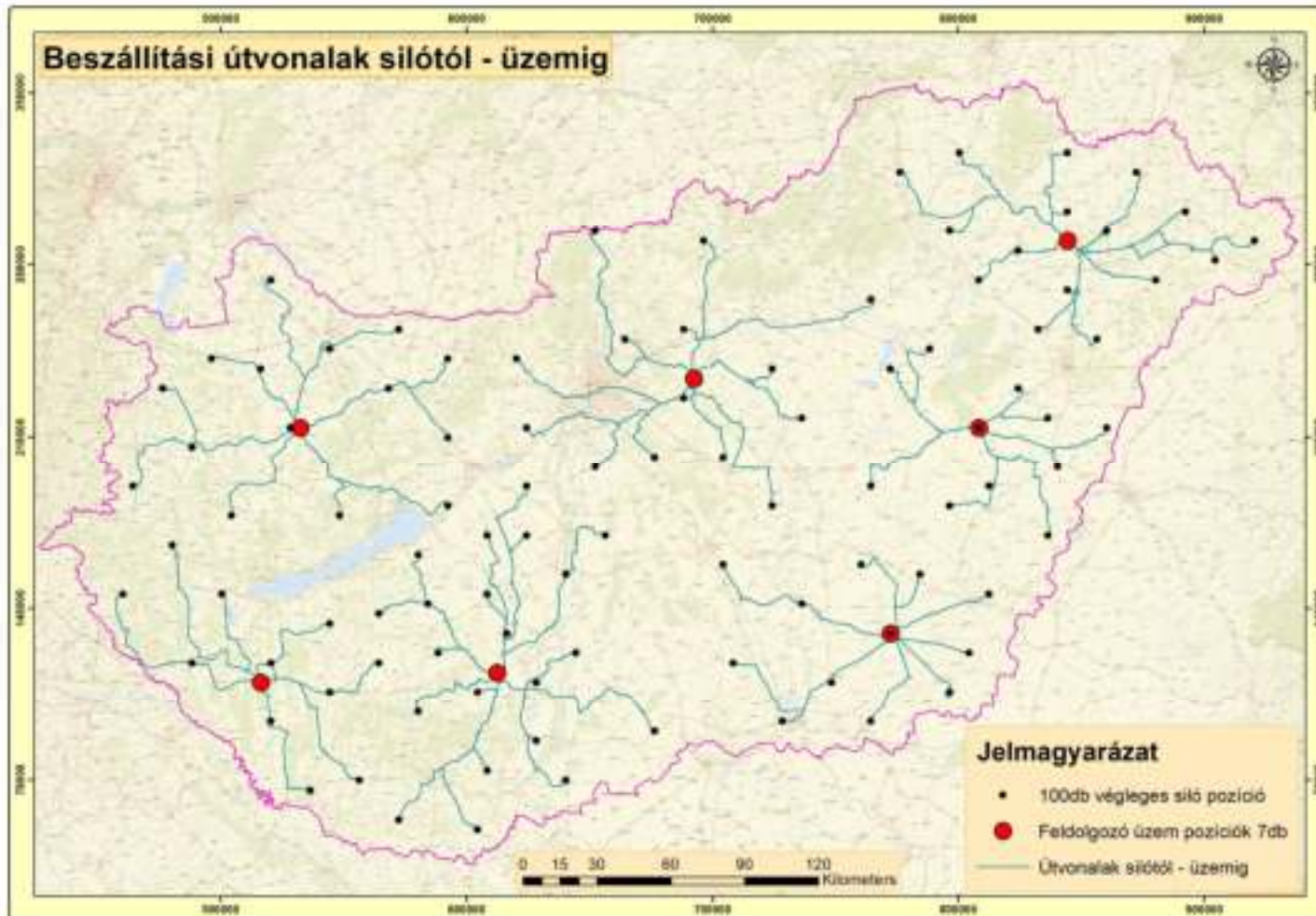


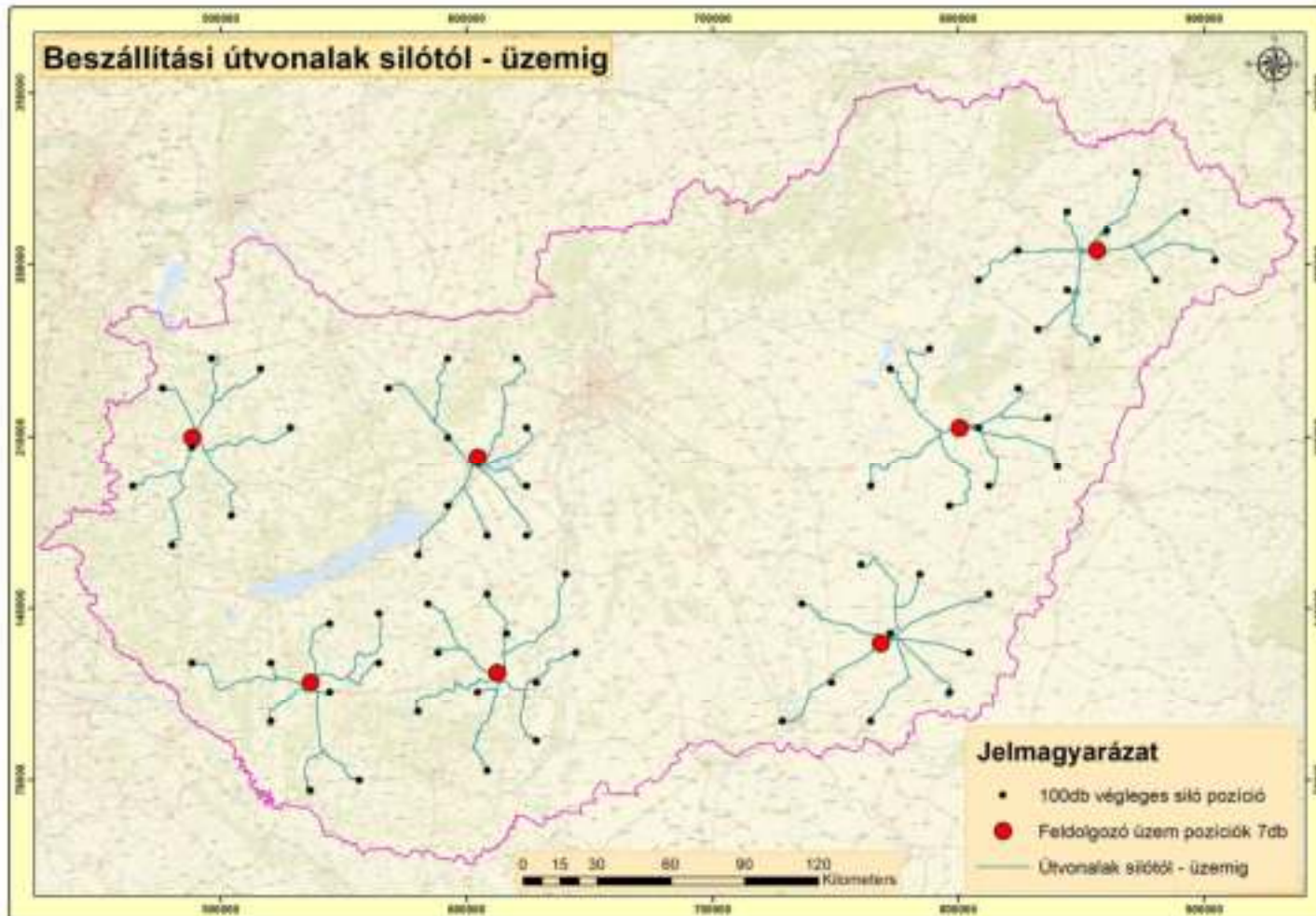








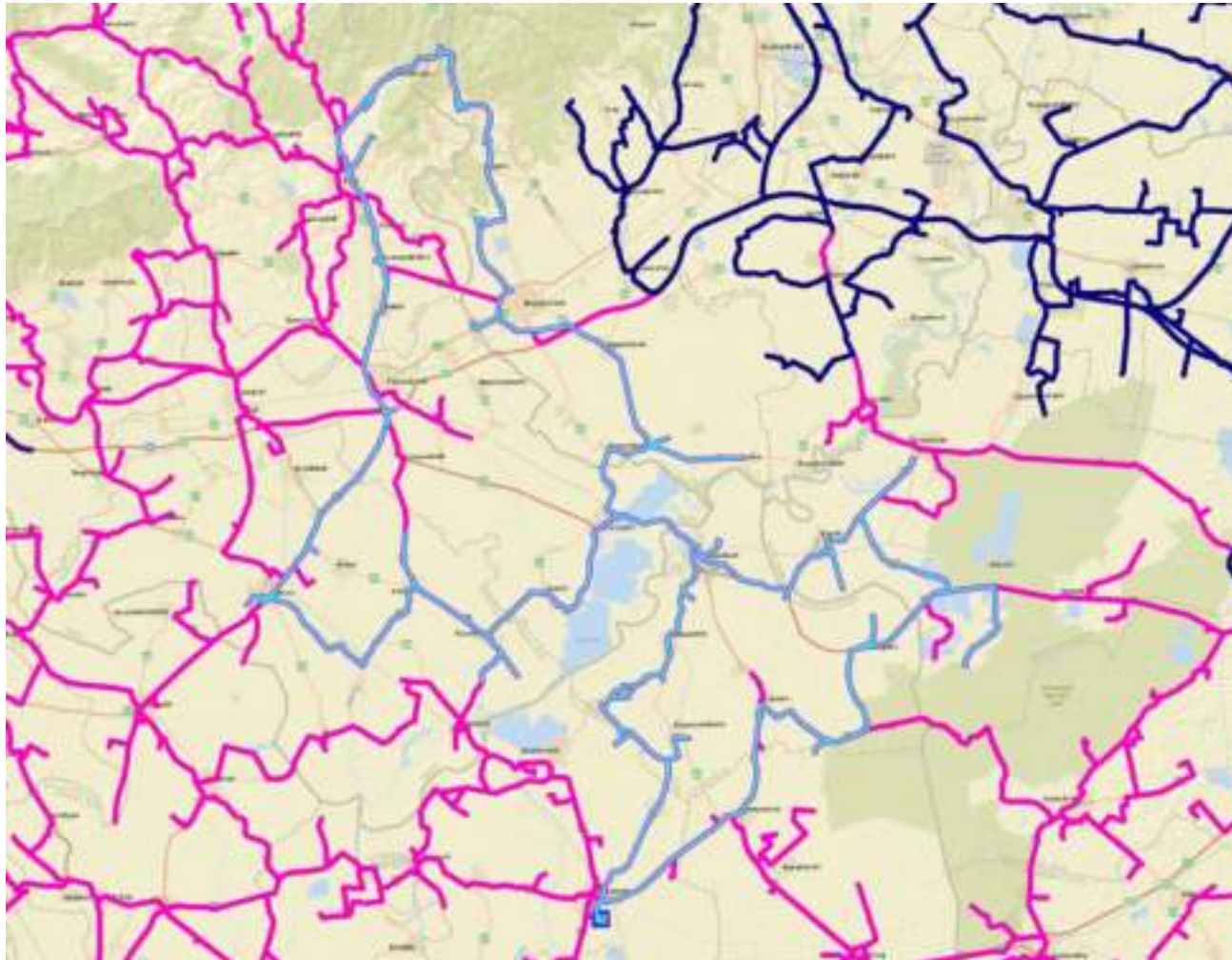




SpecialNames	AssignmentRate	ViolatedConstraints	OrderCount	TotalCost	RegularTimeCost	OvertimeCost	DistanceCost	TotalTime	TotalOrderServiceTime	TotalBreakServiceTime	TotalTravelTime	TotalDistance	StartTime	EndTime	StartTimeUTC
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<Sub>	Include <Sub>	<Sub>	35	989.629164	989.629164	0	0	989.629164	0	0	989.629164	592.627964	2023.05.08.0:00:00	2023.05.09.0:29:37	2023.05.08.0:00:00
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Excel Output 2 - Microsoft Excel

