



EU Strategy for the Danube Region
Priority Area 1a: To improve mobility and multimodality: Inland waterways

5th meeting of the Steering Group

Short term measures for effective waterway infrastructure maintenance in 2013

Ljubisa Mihajlovic
Ministry of Transport - Directorate for Inland Waterways
Linz, 18.04.2013

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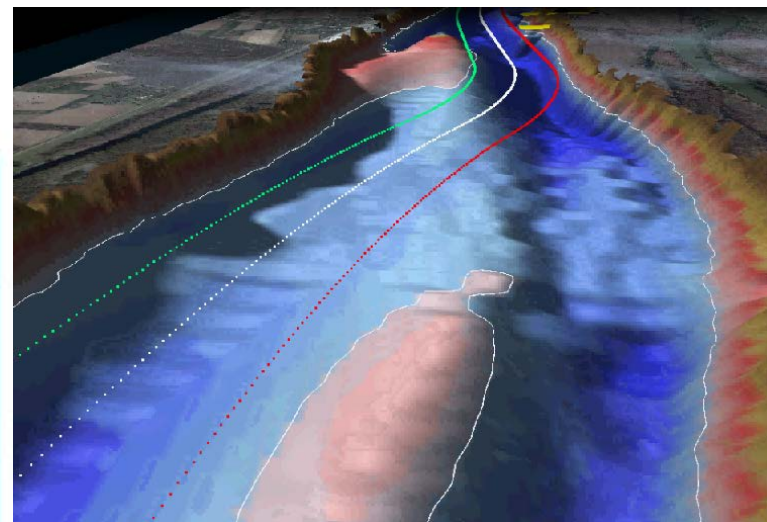


River bed surveying

- Hydrographic survey campaign in 2013 will last from May until October. In total, 301 km of the Danube River will be surveyed.
- Danube: rkm 1433 - 1132, cross sections on every 200 m
- Tisa: rkm 164 - 0 cross sections on every 800 - 1000 m
- Sava: rkm 210.8 - 0 cross sections on every 200 m only on critical sectors between rkm 104 - 0
- Depending on the situation, some of the critical sectors will be surveyed additionally.
- No additional equipment in 2013



