

# Ukraine for Micro-plastic Pollution Prevention in transfrontier river basins

Centre "EcoResource"



(State Scientific & Technical Centre for inter-sectorial & regional  
problems of the Environmental Safety and Resource Conservation)

Dr. Zinoviy S. BROUYDE

# Initial developments & preconditions in Waste Treatment sphere

(Standards and Quality, 1994, Nr.4. pp.29-32; Nr.6. pp.32-36.)

## PROBLEMS OF STANDARDIZATION FOR ENVIRONMENT PROTECTION AND RESOURCES CONSERVATION

Z. S. Brojde

To determine the range of problems raised in this work, the Fig.1 presents schematically the main changes occurring in environment as a result of human activity.

The 'Environment' term is applied here instead of the conventional term "natural environment", for which anthropogenic factors should be vanishing by definition. In fact, the real environment can no more be considered as exclusively natural. To demonstrate it, one can try to estimate the relation between natural and artificial parts in food, water, air, clothes we consume and in all other surrounding.

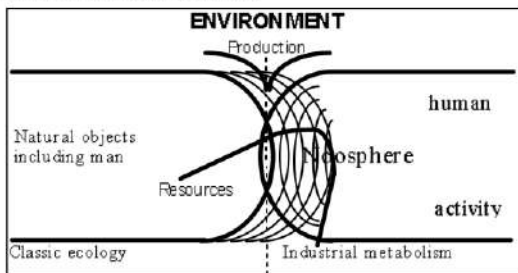


Fig.1. Environment changing as a result of human activity

Expansion of human activity area constantly changes mankind itself and all natural objects affected by its: the surface and bowels of the earth, atmosphere, hydrosphere, outer space... At the same time the other anthropogenic part of environment, the informational space is expanded. The total result of such changes is formation of the noosphere. In the heaviest degree it is reflected in public awareness and public behaviour, where virtually only subconscious instincts have remained from initial natural environment.

Human activity is aimed to manufacturing products of natural and nonnatural resources to satisfy various demands of people. In the process, natural objects are transformed into fields, reserves, mining deposits, levees, channels, reservoirs, landfills etc. which are necessary for industry and vital activity.

The nowadays level of anthropogenic changes in environment requires to revise many basic concepts. So, understanding of ecology after E. Heckel means small differences of environment from natural equilibrium, i.e. existence (coexistence) of any biogenoses, including mankind, in exclusive dependence on natural factors.

Fig.1 demonstrates us that laws of classic ecology no more extend on the whole environment. For the part of it represented on the right half of Fig.1, it is more appropriate to apply the concept of "industrial metabolism" which appeared in last years.

The concept "Sustainable Development" accepted in the Rio-92 Declaration implies refusal of the conception of "preservation of primeval nature".

Instead, the systems approach to interaction of humanity with environment is formed. On this basis, it is necessary to choose such variants of human progress (including all aspects of vital activity), which ensure subsequent sustainable development for all environmental objects. The alternative is irreversible degeneration of environment as soon as in 30-50 years if today's tendencies of technological progress are preserved. In this case the statement of some environmentalists about urgent necessity to reduce the total number of mankind by 10 times, would appear not so shocking.

The concept of sustainable development is extended on environmental objects. In the sphere of human activity and resulting production the concept of ecological security is adequate. It is possible to arrange the main kinds of human activity on their degree of integrated ecological danger approximately as follows:

- power production;
- industrial production (from mining to waste processing);
- agro-industrial complex;
- military activity;



KW-AbfG - Kreislaufwirtschafts- und Abfallgesetz  
Gesetz zur Förderung der Kreislaufwirtschaft und Sicherung der umweltverträglichen Beseitigung von Abfällen  
Vom 27. September 1994  
(BGBl. I 1994 S. 2705; 1996 S. 1354; 1998 S. 1009; 1999 S. 2425; 2000 S. 832; 27.07.2001 S. 1290; 2001 S. 2331; 20.10.2001 S. 2785; Art. 57; 21.09.2002 S. 3322; 14; 26.01.2004 S. 82; 14; 22.12.2004 S. 3704; 14; 21.08.2005 S. 1988; 14; 01.09.2005 S. 2810; 15.07.2005 S. 1018; 15; 10.07.2005 S. 1018; 16; 31.10.2005 S. 2407; 16; 08.12.2005 S. 2816; 16; 07.2007 S. 1402; 12; 22.12.2008 S. 2998; 11; 08.2009 S. 2723; 11; 08.2010 S. 1162; 11; 06.10.2011 S. 1088; 11; 24.02.2012 S. 212; 11; 17.08.2012 S. 1726; 11; 09.08.2012 S. 2128-27-2.)

Ersetzt durch Kreislaufwirtschaftsgesetz

### § 1 Zweck des Gesetzes

Zweck des Gesetzes ist die Förderung der Kreislaufwirtschaft zur Schonung der natürlichen Ressourcen und die Sicherung der umweltverträglichen Beseitigung von Abfällen.

### § 2 Geltungsbereich

(1) Die Vorschriften dieses Gesetzes gelten für

1. die Vermeidung,
2. die Verwertung und
3. die Beseitigung von Abfällen.

(2) Die Vorschriften dieses Gesetzes gelten nicht für

1. die nach dem Lebensmittel- und Futtermittelgesetzbuch sowie es für Lebensmittel, Lebensmittel-Zusatzstoffe, kosmetische Mittel, Bedarfsgegenstände und mit Lebensmitteln verwechselbare Produkte gilt, nach dem Lebensmittelhygienegesetz nach dem Milch- und Margarinegesetz, nach dem Pflanzenölhygienegesetz und nach den aufgrund dieser Gesetze erlassenen Rechtsverordnungen zu bestimmenden Stoffe,
1. a. die nach der Verordnung (EG) Nr. 1774/2002 des Europäischen Parlaments und des Rates vom 3. Oktober 2002 mit Hygienevorschriften für nicht für den menschlichen Verzehr bestimmte tierische Nebenprodukte (ABl. EG Nr. L 273 S. 1) in der jeweils geltenden Fassung, nach den zu ihrer Durchführung ergangenen Rechtsakte der Europäischen Gemeinschaft, nach dem Tierische Nebenprodukte-Beseitigungsgesetz oder nach den auf Grund dieses Gesetzes erlassenen Rechtsverordnungen abzuholenden, zu sammeln, zu befördern, zu lagern, zu behandeln, zu verpacken, zu verwenden, zu beseitigen oder in den Verkehr zu bringenden tierischen Nebenprodukte,
2. Kärntnerrotte und sonstige rassistische Symbole im Sinne des Abfallgesetzes,
3. Stoffe, deren Beseitigung in einer aufgrund des Strahlenschutzgesetzes erlassenen Rechtsverordnung geregelt ist,
4. Abfälle, die beim Aufsuchen, Gewinnen, Aufbereiten und Weiterverarbeiten von Bodenschätzen in den der Bergaufsicht unterliegenden Betrieben anfallen, ausgenommen Abfälle, die nicht unmittelbar und nicht üblicherweise nur bei den im 1. Halbsatz genannten Tätigkeiten anfallen,
5. nicht in Behälter gefüllte gasförmige Stoffe,
6. a. Kohlenstaub, das für den Zweck der dauerhaften Speicherung abgetrennt, transportiert und in Kohlendioxidspiegel gespeichert wird, oder das in Forschungszwecken gespeichert wird,
6. Stoffe, sobald diese in Gewässer oder Abwasseranlagen eingeleitet oder eingebracht werden,
7. das Aufsuchen, Bergen, Befördern, Lagern, Behandeln und Vernichten von Kampfstoffen.

### § 3 Begriffsbestimmungen

(1) Abfälle im Sinne dieses Gesetzes sind alle beweglichen Sachen, die unter die in Anhang I aufgeführten Gruppen fallen und deren sich ihr Besitzer entledigt, entledigen will oder entledigen muß. Abfälle zur Verwertung sind Abfälle, die verwertet werden. Abfälle, die nicht verwertet werden, sind Abfälle zur Beseitigung.

(2) Die Entledigung im Sinne des Absatzes 1 liegt vor, wenn der Besitzer bewegliche Sachen einer Verwertung im Sinne des Anhangs II oder einer Beseitigung im Sinne des Anhangs I II zuführt oder die tatsächliche Sachherrschaft über sie unter Wegfall jeder weiteren Zweckbestimmung aufgibt.



