

## Serbia PRTR Implementation Overview – Information system

Nebojsa Redzic Environmental Protection Agency Republic of Serbia Information system NRIZ is one of the most important subsystems of the environmental information system in the Republic of Serbia, which is, according to the current legislative, lead by Environmental Protection Agency.

This information system is completely developed in the Environmental Protection Agency with financial help of the Kingdom of Norway, and also with high-expert help of the Norwegian company EMISOFT.

By using the software tools of this information system, data has being collected and processed, which is, after verification and analysis, delivered to interested parties. Data sources are primarily Serbian enterprises, but also public administration and local self-government authorities.

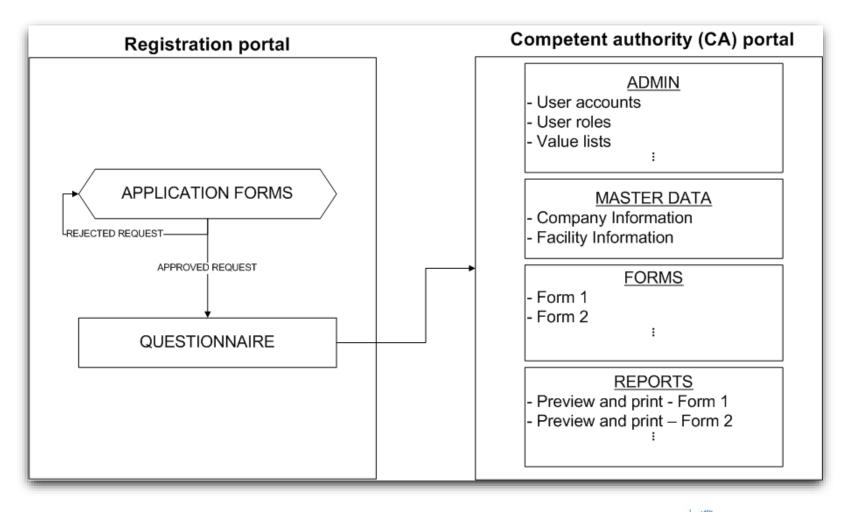


## **INFORMATION SYSTEM NRIZ**

- Created and follow the national legislation.
- Based on Microsoft platform.
- TEAMS SR used for development, SQL server chosen for a database.
- TEAMS ensures modular improvements of IS.
- Bilingual interface Serbian and English
- IS is web oriented and available on webpage of Serbian
   Environmental Protection Agency. <u>http://www.sepa.gov.rs/</u>



#### MAIN COMPONENTS OF THE INFORMATION SYSTEM NRIZ





Automatic system for selection of forms using a set of questions.

Company do that alone during input of master data.



#### Questions about the enterprise

Does your company (enterprise) have facilities on one or more locations?



#### Other Question About Enterprise

Does your enterprise produce or import the products which after being used become separate waste flows



Did your enterprise producer, importer, packer/filler, supplier and/or enterprise which manages its own packaging waste itself?

Q3\*

•

Did your enterprise operator of the system for waste packaging management?





#### Questions about the enterprise

Does your company (enterprise) have facilities on one or more locations?



#### Facilities List

Add	Edit	Remove	View	Duplicate
Facilit	y nam	e		

#### Other Question About Enterprise

Does your enterprise produce or import the products which after being used become separate waste flows



Did your enterprise producer, importer, packer/filler, supplier and/or enterprise which manages its own packaging waste itself?



Did your enterprise operator of the system for waste packaging management?







Facility name*	
Location, Settlement, City name*	
Postal Code*	
Street*	
Building Number*	
Telephone*	
Telefax*	
Latitude	
Latitude	
Longitude	

#### Activites List

Facility information







Questions	about	the	facility
-----------	-------	-----	----------

Does your enterprise has its own power plant with capacity greater then 50MW?



Does the facility have pollutant sources into air?



Does the facility have pollutant sources into water?



Does the facility have pollutant sources into soil?

QF3\*

Is waste generated in the facility?

QF4\*





In accordance with the Law on Waste Management, your enterprise is:

#### Opereator at waste disposal

QF5\* •

Operator for waste recovery



Waste exporter



Waste importer

QF8\* •

Collector or other waste holder that is not:

waste generator, collector, operator at the landfill, operator of the waste treatment, waste importer or waste exporter.

QF11*	-
-------	---

Public utility enterprise or legal entity or enterpreneur authorized for municipal waste collecting

QF9\* •

Does your facility have an obligation to report in accordance to Regulation on Emission Limit Values of air pollutants?