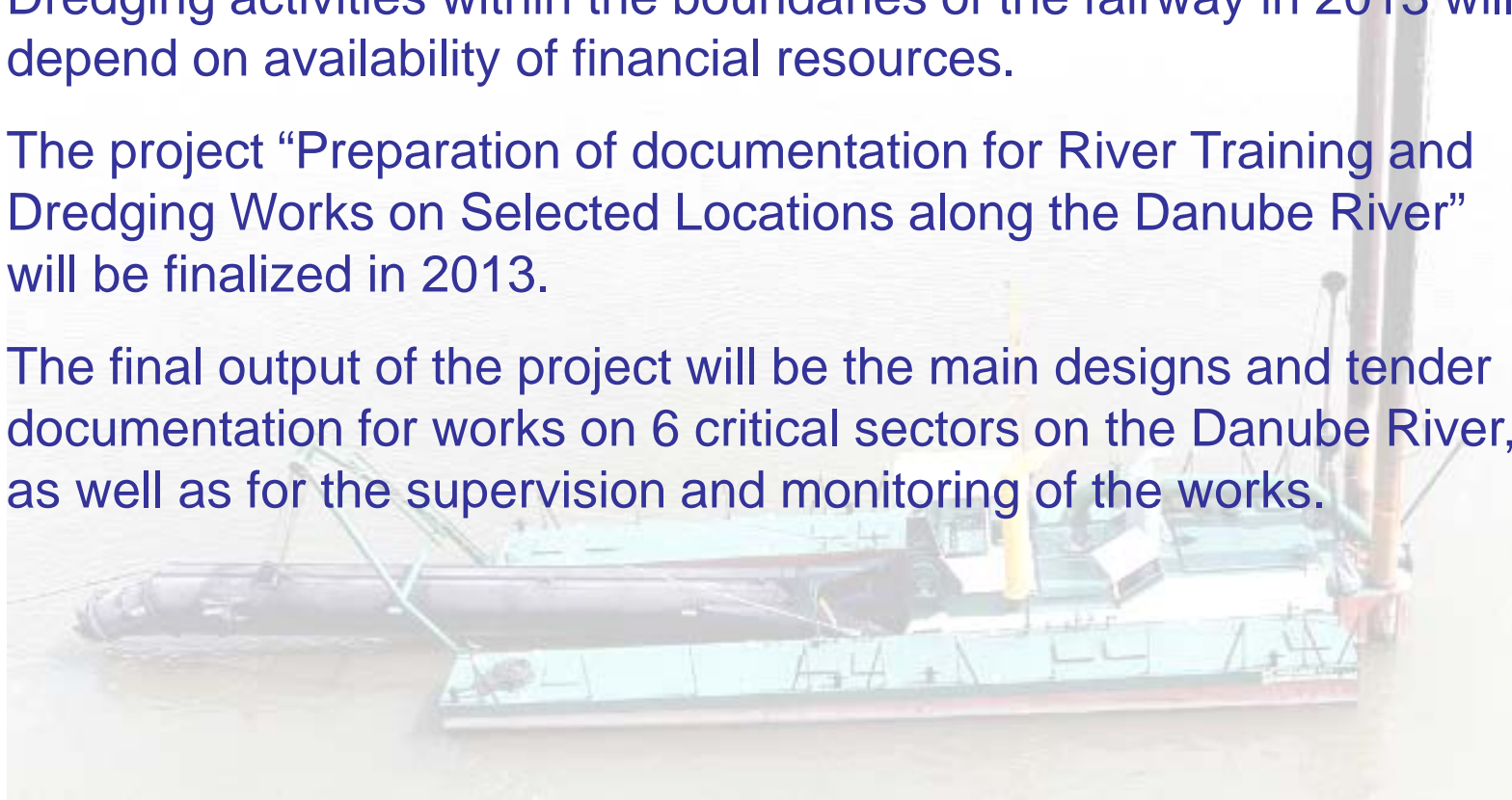
River bed surveying



Costs for surveying of the Danube, Sava, and Tisza Rivers, are EUR 150.000. This sum includes human resources, technical resources, and allocated common costs.

Dredging of problematic areas

- Dredging activities within the boundaries of the fairway in 2013 will depend on availability of financial resources.
- The project “Preparation of documentation for River Training and Dredging Works on Selected Locations along the Danube River” will be finalized in 2013.
- The final output of the project will be the main designs and tender documentation for works on 6 critical sectors on the Danube River, as well as for the supervision and monitoring of the works.



Signaling of the fairway

- Continuous monitoring and maintenance of the marking system will be performed by regional filed offices.
- Most of the activities will be taken on floating signs, for the purpose of the fairway realignment at critical sectors.
- Total costs of marking activities on the Danube River will be in the range of 450,000 EUR, including human and technical resources, as well as allocated common costs.



Signaling of the fairway



Дирекција за водна путева
Француска Бр.9
11000 Београд
Република Србија

ИЗВЕШТАЈ О МЕРЕЊУ РАСПОЛОЖИВИХ ДИМЕНЗИЈА ПЛОВНОГ ПУТА
РЕКЕ ДУНАВ
у периоду 21-24.08.2012. године¹

реки	Пловна ознака		Дубина (dm)			Ширина (m)
			Десна ваница ⇒	Средња ⇒⇐	Лева ваница ⇐	
Датум:	водомерна отаџица					Нови Сад
24.08.2012.	водостај (cm)					65
1214+300					36	190
1214+800		вид паромачи			37	240
1229+100			39	50	70	150
1230+400			42			210
Датум:	водомерна отаџица					Нови Сад
21.08.2012.	водостај (cm)					78
1266+800			27	27		150
1266+700				26	26	150
1266+000				62	25	150
1265+000		поворостављена		55	25	150

- Information on available fairway parameters at the critical sectors (depth and width) during the low water period, including information on adjusted marking system, will be published on weekly basis at the Plovput's web site in 2013.

Implementation of RIS

- Full coverage of the Danube river by 15 AIS base stations and Sava river by 3 AIS base stations
- Basic Information system for Serbian Authorities working on Danube river by provision of 37 working stations and 50 on-board installations on vessels
- Basic Information system for the commercial logistic sector by equipping 160 commercial vessels from Serbia and abroad