<http://www.cdep.ro/pdfs/greenlight.summit/kuchma2.pdf>

Address by His Excellency Leonid D. Kuchma,  
President of Ukraine, at the International Conference on  
Environmental and Sustainable Development of the  
Danube - Carpathian Region  
(Bucharest, April 30 2001)

Consistent fulfillment of our obligations and constructive orientation towards international cooperation characterize Ukrainian position on environmental development of the Carpathian and Danube regions.

As of now the antropogenic pressure on the region has achieved its critical limit. The situation is becoming more complicated due to the lack of effective legal instruments for joint environmental protection measures by different countries.

I also want to draw the attention of the participants of the Forum to the work of a very unique, in its nature, ecological European region "Upper Prut" that was set up on the basis of Ukrainian, Romanian and Moldovan proposals. With the support of the European Union, TACIS and PHARE programs we successfully implement joint Ukrainian-Romanian-Austrian project "Ecoprofit" aimed at mitigating the adverse impact of industrial activities on the environment and at improving the competitiveness of enterprises.

# Preliminary systemic projects & proposals for Danube area

European TACIS Partnership project / Projet Européen de Partenariat Institutionnel France-Ukraine

Projet Européen en Ukraine 2004  
Développement d'une stratégie pour harmoniser au niveau central et régional la politique de gestion des déchets avec les standards UE en Ukraine

Key Institutions

Industrial waste management technical assistance  
Partenariat d'assistance technique dans le domaine de la gestion des déchets Industriels en Ukraine

Région pilote Chernivtsi

Partenaires en Ukraine  
UNRECOOMRESURBY et Centre EcoResources

Partenaires en France  
ADEME, MKDD, DRIRE

Logos: brgm, EcoResource, ADEME, MKDD, DRIRE

## Eliminating pollution

The European Green Deal

December 2011 #EUGreenDeal

DANUBE POLLUTION REDUCTION PROGRAMME  
NATIONAL PLANNING WORKSHOP  
UKRAINE  
Black Sea, July 13-19, 1998

[www.icpdr.org/icpdr-files/8277](http://www.icpdr.org/icpdr-files/8277)

Ministry of Environmental Protection and Nuclear Safety  
Programme Coordination Unit  
UNDP/GEF Assistance

### special amendment

[http://ec.europa.eu/regional\\_policy/archive/consultation/danube/doc/countries/ukr\\_vision\\_2nd\\_correction\\_en.pdf](http://ec.europa.eu/regional_policy/archive/consultation/danube/doc/countries/ukr_vision_2nd_correction_en.pdf) to the official Ukrainian Position Paper on EUSDR  
[http://ec.europa.eu/regional\\_policy/archive/consultation/danube/doc/countries/ukr\\_vision\\_2nd\\_en.doc](http://ec.europa.eu/regional_policy/archive/consultation/danube/doc/countries/ukr_vision_2nd_en.doc)

Project V.2.3. – Cross-border cooperation on establishment of effective system of sorting waste products, farm waste and municipal waste on the base of the best available techniques (BAT).

Aim: to improve the strategy of waste products management in Danube region, to avoid water and soil pollution by wastes as well as harmful influence on biodiversity, to improve practice of waste management in Danube region.

#### Actions:

- to deploy and to equip with the necessary facilities landfills for household waste;
- to create a cross-boarder network of enterprises and institutions related to separable collection, sorting and recycling of municipal and industrial waste products;
- to establish an information and examining agencies with aim to take stock and to rate wastes, to specify the best available techniques in waste sphere and to minimize the waste pollution via payment for contamination and clustering approach;
- to improve the transportation of solid and liquid municipal wastes from customers to landfills and sewage-purification facilities;
- to purchase the floating vessels for collection and transportation of plastic garbage into the recycling enterprises;
- to collect, to pack and to move away hazardous waste (especially old pesticides);
- to initiate appropriate structural changes and changes of monitoring system in authorized control bodies responsible for waste management.

Expected results: Project will contribute to the establishment of the public-private partnership in sphere of integrated notification and control of pollution, as well as the use of the best available techniques (BAT); to increase the competitiveness of manufacturing and services activity; to enhance the usage of material and energy resources in industrial and municipal spheres; to stimulate the creation of new jobs.

Project will assist to harmonization of the mechanisms of data detection, collection, processing and exchange at international level as well as to ensure the monitoring facilities, professional training in the area of environmental management and risk assessment of situations at the territories of the border rivers, formation of stable organic pollution (SOP) on the base of contemporary information technologies.

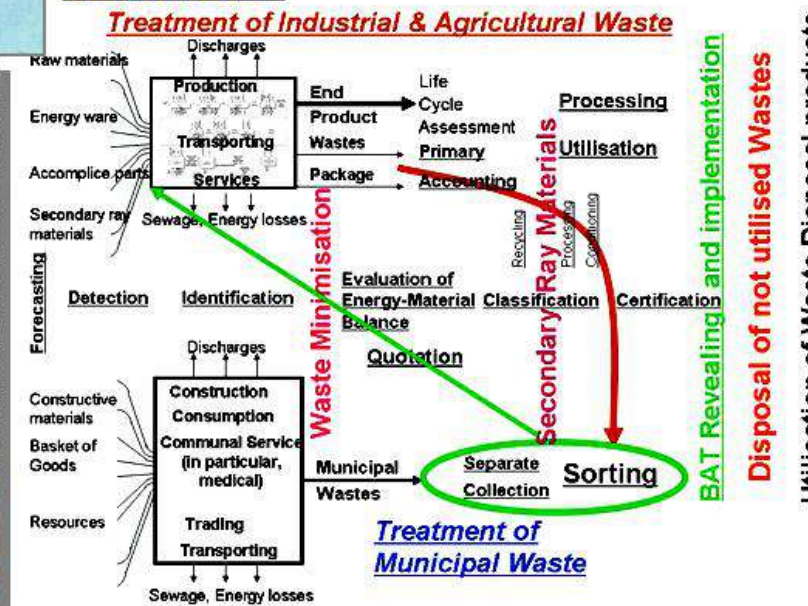
Project will broaden facilities for further involvement of investments into the permanent application of the best available techniques (BAT).

EUROPEAN UNION Phase

Plot implementation of the Austrian ECOPROFIT Programme in EcoEuraRegion as a facility for ISO 14000 and CIS Waste Management Standards

Экспериментальное внедрение австрийской программы ECOPROFIT в ЭкоЕуроРегион для расширения возможностей применения стандартов ISO 14000 и ГОСТ СНГ по управлению отходами с отходами