QF10\* •





conomic Activity*	2						
hen choosing activitie	s, pay attention to whether the chose	en activity meets the	e conditions minimum threshold values the capacity of the facility.				
ctivity*	2.(b)						
s the selected activity	y main activity for the facility?	Select Activity	y*				
QFA1*	•	Search	٩				
		Code	Name				
		o	Facility does not belong to any of the proposed economic activity with the capacity displayed				
		2.(a)	Metal ore (including sulphide ore) roasting or sintering installations				
		2.(b)	Installations for the production of pig iron or steel (primary or secondary melting) including conti				
		2.(c).(i)	Installations for the processing of ferrous metals - Hot-rolling mills				
		2.(c).(ii)	Installations for the processing of ferrous metals - Smitheries with hammers				
		2.(c).(iii)	Installations for the processing of ferrous metals - Application of protective fused metal coats				
		2.(d)	Ferrous metal foundries				
		2.(e).(i)	Installations for the production of non-ferrous crude metals from ore, concentrates or secondary				
		2.(e).(ii)	Installations for the smelting, including the alloying, of non-ferrous metals, including recovered p				
		2.(f)	Installations for surface treatment of metals and plastic materials using an electrolytic or chemica				
		Maximize	Clear Ok Cancel				



11

CA solution is implemented in accordance with domestic and international legislation for reporting in the field of environmental protection.

The portal of the competent authority is an application which, according to its purpose, can be viewed from two aspects:

- 1. From the user's side, this application is a system for data submitting of a company as a reporting entity.
- 2. On the side of the competent authority, the application is a system for analyzing the collected data, which provides a clear picture of the state of the environment in the Republic of Serbia.

Bearing in mind these aspects, user roles in the system are clearly defined, so appropriate access rights are automatically assigned to each user of the system.



Republika Srbija Ministarstvo zaštite životne sredine Agencija za zaštitu životne sredine	NACIONALNI R	Egistar izvora zag	GAÐIVANJA					
Početna Meni Traži Admin Admin Dozvole za upravljanje otpadom Import iz 'Parent Client' rešenja Obrasci Izlazne tabele Izveštaji	1. Matični podaci	2. Postrojenja	2. Lista osoba	4. Korianički nalozi	2. Obrasci 01. Obrazac 1 05. Obrazac 5 / GiO1 09. Obrazac GiO5	02. Obrazac 2 / GVE	03. Obrazac 3	04. Obrazac 4 08. Obrazac GiO4 12. Obrazac KOM1
👕 Prikazi	3. Izveštaji - pregled	l i štampa			4. Dostavljanje pod	lataka	_	
	01. Obrazac 1	02. Obrazac 2	03. Obrazac 3	04. Obrazac 4	Obrazac Ukupno dostavljenih godišnji Ukupno PRTR postrojenja ispi	n izveštaja	Broj 25013 241	
	05. Obrazac S	06. Obrazac GIO1	07. Obrazac GIO2	08. Obrazac GIO3	Obrazac 1 Obrazac 2 / GVE Obrazac 3		299 1609 303	
	09. Obrazac GIO4	10. Obrazac GIOS	11. Obrazac DED6	12. Obrazac GIO6	Obrazac 4 Obrazac 5 / GIO 1 GIO 2		1 12758 33	
					GIO 3		304	



Menu Search
admin
👕 Master Data
PRTR Master Data
🕫 Annex I Activity Codes
🗟 Country Codes
🐻 Medium Codes
📷 Method Basis Codes
🐻 Method Type Codes
🐻 Method Types
🐻 Method Designations
🐻 NACE Activity Codes
🔞 NUTS Region Codes
🐻 River Basin District Codes
🐻 Waste Treatment Codes
🐻 Waste Type Codes
📷 Unit Codes
🕫 Pollutant Codes
🕫 Pollutant Groups
🕫 Pollutant Thresholds
🕫 Sector Specific Pollutants
🕫 Coordniate Systems
🐻 Competent Authority Party
🐻 Confidentiality

Reports	
Form 1	$\checkmark$
Form 2	$\checkmark$
Form 3	$\checkmark$
Form 4	
Form 5	$\checkmark$
GIO 1	
GIO 2	
GIO 3	
GIO 4	
GIO 5	
DEO 6 / GIO 6	
DKO	
KOM 1	
GVE	





Home Responsible Pers	sons List 🛚							
Add Edit Delete View Exp	port Data Export View Import Help Duplicate History Batch							
Responsible Persons List								
Company*	Akcionarsko drustvo Aerodrom "Nikola Tesla" Beograd							
Name and Surname*	Slađana Petrić							
Function*	odgovorno lice za upravljenje otpadom							
Telephone*	0648485067							
Email*	sladjana.anokic@beg.aero							
Person will use this applica	tion* 🖌							
User name*	NikolaTesla							
Default Language*	Srpski							





## COMPETENT AUTHORITY PORTAL - Reporting -

The procedure of reporting i.e. data delivery is reduced to the simple filling of electronic forms. After entering, data is stored in the database.

The system has the history of the records. Each data change is recorded, and in that way significantly simplifies the tracking of data changes.

During the reporting period, according to the defined methodology, system administrators approve data submitted and then lock the reports. Data in locked reports can no longer be changed.