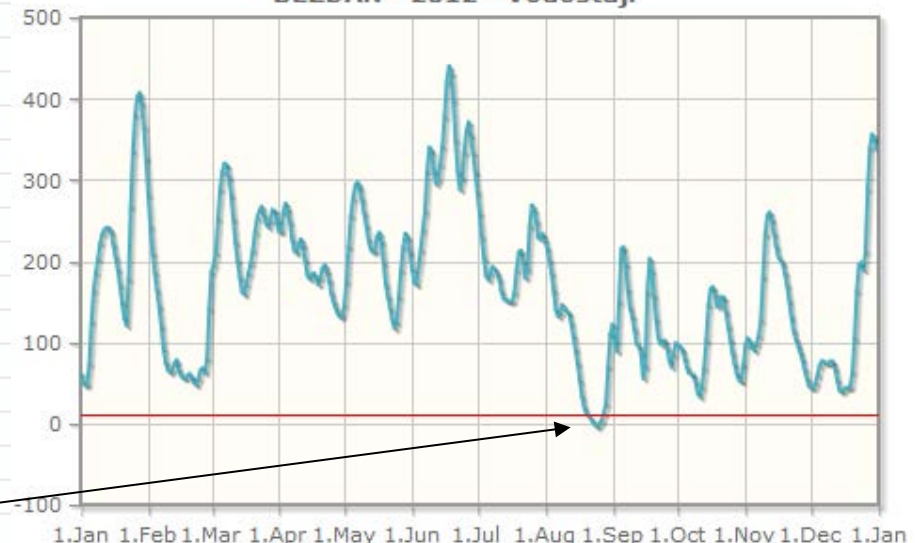


BEZDAN - 2012 - Vodostaji												
	jan	feb	mar	apr	maj	jun	jul	avg	sep	okt	nov	dec
1	62	282	187	236	146	191	285	226	122	97	97	44
2	51	242	195	237	175	174	259	216	102	94	105	44
3	47	210	210	260	218	171	230	201	89	91	100	49
4	48	186	252	271	256		204	185	150	81	93	60
5	74	164	288	264	277	214	182	164	215	69	90	72
6	126	144	310	248	293	239	177	140	217	62	98	77
7	164	120	320	227	297	261	185	132	196	62	108	76
8	186	92	318	213	291	311	193	136	165	60	127	74
9	203	75	303	210	276	340	190	146	142	52	180	
10	222	66	281	220	259	335	185	141	132	38	233	
11	234	63	252	227	244	312	178	138	116	33	256	
12	239	66	223	220	227	295	163	136	98	45	260	
13	241	74	200	201	215	300	154	124	95	68	251	
14	241	78	180	183	211	319	152	108	88	102	234	
15	236	66	162	178	213	341	151	91	56	146	218	
16	220	59	159	183	230	378	150	74	71	166	205	
17	205	56	172	185	235	421	151	53	162	168	201	
18	190	56	185	179	224	440	161	33	203	159	197	
19	171	59	197	171	197	431	189	20	188	144	185	
20	149	61	213	180	171	398	211	12	157	146	170	
21	130	57	236	191	156	349	213	9	128	156	151	
22	121	50	253	195	142	310	200	6	105	155	131	
23	178	48	262	188	127	288	179	2	98	137	114	
24	267	55	267	176	117	302	190	-2	102	120	104	
25	335	66	257	160	125	334	243	-4	102	103	96	
26	380	68	247	150	156	360	269	0	93	87	88	212
27	402	63	242	142	189	371	263	4	78	73	79	289
28	407	80	249	135	217	355	249	12	70	61	67	339
29	394	141	263	131	234	333	228	24	85	53	56	356
30	365		262	133	229	310	231	70	99	52	46	351
31	326		249		211		233	110		72		338

Water levels on Bezdán gauge station during 2012

7 days in a row water levels were lower than EN (second half of August)

BEZDAN - 2012 - Vodostaji

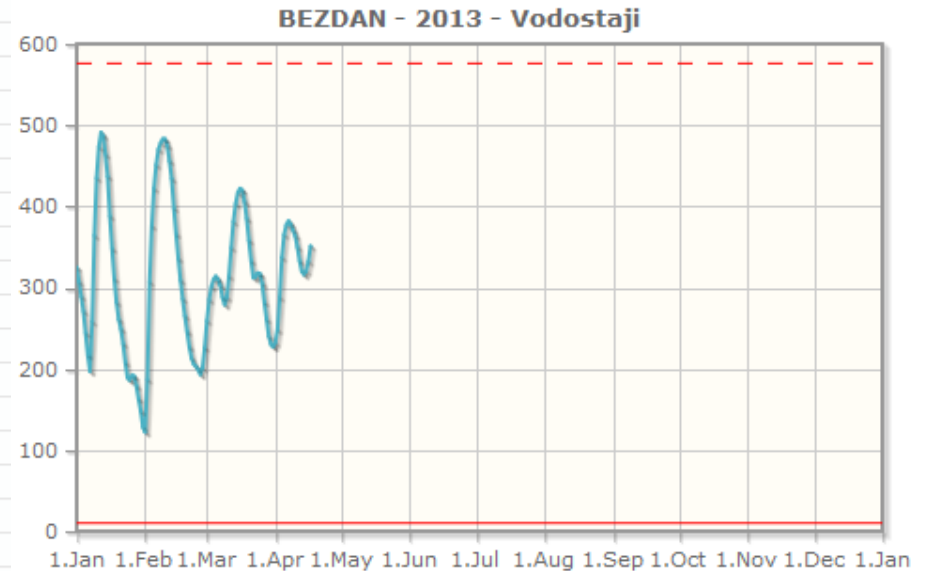


BEZDAN - 2013 - Vodostaji

	jan	feb	mar	apr	maj	jun	jul	avg	sep	okt	nov	dec
1	325	122	259	232								
2	307	187	285	248								
3	289	307	301	288								
4	271	376	310	337								
5	244	422	314	365								
6	217	451	310	377								
7	197	470	303	382								
8	258	478	288	378								
9	364	483	279	371								
10	435	483	288	364								
11	473	475	314	350								
12	491	456	349	333								
13	487	434	381	320								
14	464	398	403	316								
15	437	366	417	320								
16	388	336	422	332								
17	348	309	420	351								
18	311	286	406									
19	282	265	385									
20	261	246	358									
21	249	227	333									
22	231	213	312									
23	208	206	313									
24	189	203	318									
25	186	199	317									
26	192	193	305									
27	191	201	282									
28	179	226	261									
29	163		240									
30	148		230									
31	128		227									