Logos: Tacis, PHARE, TACIS, PHARE, Tacis, PHARE, Tacis, PHARE



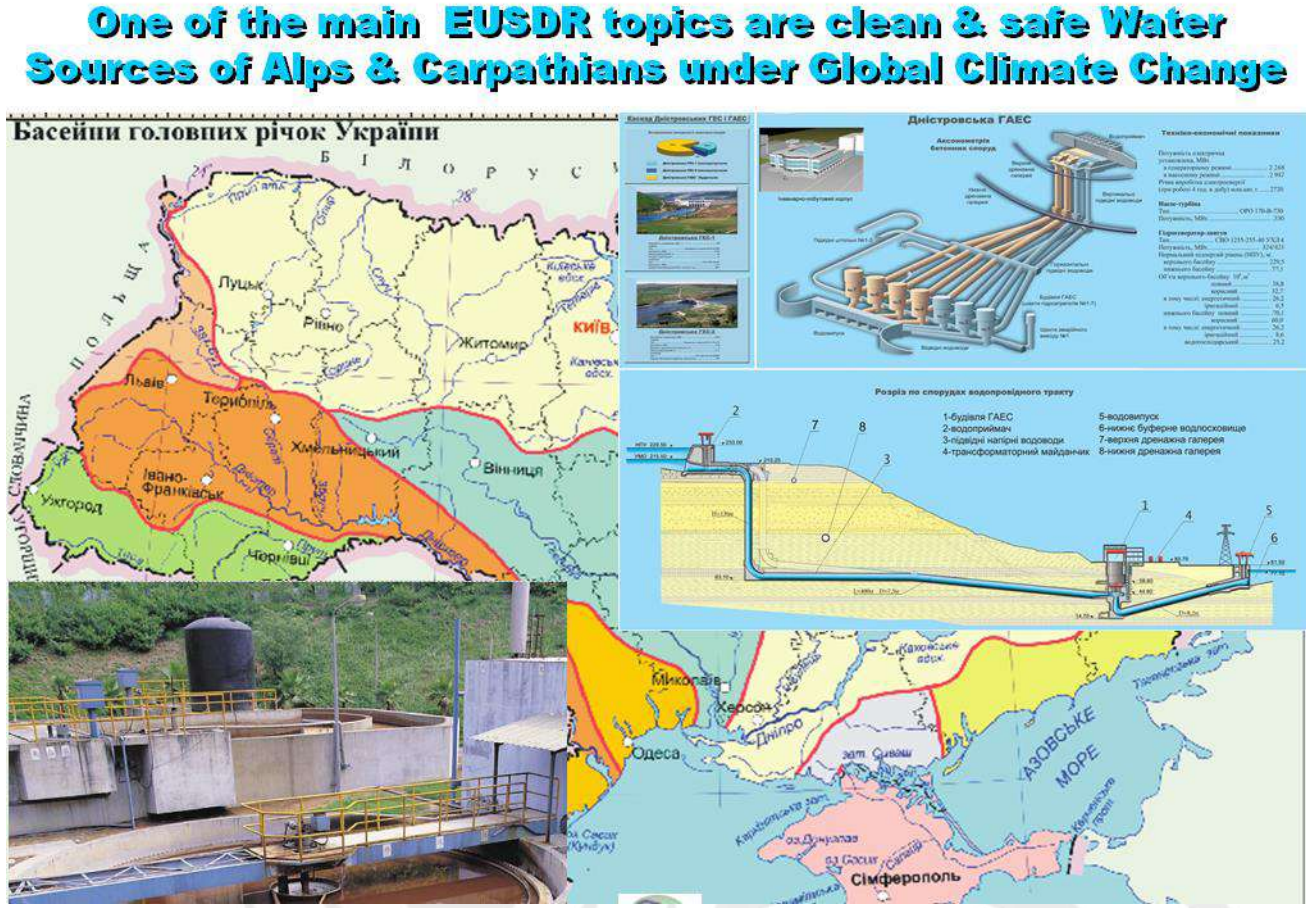
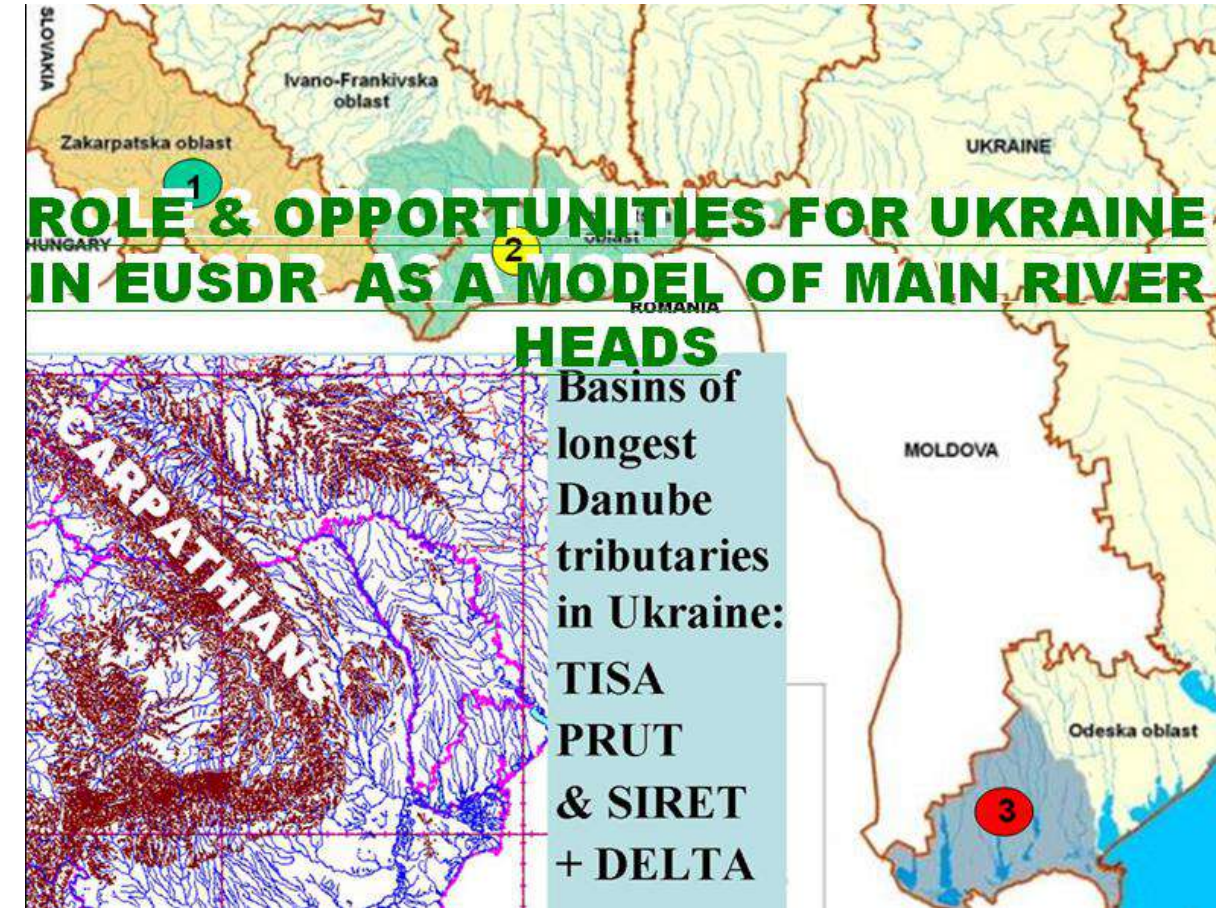
Utilisation of Waste Disposal products

Disposal of not utilised Wastes

BAT Revealing and implementation

Logos: Ministry of Environmental Protection and Nuclear Safety, UNDP/GEF Assistance

# Ukrainian role for EUSDR-DTP common priorities embodiment



## Answering European GREEN DEAL & EUSDR-DTP common priorities

### The EU will:



Become  
climate-neutral  
by 2050



Protect human life,  
animals and plants,  
by cutting pollution



Help companies  
become world leaders  
in clean products and  
technologies



Help ensure a  
just and inclusive  
transition

*“The European Green Deal is our new growth strategy.  
It will help us cut emissions while creating jobs.”*

*Ursula von der Leyen, President of the European Commission*

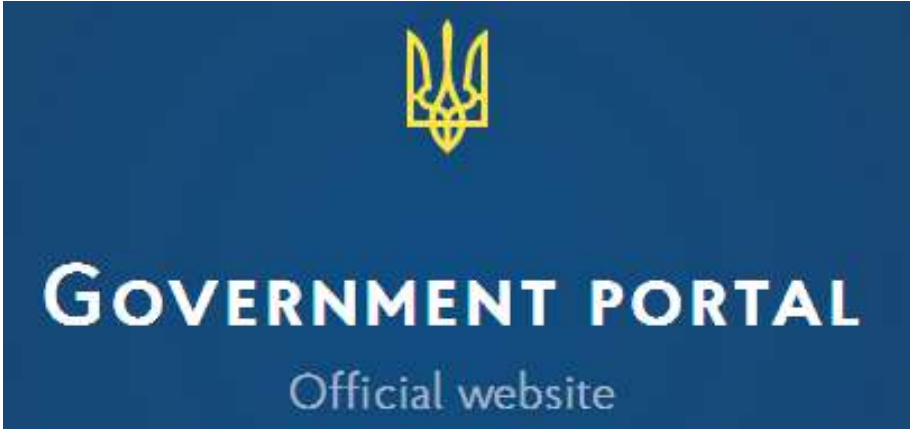


## Clean water



Reduce particularly harmful pollution from **micro-plastics**

# General vision of conformity to European GREEN DEAL



Ukraine will shortly submit a proposal to engage in the implementation of the European Green Deal (EGD), the EU's main line of development, which envisages the transition of Europe to a climate-neutral economy by 2050.

Elaboration of such suggestions was touched upon at the inaugural meeting of the interagency working group on reducing the consequences of climate change chaired by Deputy Prime Minister for European and Euro-Atlantic Integration Dmytro Kuleba.

