

**ВІДКРИТЕ АКЦІОННЕ ТОВАРИСТВО
"УКРАЇНСЬКИЙ ГОЛОВНИЙ ПРОЕКТНО-РОЗВІДУВАЛЬНИЙ
ТА НАУКОВО-ДОСЛІДНИЙ ІНСТИТУТ З МЕЛІОРАТИВНОГО
ТА ВОДОГОСПОДАРСЬКОГО БУДІВНИЦТВА"
(ВАТ "УКРВОДПРОЕКТ")**

*Державна ліцензія на виконання спеціальних видів робіт
у проектуванні та будівництві Серія АБ № 356343*

*Державна ліцензія на виконання топографо-геодезичних,
картографічних робіт Серія АБ № 120400*

*Державна ліцензія на проведення землевпорядних
робіт Серія АБ № 583115*

Public Corporation «Ukrvodproekt»

**Feasibility Study for creation (construction) of
Informational-measurement System «Prycarpattja»
In the basins of Prut and Siret rivers**

ENVIRONMENTAL IMPACTS ASSESSMENT

01035101-211020-OBHC

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3 BRIEF CHARACTERISICS OF THE AREAS FOR CONSTRUCTION AND RECONSTRUCTION.

Activity foreseen by the project is directed to perfection of the system for hydro-meteorological phenomena monitoring with further establishment of modern systems for data transfer and processing, aimed to forecast the negative impacts of the flood waters by prevention awareness, as well as further design of anti-flood and riversides protective measures.

At the moment in the basin of Prut-Cheremosh exist 16 hydromonitoring stations, which belong to Hydrometeorological Service of the Ministry of Emergency (Hydromet Centre). And suggested 1 automatic station (AS) of Dnister-Prut Basin Administration of Water Resources (BUVR).

In the basin of Siret river is in operation 1 station belongs to Hydromet Centre and foreseen opening of 2 stations of BUVR.

Additionally project foresees establishment of 9 precipitation gages (APG), and 2 of them will be placed on the existent meteostations of Hydromet Centre.

To determine water outflow in the Prut and Siret basins also foreseen construction of 4 cross-sections to provide water flow speed automatic measurement.

The land ownership for ASs placement is mainly confirmed by State Acts or by special letters of the land owners. It’s concern ASs which are situated on the railway or autoroad bridge footings.

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The precipitation gages, which should become automatic through project activity, are placed accordingly to the letters of agreement on the territory of village Councils and 2 of them - on the territory of actual meteostations.

The List of station foreseen to become AS is in the Table 1.

Table 1

List of water check points foreseen to become AS

№	Nomination River – Settlement	Belongs to	Current status	Type of placing
1	2	3	4	5
1.	r. Prut – Vorokhta	Hydromet Centre	actual	bridge
2.	r. Prut – Tatariv	Hydromet Centre	actual	bridge
3.	r. Prut – Jaremcha	Hydromet Centre	actual	bridge
4.	r. Prut – Kolomyja	Hydromet Centre	Actual	bridge
5.	r. Prut – Chernivtsi	Hydromet Centre	actual	riverside
6.	r. Prut – Dubivtsi	BUVR	Draft	bridge
7.	r. Prut – Tarasivtsi	BUVR	Draft	bridge
8.	r. Zhonka – Jaremche	Hydromet Centre	actual	riverside
9.	r. Kamjanka – Dora	Hydromet Centre	actual	riverside
10.	r. Chernjava – Ljubkivtsi	Hydromet Centre	actual	riverside
11.	r. Iltsa – Iltsi	Hydromet Centre	actual	riverside
12.	r. Black Cheremosh – Verkhovina	Hydromet Centre	actual	riverside
13.	r. Varetin – Upper Jaseniv	Hydromet Centre	actual	riverside
14.	r. White Cheremosh – Jablunitsa	Hydromet Centre	actual	riverside
15.	r. Cheremosh – Usteriki	Hydromet Centre	actual	riverside
16.	r. Cheremosh – Kutu	Hydromet Centre	actual	bridge
17.	r. Putila – Putila	Hydromet Centre	actual	riverside
18.*	r. Siret – Lopushna	BUVR	design	precipitation gage
19.	r. Siret – Storozhinets	Hydromet Centre	actual	riverside
20.	r. Siret – Kamjanka	BUVR	design	bridge
21.*	r. Small Siret – Upper Petrivtsi	BUVR	design	precipitation gage
22.*	r. Makhidra – Old Zhadov	BUVR	design	precipitation gage
23.*	r. White Cheremosh upper reaches – Goloshina	BUVR	design	precipitation gage
24.*	r. Pistenka - Prokurava	BUVR	design	precipitation gage
25.*	r. Sovitsa – Kitsman	BUVR	design	precipitation gage
26.*	r. Black Cheremosh upper reaches – Zelene	BUVR	design	precipitation gage
27.*	Seljatin (meteostation)	Hydromet Centre	design	precipitation gage
28.*	Pozhezhevaska (meteostation)	Hydromet Centre	design	precipitation gage
29.	Р.Прут, Чернівці	Hydromet Centre	design	flow meter
30.	Р. Черемош – с. Устеріки	Hydromet Centre	design	flow meter
31.	Р. Білий Черемош – с. Яблуниця	Hydromet Centre	design	flow meter
32.	р. Сирет – м. Сторожинець	Hydromet Centre	design	flow meter