Water levels on Bezdán gauge station during 2013

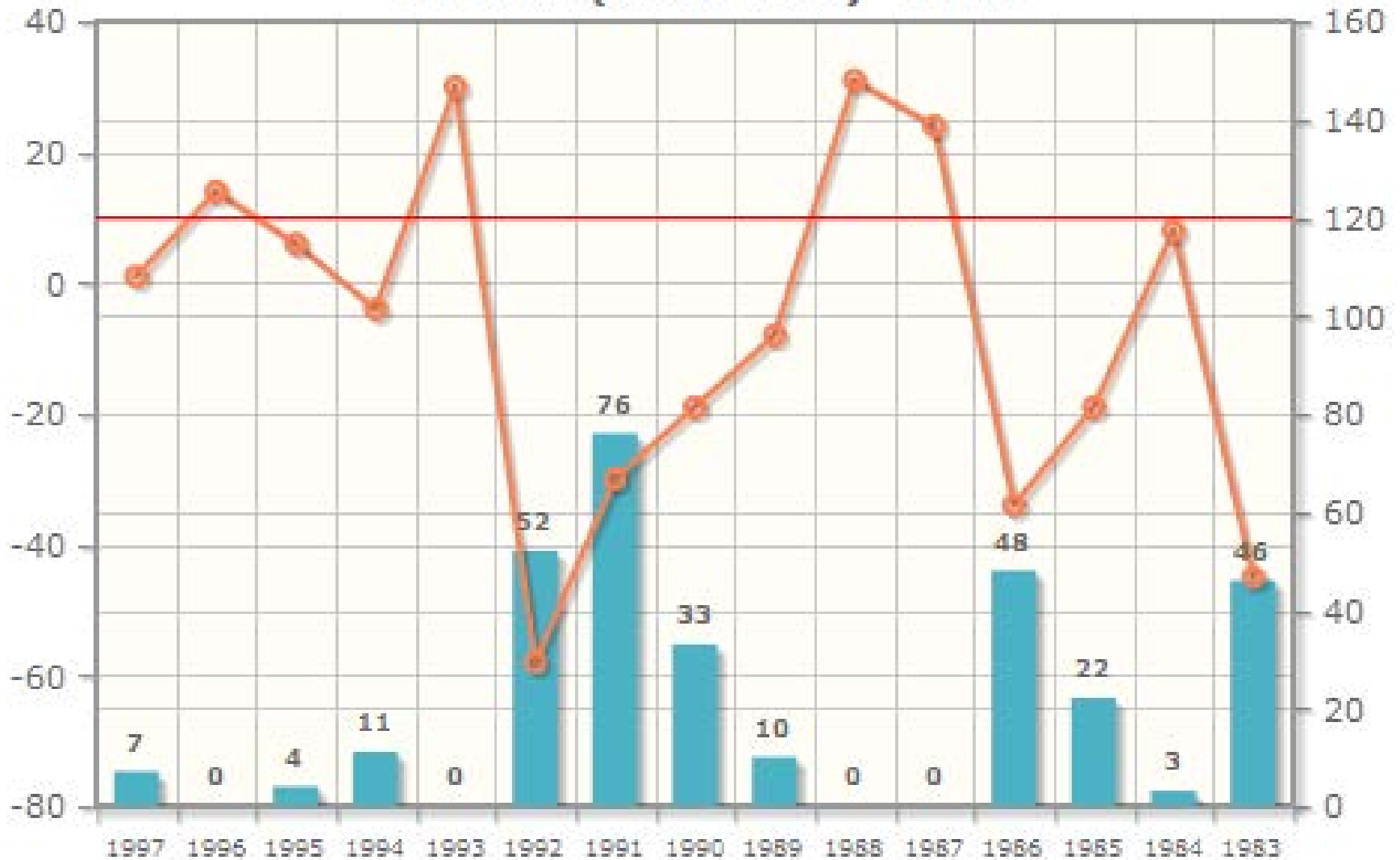
No water level lower than EN



BEZDAN (2011-1997) - Hmin



BEZDAN (1997-1983) - Hmin





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**Thank You
For Your Kind Attention**

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Linz, 18.04.2013