That is why it is important for our country not just to wait for the recommendations of Brussels, as it usually happened in the past, but to show the new quality of interaction with the European Union, to take an active part in the policy development stage. In addition to the list of areas for participation in the EGD, Ukraine will also provide suggestions on how to structure climate dialogue with the EU.



# Ukrainian Legal-Normative Basis on Waste Treatment in conformity to Acquis Communautaire



EUROPEAN UNION

THE EUROPEAN PARLIAMENT

THE COUNCIL

Brussels, 2 October 2008

A new framework for waste management in the EU  
Article 4 Waste hierarchy

- (a) prevention
- (b) preparing for re-use
- (c) recycling
- (d) other recovery, e.g.  
energy recovery and
- (e) disposal

**Integrated Pollution Prevention  
and Control - Best available  
Technology (BAT)  
implementation accordingly to  
EU Directive 96/61EC**

**Waste Treatment Planning**

## LAW OF UKRAINE "ON WASTE"

minimisation of waste generation, compulsory accounting of waste on the basis of their classification and certification **Art. 5**

Standardization is compulsory for the requirements to Waste Classification and their Certification, requirements to safe Waste treatment, as well as to the Waste as Secondary Raw Materials. **Art. 6**

Obtaining information about Technologies for Waste Utilisation **Art. 16**

Providing acceptance and utilisation of the used package materials and containers, in which bundled products of the enterprises, institutions and organisations, or concluding agreements with proper organisations for their collection and utilisation;

Determination of the content and properties of Wastes which are generating

On the basis of material-raw materials balance of Production should be provided detection and preliminary current Accounting of the Quantity, Type and Content of Wastes, which are generating, collecting, transporting, keeping, processing, utilising, decontaminating and disposing, as well as presented statistical reporting on Waste;

Furnishing information on Waste and Activities concerned to them to the Local Authorities and Local Self-governments and to especially appointed bodies of executive power responsible for Waste Treatment;

Appointing persons responsible for the Waste Treatment;

Organisation of the accounting providing for Wastes generation, processing decontamination, utilisation and disposal, as well as their Certification; **Art.2**

Establishment of Information-Analytic Systems and Data Banks on the amounts of Wastes Generation and Treatment, providing information exchange with proper authorities of other States and International Bodies **Art. 23**

**State Accounting and Certification are compulsory for all Wastes**, which are generated on the territory of Ukraine and for which is apply force of this Law, the order of State Accounting and Certification should be established by the Cabinet of Ministers of Ukraine **Art. 26**

Development of General Requirements for Municipal Wastes Treatment, Development of the System of Information and Scientific-Methodical Backing to provide intelligence for Generators of Waste on technological and other opportunities for Waste generation amount reduction and utilisation of the Waste **Art. 31**

Information on technological opportunities for Waste Utilisation **Art. 41**

System of Interstate (CIS) **Standards** ГOCT 17.9.

“**Environment Protection. Waste Treatment**», which was initiated by the Standards:

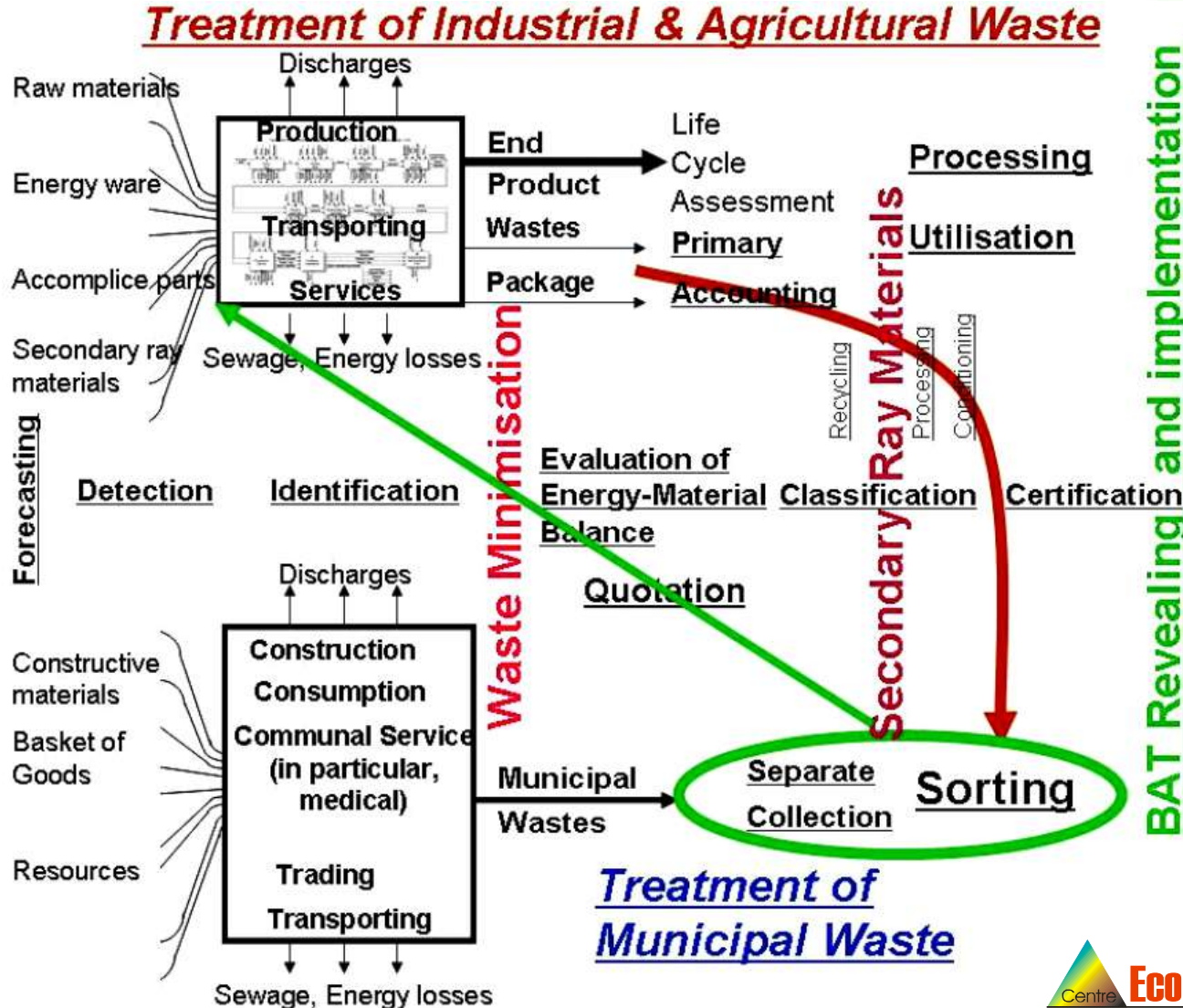
ГОСТ 17.9.0.1-99 (ДСТУ 3911-99) **Waste detection** and submission of **information data about waste**. General requirements:

ГОСТ 17.9.1.1-99 (ДСТУ 3910-99) **Waste Classification**. Order of waste denomination according to their genesis and their reckon with classification categories;

ГОСТ 17.9.0.2-99 (ДСТУ 2195-99) **Technical certificate of waste**. Make-up, content, writing and alteration rules,

For putting this management system into operation it serves now the mechanism of Primary **Accounting of Wastes and Package accordingly to Form Nr 1-BT**, approved by the Order of Ukrainian Ministry of Environment Protection of 07.07.2008 Nr. 342, agreed by the National Committees of Statistics and of Entrepreneurship and registered by the Ukrainian Ministry of Justice.

# General approach to Waste Treatment



**Integrated Enforcement and Planning for Industrial and Municipal Wastes Treatment, based on their Accounting, Sorting, Certification and of the Best Available Technologies (BAT) revealing.**

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Waste management and Recycling, Integrated Waste Management/ Waste Minimization

**Key words:** Genesis, Industrial and Municipal Wastes, Prognosis, Accounting, Separate Collection, Sorting, Certification, Best Available Technologies, Public-Private Partnership.

One of the principal peculiarities of Natural-Anthropogenic Environment (by Legislation of Russia and term "Dovkilja" = Environment in Ukrainian Constitution) is the steady growth of Wastes amount and multiplicity. The Technogenic Sphere and Mankind Vital Activity are the nonstop generators of not-natural improper products — Liquid, Solid, Gaseous and Information Wastes. In the same time into Waste Flows are transforming also purposeful products of Technogenic Sphere (Production, Goods, Provision, Information Medium) after their usage, physical or functional depreciation, damage etc, as well as human and domesticated animals physiological wastes. And in addition we have growth of the "secondary" wastes which are generated by the "primary" wastes treatment.