Notice: *- shown placement of the automatic precipitation gages

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The detailed information listed the works should be made for each AS automatisisation/construction are in the Explanation Notice (розділ 1, позначення - 211018-ПЗ та -211019-ПЗ) та Кошторисні документації (chapter 2, designations - 211018-КД and - 211019-КД).

The Scheme of ASs and Precipitation gages placement shown on the Picture 1..

The List of Works, foreseen to perform in the processes of construction reconstruction:

- excavation works for buildings;
- installation of ferroconcrete well and underwater tube;
- ditch backfilling around buildings;
- cover of the well by metallic plate – cover:
- heightening on this plate a room for equipment and devices приміщення для;
- plastering of walls (outside and for interior);
- doors and windows placing;
- ceramic floor decking;
- rolled-strip roofing;
- stairs (if necessary – with handrail);
- paths beautification to provide the way;
- establishment of hydrometric poles;
- water-gauge placement;
- bottoming and paint;
- clips making and installation (welding)

Concrete list of works for each AS depends of its technical status and physic-geographic conditions of the place.

Excavation works will be made by hands and sometime – mechanized.. Extraction of local sandy gravel for constructions and stairs in small volumes can't have an appreciable influence on the flow. The atmosphere discharges from welding, bottoming and painting also can't have marked affect on their concentrations in the ground air.

Construction works will be performed through the periods of minimal water content and besides the time of fish spawning. The time of these works will be agreed with the authorities responsible for the fish protection

Even if it will be used special machines for the well pit making the additional discharges also can't have an essential influence on the background condensations/

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Summarizing. The meddling into environment is minimal. Negative impact on the herbage, geologic sphere, atmosphere air and hydrosphere willn't be influable.

5 COMPLEX ASSESSMENT OF ENVIRONMENTAL IMPACTS IN THE PROCESS OF CONSTRUCTION WORKS PERFORMANCE6.

Taking into account the factors of environmental influence in the processes of hydrometric buildings construction and reparation there can be discussed potential impacts in such spheres as:

- atmosphere air (discharges from vehicles, construction machines, welding works, fume from dissolvent substances of paint materials);
- channel deformations when trench digging for water intake tubes and wells of water gages, stairs construction;
- fish resource and total damage for zoo benthos , fito- and zoo- plankton;
- fauna in river valleys;
- soils.

Summarising all the mentioned in previous chapters it can be confidently affirm that both volumes of works and their character, means & methods of performance can't have an appreciably influence on existent natural balance.

All the sites are in residential areas which anthropogenic impacts are fare more then probable influence of the construction works, foreseen by the project/

There absent productive soils on the ASs placements.

Works will be performed in the intermediate periods and should be agreed with the environment and fish protection authorities.

In previous chapters wasn't investigated one more aspect of the project implementation – automatic transfer of the monitoring results. This issue will be resolved through/ mobile connection operators network. Therefore the probable additional influence of the electromagnetic impacts isn't necessary to take into consideration. .

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6 PERSPECTIVE ENVIRONMENTAL IMPACTS EVALUATION

Project’s measures in whole can’t produce negative effect for any of the components of the environment and only aimed to improve the social status of the Region.