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
	Object Name	Descript	StartDep	EndDepot	Capacitk	MaxOrder	Assignme	ViolatedC	OrderCou	TotalCost	RegularTim	TotalTime	TotalTrave	TotalDista	StartTime	EndTime			
1	1	auto301	4	4	15000	40	1	0	29	554,74705136800	554,74705136800	554,74705136800	554,74705136800	347,40657068900	2023.05.08	2023.05.08			
2	2	auto302	4	4	15000	40	1	0	35	989,62016376300	989,62016376300	989,62016376300	989,62016376300	592,02706366000	2023.05.08	2023.05.09			
3	3	auto303	4	4	15000	40	1	0	40	824,92147720400	824,92147720400	824,92147720400	824,92147720400	452,82978207000	2023.05.08	2023.05.08			
4	4	auto304	4	4	15000	40	1	0	34	971,04766253900	971,04766253900	971,04766253900	971,04766253900	509,48291167000	2023.05.08	2023.05.09			
5	5	auto305	4	4	15000	40	1	0	29	652,30199659600	652,30199659600	652,30199659600	652,30199659600	311,80680751300	2023.05.08	2023.05.08			
6	6	auto306	4	4	15000	40	1	0	30	852,49878815700	852,49878815700	852,49878815700	852,49878815700	546,73238759200	2023.05.08	2023.05.08			
7	7	auto307	4	4	15000	40	1	0	31	801,52426769200	801,52426769200	801,52426769200	801,52426769200	463,22168850400	2023.05.08	2023.05.08			
8	8	auto308	4	4	15000	40	1	0	40	1224,49828330000	1224,49828330000	1224,49828330000	1224,49828330000	724,03096354800	2023.05.08	2023.05.09			
9	9	auto309	4	4	15000	40	1	0	40	1057,38132404000	1057,38132404000	1057,38132404000	1057,38132404000	623,45116597300	2023.05.08	2023.05.09			
10	10	auto310	4	4	15000	40	1	0	40	1366,97401726000	1366,97401726000	1366,97401726000	1366,97401726000	824,91078457300	2023.05.08	2023.05.09			



Directions (Vehicle Routing Problem -v1)