As opposed to elementary Metabolism (which is a part of Nature processes) these Waste Flows of Mankind activity (so called «Industrial Metabolism») already changed evidently the Substances Circulation both on the Earth and in the nearest Space (Shapskauskas, 1993) The main amount of Wastes is generated as by-products in the processes of Natural Resources (Water, Air, Soil, Biota, Energy) extraction and transformation into Raw Materials and Energy Wares. The following Waste Generators are Industry, Services, Consumption, Mankind Life Activity. The issue how to minimise whole Life Cycle of our Civilisation became through the last decades an essential part of National and International Legislation:

- Pollution Prevention Act (US, 1990);
- Basle Convention (1992);
- German Law on the Economy of Close Cycle and Safe Waste Disposal (1995);
- Ukrainian Law «On Waste» and CIS Model Law "On Industrial and Consumption Wastes" (1998);
- New Directives of the EU Parliament and Council, as well as the EU Strategy on Raw Materials (2008) etc.

The single means for consequent embodiment of Waste Minimisation Principle, which is proclaimed by mentioned Legislation, is the Evolutional Perfection of Technologies. Under term of "Technology" everybody should understand any Human Activity (Natural Resources Utilisation, Production, Agro-sphere, Services, Consumption, not natural needs satisfaction, e.g. — to be in fashion, etc) ordered and directed for specified result. The main identifier of Technology is transformation of natural and anthropogenic Material, Energy, Biologic and Information Resources. From such point of view it's obvious that all Wastes are generated exactly by the Technologies of Natural Resources Utilisation, Production, Consumption and

# Ukrainian Legal Basis on Transfrontier Cooperation

Ministry of Regional Development  
and Construction of Ukraine  
State Scientific & Technical Centre  
for inter-sectorial & regional problems  
of Environmental Safety and Resource Conservation

Ministry of Regional Development  
and Construction of Ukraine  
State Scientific & Technical Centre  
for inter-sectorial & regional problems  
of Environmental Safety and Resource Conservation

APPROVED  
Order of Minister of Regional  
Development and Construction  
of Ukraine № 46 of 27 January 2009

APPROVED  
Order of Minister of Regional  
Development and Construction  
of Ukraine № 46 of 27 January 2009

## METHODICAL RECOMMENDATIONS

for National and Regional co-ordination  
of the Transfrontier Co-operation  
Projects accordingly to the European  
Neighbourhood and Partnership  
Instrument

## METHODICAL RECOMMENDATIONS

on Informational Technologies  
implementation for the Transfrontier Co-  
operation Projects support

## ASSOCIATION AGREEMENT BETWEEN THE EUROPEAN UNION AND ITS MEMBER STATES, OF THE ONE PART, AND UKRAINE, OF THE OTHER PART

### TITLE V ECONOMIC AND SECTOR COOPERATION CHAPTER 27

#### CROSS-BORDER AND REGIONAL COOPERATION

#### Article 446

The Parties shall promote mutual understanding and bilateral cooperation in the field of regional policy, on methods of formulation and implementation of regional policies, including multi-level governance and partnership, with special emphasis on the development of disadvantaged areas and territorial cooperation, with the objective of establishing channels of communication and enhancing exchange of information between national, regional and local authorities, socio-economic actors and civil society.

#### Article 447

The Parties shall support and strengthen the involvement of local and regional level authorities in cross-border and regional cooperation and the related management structures, to enhance cooperation through the establishment of an enabling legislative framework, to sustain and develop capacity building measures and to promote the strengthening of crossborder and regional economic and business networks.

#### Article 448

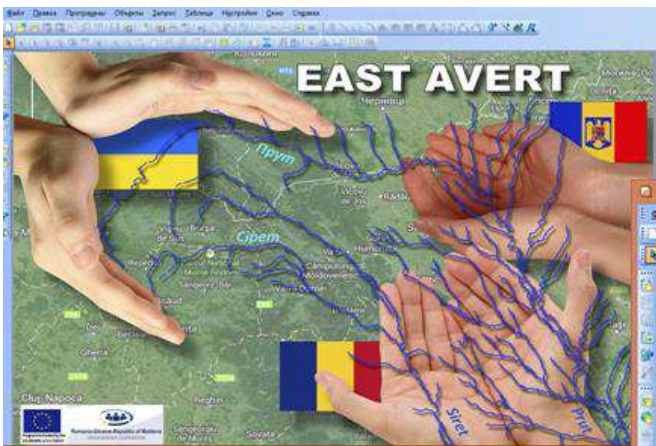
The Parties shall strengthen and encourage development of cross-border and regional elements of, *inter alia*, transport, energy, communication networks, culture, education, tourism, health and other areas covered by the present agreement which have a bearing on cross-border and regional cooperation. In particular, the Parties shall encourage the development of cross-border cooperation in the modernisation, the equipping and the coordination of emergency services.

<https://zakon.rada.gov.ua/rada/show/v0046661-09#Text>

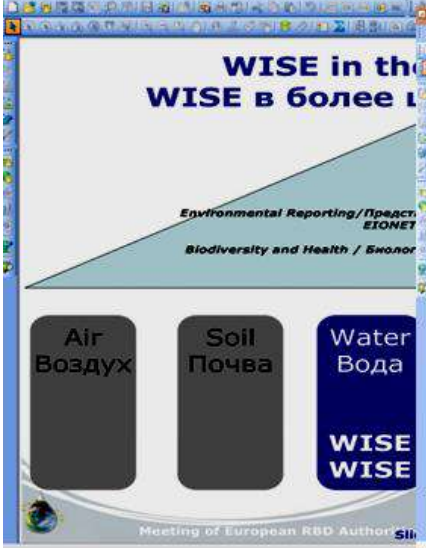


# and their continuation perspectives

## Acceleration EU Directives rooting



**Directive 2007/60/EC of the European Parliament and of the Council of 23 October 2007 on the assessment and management of flood risks**



**EU Directives**  
 2010/75/EU on industrial emission (integrated pollution prevention and control)  
 Directive 91/271/EEC on urban waste water treatment



### REQUEST FOR CLARIFICATION TO JOINT TECHNICAL SECRETARIAT OF THE JOP "RO-UA-MD 2007-2013"

#### PROJECT IDENTIFICATION DATA

Date of the document	12/07/2017
MIS ETC	966
Title	Prevention and protection against floods in the upper Siret and Prut river basins, through the implementation of a modern monitoring system with automatic stations
Project acronym	EAST AVERT
Start date =	November 29, 2013
End date =	December 31, 2017
Overall budget =	9,243,784.56 EUR
EU funding =	8,287,607.98 EUR

Accordingly to decisions of Projects Partners Management Meeting in Iasi on 05/07/2017 Ukrainian PPs ask for JTS clarification on eligibility of the following proposal concerned Activity 3 of the LSP "East Avert".

#### JUSTIFICATION

In parallel to Activities 1 & 2 on new Monitoring, Modelling, Prognosis & Early Warning Systems (MIS and EWS) creation for Upper Prut & Siret basins plain inundations (which development is tying mainly of Flood 2008), it should be embodied the Activity 3 on providing EU Flood Directive 2007/60/EC (FD) implementation, as well as – to realise interaction between MIS/EWS and FD implementation processes.

First stage of FD implementation in Romania was reflected in Report to EU/ICPDR in 2015, which've included information about East Avert objectives. In the same Report were also elucidated UA Governmental Decisions on promotion FD implementation in Ukraine since 2017 accordingly to EU-UA Association Agreement provisions. And from 01/02/2017 in Ukraine were enforced appropriate changes of Legislation (e.g. in Water Code), as well as already are developed Governmental Acts for PFRA and on the Order of Flood Risks Management Planning.

In accordance to this & to East Avert Contract prescriptions, since Autumn 2014, were initiated presentations & discussions with East Avert LP and PP4, as well as on numerous international Forums (e.g. on EUADR, INBO, Carpathian Convention & INHGA events) for FD key requirements implementation using opportunities of East Avert, in particular for GIS mapping of river plain, flash (Stormwater) and Urban types of historic & probable future floods. Thus East Avert Activity 3 is aimed to minimise impact of hazards & risks of inundations and accidental pollutions on Population, Environment and in Socio-Economic sphere. In the same way there should be provided appropriate GIS mapping & scenarios development for key stakeholders (localities, services of Emergency & Civil Defence etc) preparedness and for emergency planning both on prevention measures & for interventions according to circumstances (in situ) activities.