When the system of ASs :will be putted into operation:

- negative impact on aqueous medium should be absent;
- negative impact on the soils should be absent;
- negative impact on the atmosphere air should be absent;
- negative impact on the fauna should be absent;
- negative impact on the fish resource should be absent;
- negative impact on the technogenic sphere should be absent;
- negative impact on the social sphere should be absent.

As positive consequences of the project activity should be nominated the establishment of secure System for collection, processing, transfer and accumulation of hydrometeorological information, aimed to provide effective floods prognosis and prevention to minimise concerned risks, what will have a positive influence on the social and economic spheres .

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(Chernivtsi Regional State Administration
Deputy Head Mykhailo Gainicheru 18.05.2011)**DECLARATION OF INTENT**1. Investor (customer): **Dnister-Prut basin Administration of Water Resources**Поштова і електронна адреса: **Chervonoarmiyska street, 194B, Chernivtsy 58013.**
e-mail - buh@dpbuvr.org.ua2. Localisation of constructive places: **actual and new stations for water status monitoring in river beds of the Ukrainian parts of rivers Prut and Siret basins**3. Characteristic of the activity (object): **collection, processing, transfer and accumulation of hydro meteorological information in automatic regime concerned data on the level and temperature of water, air temperature and atmospheric pressure, flow speed and water discharge**Technical and technology data: **sensors on level, temperature, pressure, automatic precipitation gage and discharge gauge**4. Social-economic necessity for planned activity: **urgent need to establish System for providing effective floods prognosis and prevention to minimise concerned risks accordingly to Governmental decisions and international commitments of Ukraine.**

5. Needs in resources for construction and operation:

land – **on lands of Water Fund on the reversides inside of sitings for stations and on the bridge footings, on the territories of the village Councils and actual meteo-stations**raw materials – **stones from local deposits for reiversides reclamation**energy (fuel, electricity, heat) – **for account of construction contractors**water – **absent**labor – **approx. 5 persons for account of construction contractors.**6. Transport providing (in construction and further operation): **for account of construction contractors and customer.**7. Environmental and other limits for planning activity in variants : **absent.**8. Necessary environmental-engineering support and territory protection in variants: **accordingly to design decisions and prescriptions of environmental authorities.**

9. Probable environmental impacts of planning activity (in construction and further operation):

- climate and micro-climate: **absent**
- air: **products of fuel incineration in engines.**
- water: **temporary local worsening of the water quality (dimness) through tubing for riverside AS.**
- soils: **removal of non-productive layer of soil with further restoration in a way of its stow as backing side layer .**

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- fauna and flora, protected areas: ower-water flora – temporary impact composed by meadow formation of damaged places, fauna - absent, protected areas - absent, water biocoenosis – practically absent.
 - social environment (population): improvement by resolution of the problem through preliminary awareness about floods and other water emergency
 - tecnogenic environment : absent.
10. Waste of productions and possibility for their secondary usage, utilisation, decontamination or safe disposal: absent.
11. EIA volume: accordingly to requirements of ДБН А.2.2-1-2003
12. Public participation: public awareness through mess-media.

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DECLARATION ON CONSEQUENCES

Feasibility Study (FS) for establishment (construction) of Information-measurement System «Pricarpattja» in the basins of Prut and Siret rivers was developed on the basis of project statement given by Dnister-Prut basin Administration of Water Resources (BUVR).

FS foresees establishment of the System for Floods prognosis and prevention and mitigation of risks concerning through reconstruction of actual and constriction of new automatic water stations and cross-sections to water flows gauge and precipitation gauges placement.

FS foresee:

- Reconstruction by the way of 16 water stations automatisation;
- Construction of 3 automatised stations;
- Construction of 4 rover cross-sections for automatic water discharge measurement;
- Establishment of 9 automatic precipitation gauges;
- Riversides protection around the AS where the river banks are destroying.

Propose measures, after their implementation willn't have an influence on the Environment and have a positive impact on the social sphere through Floods prognosis and proper in time awareness of inhabitants about probable consequences of their passing..

CUSTOMER

**Dnister-Prut basin Administration
of Water Resources**

GENERAL DESIGNER

Public Corporation «Ukrvodproekt»

President

V.Dupljak

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