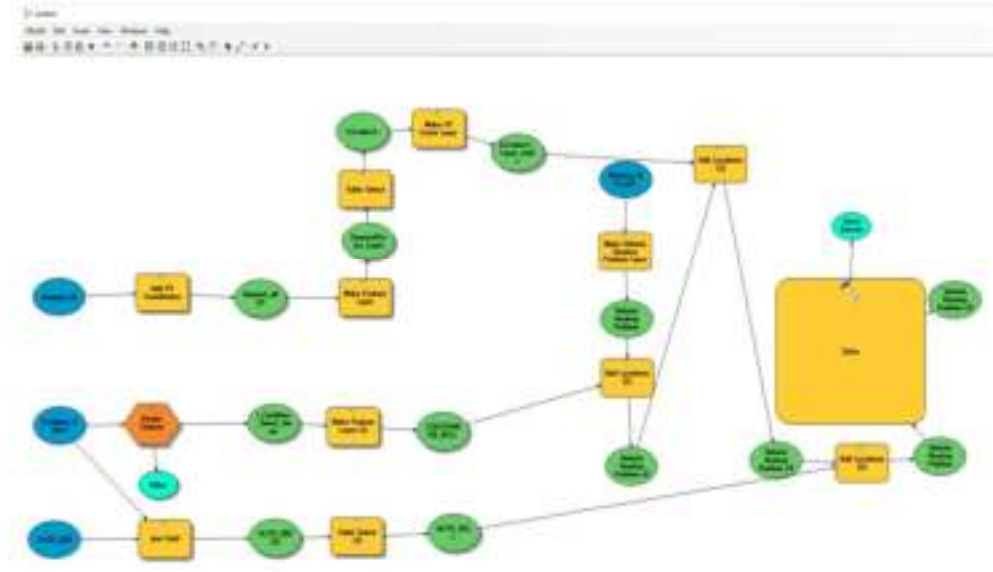
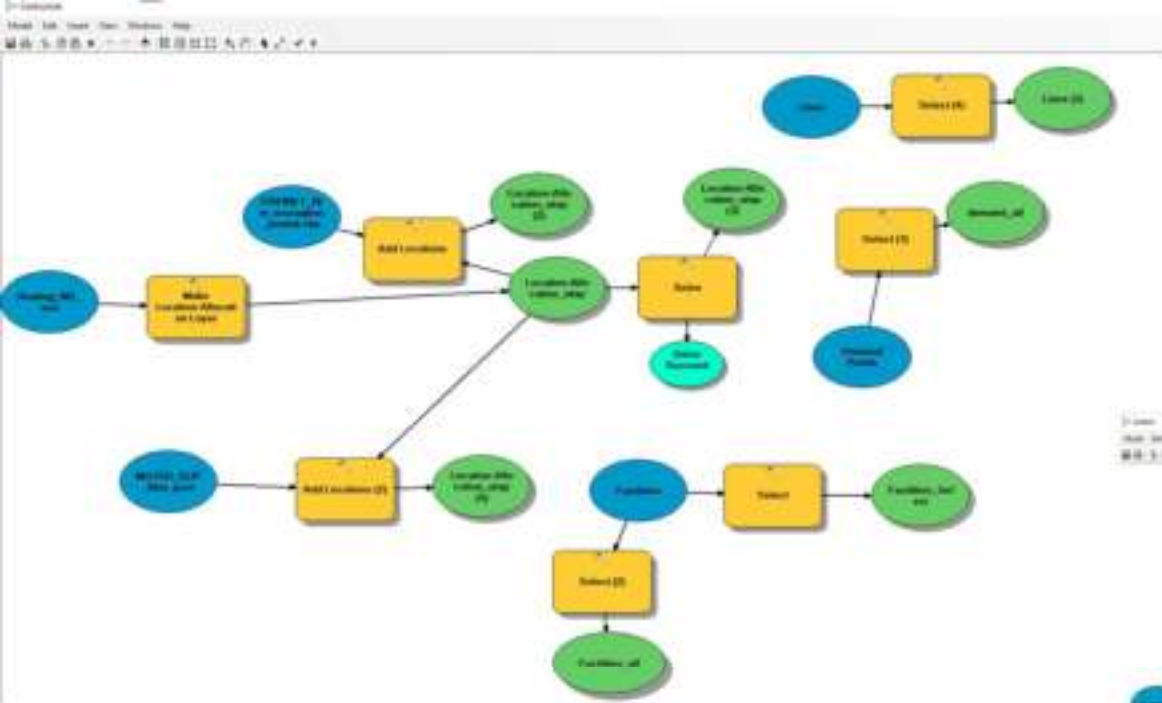
	403 km	13 hr 43 min	1500
1: Start at 4			1500
2: Go northwest	455 m	2 min	1500
3: Bear right on PUSZTÁNY UTCA	730 m	3 min	1500
4: Turn left on DAKÓD PISTA UTCA and immediately turn right on PUSZTÁNY UTCA	223 m	< 1 min	1500
5: Make sharp right on ÁRPÁD KÖRÜT	754 m	1 min	1500
6: Turn right on 34 (BÁDÓCSI UTCA)	23 km	28 min	1500
7: Turn right on 3402 (SŐNYI GÉZA ÚT) toward MÓRTOVÁ	7,2 km	9 min	1500
8: Turn right	1,7 km	5 min	1500
9: Arrive at 822, on the right			1500
10: Depart 822			
11: Go back northeast	1,7 km	5 min	1500
12: Turn right on 3402	6,3 km	10 min	1500
13: Arrive at 867, on the right			1500
14: Depart 867			
15: Continue north on 3402	4,0 km	7 min	1500
16: Turn right on 33	804 m	< 1 min	1500
17: Turn left	22 m	< 1 min	1500
18: [+]: Turn right on GÖRÉS TAVYA	3,4 km	12 min	1500
19: Arrive at 277, on the right			1500
20: Depart 277			
21: Go back south on GÖRÉS TAVYA	3,4 km	13 min	1500
22: Turn left	22 m	< 1 min	1500
23: Turn left on 33	13,0 km	13 min	1500
24: Turn right	3,1 km	4 min	1500
25: Arrive at 1307, on the left			1500
26: Depart 1307			
27: Continue south	732 m	1 min	1500
28: Continue on SZÁSZTELEK MAJOR	829 m	1 min	1500
29: Bear right	3,2 km	4 min	1500
30: [+]: Turn left on FALVÉGHALMA MAJOR	146 m	< 1 min	1500
31: Arrive at 1133, on the left			1500
32: Depart 1133			
33: Go back west on FALVÉGHALMA MAJOR	146 m	< 1 min	1500
34: Turn right	3,2 km	4 min	1500
35: Bear left on SZÁSZTELEK MAJOR	829 m	1 min	1500
36: Continue	3,9 km	3 min	1500
37: Turn left on 33	3,7 km	3 min	1500
38: Turn right on 3302	6,1 km	10 min	1500