For these tasks of East Avert Activity 3 (basing on experience both of EU projects in Romania & on previous interaction with USAID/GEF/ICPDR/TACIS/PHARE/OECD/COWI/GIZ/CEI/British Council/WBRD etc in East Avert, Dniester/Nistru & Tisa areas), since Spring 2011 with LP and PP4 were agreed appropriate requirements for these works GIS (DTM & vector maps) facilitation.

After numerous discussions through East Avert events in Chernivtsi 03/02/2016, Suceava (19-20 of May 2016), Bucharest (15/09/2016 & 11/10/2016) and in Chernivtsi (19-20 of October 2016), as well as – after appeals to LP and PP4 – on 4-5 of July 2017 PP4 represented exhausted information on Romanian experience in this field and on FD Simulation Reporting requirements.

# Under common aegis of EUSDR & other international Institutions



**28.04.2015** FILES <https://environmentalrisks.danube-region.eu/files> **9th SG Meeting**

Technogenic-Environmental Safety issues in Ukrainian part of EUSDR area  
 Ukrainian part of EUSDR area is unique in comparison with other 13 countries of the Danube region, whereas it's the single State, which unites delta in Odessa Oblast (Sulina) together with  
 - general Lower Danube water (and danger) sources-basins of its main tributaries: Tisa, Prut and Siret in Ukrainian Carpathians, which occupy 80% of Ukrainian area in the Danube basin.  
 Ukrainian & Moldavian participation in EUSDR also covers in fact practically all the right bank and the whole delta of the neighbour Dniester/Nistru river.  
 Therefore in parallel to EUSDR establishment, it was developed and approved Large Scale project East Avert, which should cover the last "gap" in the Danube Risks Prevention and Mitigation "umbrella" following developments of the Danube Flood Risk project.  
 Implementation of East Avert for sees 2 general objectives for the Carpathian-Danube area:  
 - core technical - common System of Automatic Stations establishment & putting into operation through trilateral dispatching structure;  
 - and more prospective - development of GIS basis and distributed data bases for digital mapping of flood hazards and flood risk, showing the potential adverse consequences associated with different flood scenarios, including information on potential sources of environmental pollution, and modeling, planning, as well as interaction in the ordinary, emergency, disaster regimes and for consequence of floods elimination, as an essential element for territorial Spatial Planning and Sustainable Socio-Economic Development.

EAST AVERT PROJECT MIS ETC 966

Romania-Ukraine-Republic of Moldova



**International Network of Basin Organizations**  
 流域组织国际网  
 Международная сеть водохозяйственных организаций  
 الشبكة الدولية لهيئات الأحواض  
 Uluslararası Havza Organizasyonu Ađy

**www.inbo-news.org**  
 "The Website on Basin Management in the World"  
 Français-Español-русский

**"Europe-INBO 2014"**  
 12-15, November 2014, Bucharest (Romania)

Communications / Comunicaciones

General Assemblies  
 Liaison Bureau meetings

**WORKSHOP on the Europe Region Process of the 7th World Water Forum**

12 novembre 2014  
<https://riob-info.org/ru/node/1080>

East Avert : From agreed Water Management through green Infrastructure to Sustainable Regional Development in Transfrontier River Basins  
 Zinoviy S.BROYDE



Programme funded by the EUROPEAN UNION



**EAST AVERT PROJECT MIS ETC 966**



[www.ro-ua-md.net](http://www.ro-ua-md.net)

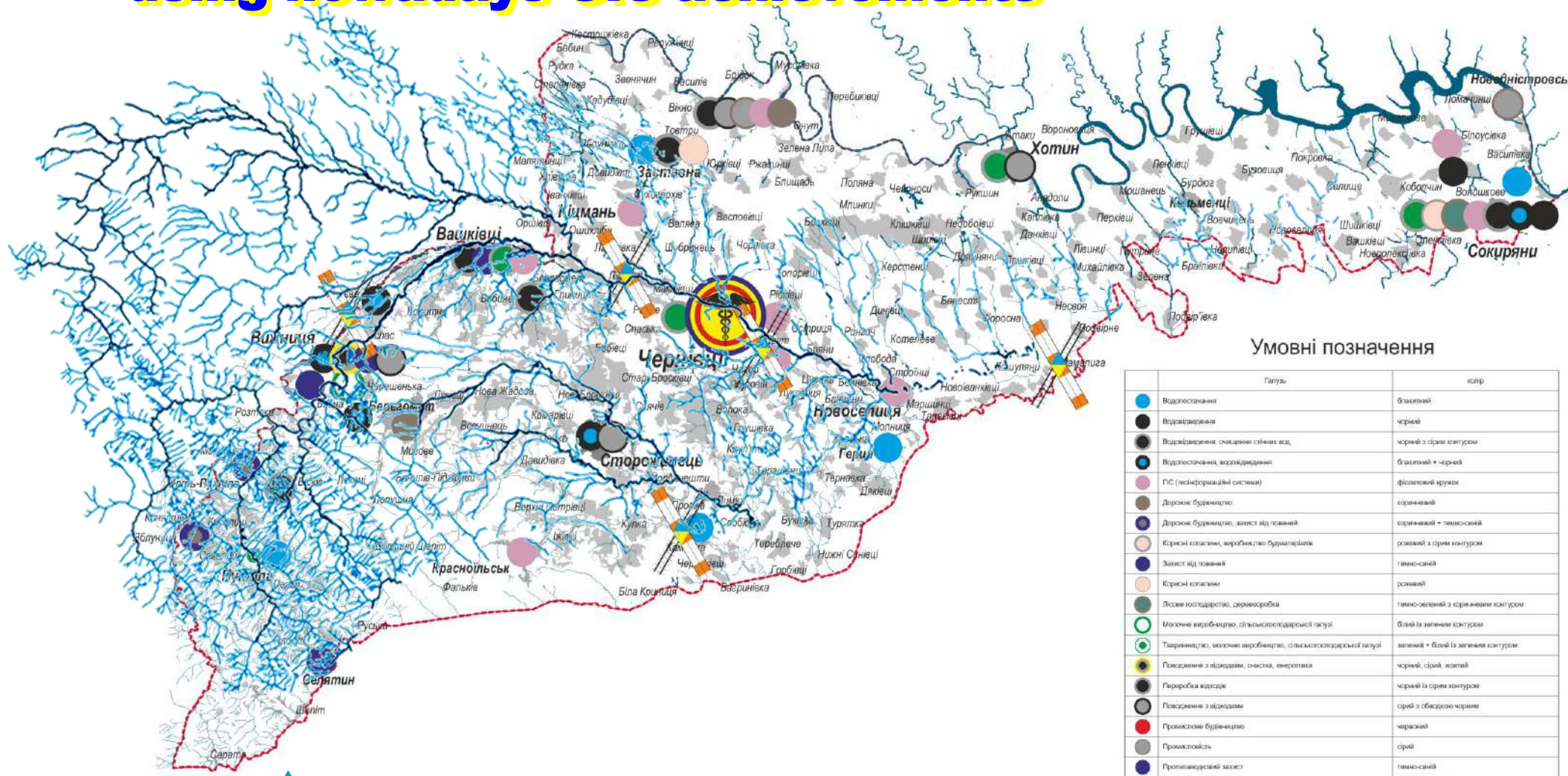


**Romania-Ukraine-Republic of Moldova**  
 CROSS BORDER COOPERATION

of the 7th World Water Forum

- WORKSHOP : River Restoration and Natural Water Retention Measures
- ROUNDTABLE 1 : Preparation of the WFD 2nd Management plans (2016- 2021) : Integration of water quantity issues ; adaptation to climate change ; better information

# Technogenic Activities Planning, postponing & cumulative impact assessment, using nowadays GIS achievements



# Following UA proposals for EUSDR & DTP

Strategic Ukrainian projects initiatives accordingly to Priority Areas of EU Strategy for Danube Region (EUSDR)<sup>1, 2</sup>

⊕

EUSDR PA & project name	Short justification	Contributing factors	National interests	International interests	Financial indexes
<b>6+8. To support the competitiveness of enterprises</b> Transfrontier cooperation on efficient Municipal and Manufacturing Waste Treatment implementation basing of their Sorting and BAT (best available technique) application	On the basis of developments in sphere of Waste Treatment & application of BAT in directions of Standardization <sup>3</sup> & Legal-Normative basis <sup>4</sup> , with their harmonization with European & World approaches, including Transfrontier Cooperation <sup>5, 6</sup> , in collaboration with key world designers <sup>7</sup> , into Position Paper of Ukraine for EUSDR was included project's initiative <sup>8</sup> , which further was implemented into Concept of the Waste Treatment Program for Chernivtsi city <sup>9</sup> & proposals to the draft of National Plan for Waste Management <sup>10</sup> .	Letter of EUSDR SC PA6 <sup>11</sup> Law «On Wastes», Actual Standards <sup>12</sup> Instructuir <sup>13</sup> , Primary accounting <sup>14</sup> EU Directives 2008/98/EC, 2018/852, 2018/1147	Harmonization of Legal-Normative basis & activities for Waste Treatment with BAT applying in boundary to EU regions & territorial communities with different facilities of international promotion involvement, with simultaneous Energy-Resource potential of Wastes utilization and consequent improvement of manufacturing & municipal sphere functioning	Prevention of pollutions & of emergency, as well as BAT spreading in border crossing river basins in the area of EUSDR.	Planning and feasibility studies will allow to identify optimal innovative-investment decisions and opportunities for PPP & external allocations using

<sup>1</sup> <http://zakon2.rada.gov.ua/laws/show/1537-19>

<sup>2</sup> <http://ecoresource.ddns.net/SiteAssets/SitePages/EUSDR.aspx>

<sup>3</sup> [http://ecoresource.ddns.net/SiteAssets/SitePages/EUSDR/Standardization in Environmental-Resource %20sphere 1994.pdf](http://ecoresource.ddns.net/SiteAssets/SitePages/EUSDR/Standardization%20in%20Environmental-Resource%20sphere%201994.pdf)

<sup>4</sup> <http://www.ecologylife.ru/Utilizatsiya-2004/socno-sherid-zadach-i-vozmozhnostey-odnovremennogo-razvitiya-natsionalny-sistemyi-upravleniya-i-mezhdunarodnogo-sotrudnichestva.html>

<sup>5</sup> <http://waste.ua/cooperation/2005/theses/broyde2.html>

<sup>6</sup> <http://ecoresource.ddns.net/DocLib/WasteBarSEPSErodure.pdf>

<sup>7</sup> <http://ecoresource.ddns.net:8080/EcoResource%20WasteBAT.pdf>

<sup>8</sup> [http://ec.europa.eu/regional\\_policy/archive/consultation/danube/doc/countries/ukr\\_vision\\_2nd\\_correction\\_en.pdf](http://ec.europa.eu/regional_policy/archive/consultation/danube/doc/countries/ukr_vision_2nd_correction_en.pdf)

<sup>9</sup> <http://chemivtsy.eu/portal/ukr/mvk/2013004-133-d.doc>

<sup>10</sup> [http://ecoresource.ddns.net/SiteAssets/SitePages/EUSDR/Proposal to National Waste Management Plan.pdf](http://ecoresource.ddns.net/SiteAssets/SitePages/EUSDR/Proposal%20to%20National%20Waste%20Management%20Plan.pdf)

<sup>11</sup> <http://ecoresource.ddns.net/SiteAssets/SitePages/%D0%9D%D0%BE%D0%B2%D0%B8%D0%BD%D0%B8/Recommendation%20Letter%20+.pdf>

<sup>12</sup> <https://waste.ua/law/standard.html>

<sup>13</sup> <https://merr.gov.ua/content/yakim-chinom-subekti-gospodaryuvannya-mozhut-pogodzuvati-rozbleni-nimi-vidpovidno-do-zakonu-ukraini-pro-vidhodi-pasporti-vidhodiiv.htm>

<sup>14</sup> <https://zakon.rada.gov.ua/laws/show/20824-08>

# Systemic initiatives for transfrontier river basins pollutions prevention



УКРАЇНА

## ЧЕРНІВЕЦЬКА ОБЛАСНА ДЕРЖАВНА АДМІНІСТРАЦІЯ

вул. М. Грушевського, 1, м. Чернівці, 58010, тел./факс: (0372) 55-37-76, тел. 55-15-89, 51-30-10,  
E-mail: ods@bukoda.gov.ua Код ЄДРПОУ 00022680

№ 107/2020 № 0153-6/4644 На № \_\_\_\_\_ від \_\_\_\_\_

Міністерство захисту довкілля та  
природних ресурсів України

Міністерство розвитку громад та  
територій України

За результатами селекторної наради, яка відбулась 17.07.2020 під головуванням Прем'єр-міністра України з метою врегулювання проблемних питань, пов'язаних із запобіганням потраплянню твердих побутових відходів у річку Тиса та інші водні об'єкти, у національному і транскордонному аспектах відповідно до резолюції Кабінету Міністрів України від 15.07.2020 № 29745/1/1-20, просимо розглянути наступне.

Чернівецька обласна державна адміністрація співпрацювала в сфері поводження з відходами у басейнах транскордонних річок з Міністерством захисту довкілля та природних ресурсів України, колишніми Державним комітетом України з будівництва та архітектури і Державним комітетом України з питань житлово-комунального господарства та Міністерством розвитку громад та територій України практично з початку їх функціонування. Зазначені питання розглядалися вже у 1992 році на вихідних стадіях розробки проєктів Державної програми соціально-економічного розвитку українських Карпат і Закону України про відходи.

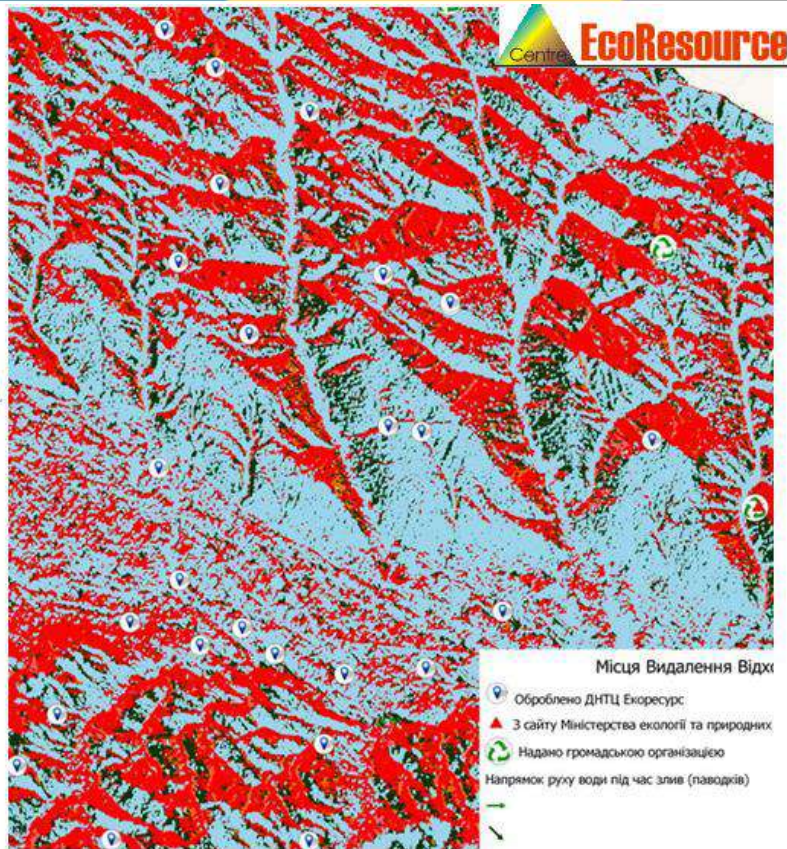
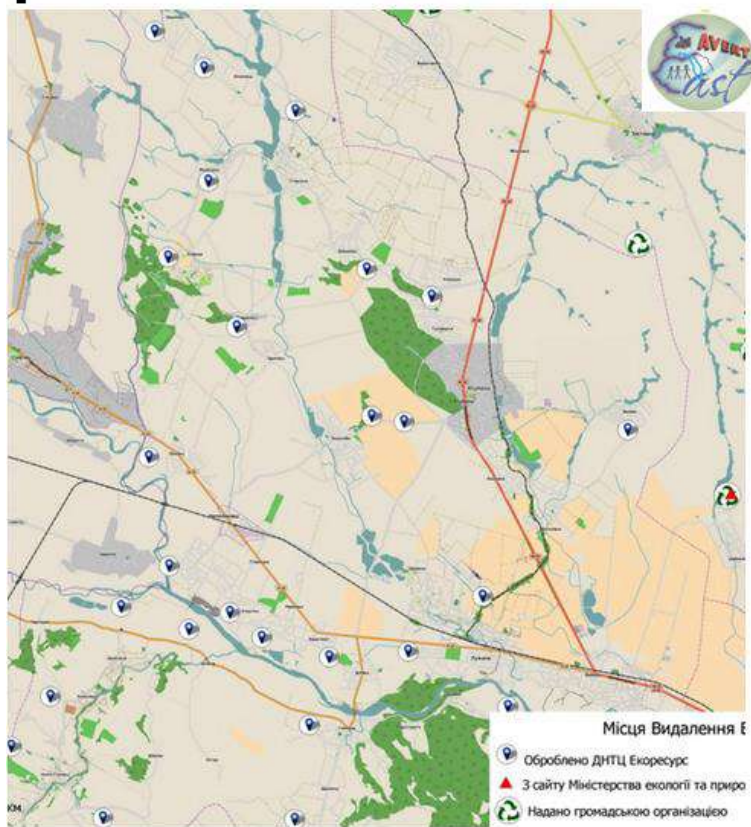
У зв'язку із залученням України до Європейської Зеленої угоди та з ініціативами Нової генерації ЄС і оновленого Східного партнерства, шляхи до розв'язання цієї проблеми запропоновано у листах, направлених Міністерству захисту довкілля та природних ресурсів України 20.05.2020 № 01.56-6/3137-3 і 22.06.2020 № 01.56-6/3137-5 та Міністерству розвитку громад та територій України від 20.05.2020 № 01.56-6/3137-1 на виконання доручення Кабінету Міністрів України від 12.05.2020 № 5648/3/1-20.