Options: Post Routes Show All Post Close

Directions (Vehicle Routing Problem -v1)

	403 km	13 hr 43 min	1500
1: Start at 4			1500
2: Go northwest	455 m	2 min	1500
3: Bear right on PUSZTÁNY UTCA	730 m	3 min	1500
4: Turn left on DAKÓD PISTA UTCA and immediately turn right on PUSZTÁNY UTCA	223 m	< 1 min	1500
5: Make sharp right on ÁRPÁD KÖRÜT	754 m	1 min	1500
6: Turn right on 34 (BÁDÓCSI UTCA)	23 km	28 min	1500
7: Turn right on 3402 (SŐNYI GÉZA ÚT) toward MÓRTOVÁ	7,2 km	9 min	1500
8: Turn right	1,7 km	5 min	1500
9: Arrive at 822, on the right			1500
10: Depart 822			
11: Go back northeast	1,7 km	5 min	1500
12: Turn right on 3402	6,3 km	10 min	1500
13: Arrive at 867, on the right			1500
14: Depart 867			
15: Continue north on 3402	4,0 km	7 min	1500
16: Turn right on 33	804 m	< 1 min	1500
17: Turn left	22 m	< 1 min	1500
18: Depart 822			
19: Go back northeast	1,7 km	5 min	1500
20: Turn right on 3402	6,3 km	10 min	1500
21: Arrive at 867, on the right			1500
22: Depart 867			
23: Continue north on 3402	4,0 km	7 min	1500
24: Turn right on 33	804 m	< 1 min	1500
25: Turn left	22 m	< 1 min	1500

Options: Post Routes Show All Post Close





A TKP2021-NKTA-07 számú projekt a Kulturális és Innovációs Minisztérium Nemzeti Kutatási, Fejlesztési és Innovációs Alapból nyújtott támogatásával, a TKP2021 Program finanszírozásában valósul meg.

Eke Zoltán – Kiss Levente

Mérnöki Rendszerek Divízió
Rendszertervezés Osztály

KÖSZÖNÖM A FIGYELMET!