На основі цих напрацювань, висвітлених у додатку 1, пропонуємо привернути увагу до наступних аспектів проблеми.

1. Тривале невиконання вимог законодавства щодо **винесення в природу прибережних захисних смуг річок** не дозволяє встановити належний режим їх використання і відповідальність за стан території. Наслідком є заростання чагарником, безконтрольне захаращення і накопичення відходів вздовж берегів і у місцях протиправного видобутку гравію та піску. Окрім того, немає місцевої варті, що мала б забезпечити правоохоронну і природоохоронну діяльність у

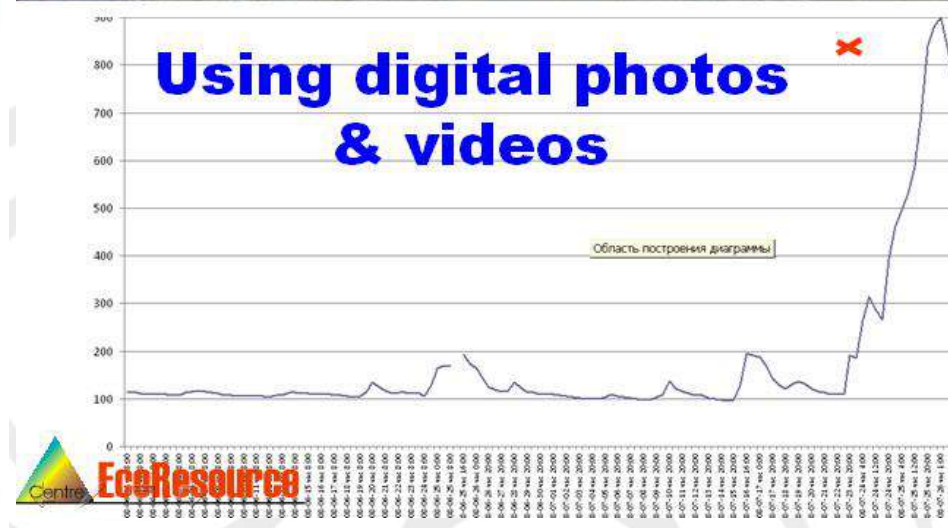
# using nowadays opportunities

**Decisions making for  
 Waste accumulations  
 (landfills, dumps, burial  
 grounds for animals etc.)  
 placement & risks caused**



**by actual danger of flash  
 floods from slopes (on  
 Stormwater nature), which  
 are provoked by Climate  
 Change**

Programme funded by the  
 Romania-Ukraine-Republic of Moldova



# Mutual retrieval of Waste Treatment BAT

## REPRESENTATION OF BAT FOR WASTE TREATMENT accordingly to ДСТУ 2195-99 (ГОСТ 17.9.0.2-99) & ДСТУ 3910-99 (ГОСТ 17.9.1.1-99)

Data about waste, which are treated (utilised, disposed) by this technology <sup>1)</sup>						
Listing name of the waste	Name of the processes, which generate waste, processed by the technology	Names of the economical activities, where processed waste are generated <sup>2)</sup>	Code of the waste by the National Classifier	Name and (or) abbreviation of the special classifier or another document which reckon waste in certain classes, groups or check-lists	Code (cipher, number) of the waste by special classification	Name and (or) abbreviation of Normative Document (Standard, Regulation for this type of waste
24	25	26	27	28	29	30

Data about the technology			Technology holder			Technological requirements to the processed waste					
Name, trade mark	Code of technology	ND, patents, other sources	Name of the enterprise	Address, phone, fax, e-mail	Shipping station, code	Index of waste	Unite of measure	Method of control	Values		
									minimal	nominal	maximal
46	47	48	49	50	51	52	53	54	55	56	57

Final products of the waste treatment technology						Real throughput for waste processing			
Name of the product, code	ND, patent	Index of The product	Unite of measure	Method of control	Values			Unite of measure	Quantity
					Minimal	Nominal	maximal		
58	59	60	61	62	63	64	65	66	67

<sup>1)</sup> fulfilled accordingly to requirements & recommendations of the DSTU 3910-99 (GOST 17.9.1.1-99)

<sup>2)</sup> names accordingly to Classifier DK 009-96 "Classification of the economical activities"

This form is composed on the base of DSTU 2195-99 (GOST 17.9.0.2-99) "Environment protection. Waste treatment. Technical certificate of the waste" for creation of the unified data bases on waste treatment technologies by state, regional organisations & enterprises. The peculiarity of the Form is that its owner (holder) has not inform any «know-how» on this technology, unless only voluntary in the columns 46 i 48.

For efficient usage of the above-mentioned data it's only necessary to give maximal information about the types of processed waste and about their origin as well as about the final products of the technology including the "secondary" waste.

# and so on

## Transfrontier collaboration for establishment of efficient System for Municipal and Industrial Waste Treatment on the basis of their Sorting (SMIWASTRES)



for EUSDR principal project  
Cross-border cooperation on establishment of  
effective system of sorting waste products,  
farm waste and municipal waste on the base  
of the best available techniques (BAT)''

### LETTER OF RECOMMENDATION

To whom it may concern

The Steering Group of the Priority Area 6 "Preserving biodiversity, landscapes and the quality of air and soils", made up of representatives from the Danube countries (nominated by their governments), has pre-examined the project SMIWASTRES ("Transfrontier collaboration for establishment of efficient System for Municipal and Industrial Waste Treatment on the basis of their Sorting") on the basis of a project description form, in which the project relevance for the EUSDR, the project objectives, activities and expected results and further information are described by the applicant (Department of Housing & Communal Service of Chernivtsi Regional State Administration - Ukraine).

The conclusion is:

The project 'SMIWASTRES' contributes to the actions of the EU Strategy for the Danube Region. Hence, the Steering Group - representing the Danube countries - invites the funding sources to consider providing adequate financial support to the project.

Munich, 01. March 2012

Ballnus



Dr. Florian Ballnus  
Priority Area Coordinator  
Bavarian State Ministry of the Environment and Public Health  
Germany

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Thank you for your attention!

**Zinoviy Broyde**

Centre “EcoResource”

ecoresource.office@gmail.com +38-050-512 86 98

<http://ecoresource.ddns.net/SitePages/EUSDR.aspx>