Data submitted is sent, after analytical processing, to the interested parties.



Republika Srbija Ministarstvo zaštite ž Agencija za zaštitu ži	Ø   🍠 🗳   阔	Page 1	✓ of 3 ▷ ▷   🔚 🖺 Pdf ✓							
Home Print Preview ( Enter Filter criteria Show Re			Obrazac GIO4							
	GODIŠNJI IZVEŠTAJ O OTPADU IZVOZNIKA OTPADA									
No	Izveštaj za <u>2016</u> godinu									
Year	PODACI O PREDUZEĆU									
Company*	Poreski identifikacioni broj (F	PIB)	987654321							
company	Matični broj preduzeća		98765432							
Facility	Pun naziv preduzeća		Demo							
		Mesto	Novi Sad							
		Šifra mesta	802824							
		Poštanski broj	11000							
	Adresa	Ulica i broj	Ulica 1							
		Telefon	011/11111							
		Telefaks								
		E mail								
	Opština		Novi Sad							
	Šifra opštine		80284							
	Šifra pretežne delatnosti		0112							
	PODACI O ODGOVORN									
	lme i prezime		Petar Petrović							
	Funkcija		referent							
	Telefon		00000000							
	PODACI O LICU ODGOV	ORNOM ZA UPRAV	VLIANJE OTPADOM							
	lme i prezime		Petar Petrović							
	Funkcija		referent							
	Telefon		00000000							
	E mail									
L	PODACI O DOZVOLI ZA	UPRAVLIANJE OTP	PADOM							
	Broj dozvole		19-00-00328/2013-05	-						
	Datum izdavanja:		23.05.2013.	_						
	Dozvola važi do:		23.05.2018.							
	Sakupljanje	Transport	Skladištenje Tretman Odlaganje							



	Republika Srl Ministarstvo Agencija za z	bija zaštite životne zaštitu životne	sredine sredine	e e	NACIONALNI REGISTAR IZVORA ZAGAĐIVANJA							
Home	General [	Data (Forr	n 1) :	23								
Add Edit	t Delete L	.ock View	Expo	rt Data Expor	t View	Import	Help Dupli	cate	e History Batch			
General Add Edit Remove View Duplicate												
Additio	onal Data			Fuel Name*		Consumpt	ion per day*	١	Way of Storing		Max. S	Stock Caj
Fuels				Natural gas (N	m3)	20109		I	nema lagerovanja-priključen	na gsnu mrežu		
Produc	ts			Transport dizel	(t)	0,071		F	Podzemni rezervoar		16	
Raw M	aterial											
Remar	ks											
				4								•
Previou	s Nex	dt		•						Save		Cancel
												1
										unitar		

me 02. Obrazac 2 / 0			
Edit Delete Lock View		a Export View Import Help Duplicate History Batch Pollutant to Air -	23
eneral	Add	Add Delete Previous Next	
ditional Data	Name	Entering Entering Linearies Linearies	
els	Nome	Pollutant	-
nissions to Air		Name of pollutant*	
marks			
		Concentration of pollutants in flue gas	
		Annual mean measured value (mg/ Nm3)	
		Way of determining	
		Emitted amounts during THE NORMAL operation	
		S childred anothis during the Norther operation	
		Emitted amounts (g/h)	
		Emitted amounts (g/h) Emitted amounts (kg/year)*	
			20
		Emitted amounts (kg/year)*	•
		Emitted amounts (kg/year)* Way of determining* Method of determining*	•
		Emitted amounts (kg/year)* Way of determining* Method of determining*	•
		Emitted amounts (kg/year)* Way of determining* Method of determining* Ok Cancel	•
		Emitted amounts (kg/year)* Way of determining* Method of determining* Ok Cancel Ok Cancel	



## COMPETENT AUTHORITY PORTAL - Entry forms -

System logical controls includes:

- System conditionally mandatory fields
- Logical controls of values

**The conditionally mandatory fields** are marked with two asterisks (\*\*) in the system. These fields are conditionally mandatory and the fact that they are mandatory depends on the values entered in other fields on the electronic form. In case of user's mistake, the system will display the information in the error dialog box. In case of such error, the user cannot save data to electronic form until the proper corrections are made.



Republika Srbija Ministarstvo poljoprivrede i Agencija za zaštitu životne Home 01. Obrazac 1 🛪	i zaštite životne sredine sredine	NACIONALNI REGISTAR	IZVORA ZAGAĐ	ALIAAVI		
Add Edit Delete Lock View	Export Data Export View Imp	ort Help Duplicate History Batch				
General Additional Data Fuels Products Raw Material Remarks	<ul> <li>Information on Working F Working regime*</li> <li>Season start (month)**</li> <li>Season end (month)**</li> <li>Number of shifts per day</li> <li>Number of working days -</li> <li>Number of working days -</li> <li>Number of operation hour</li> <li>Data on Employees in the</li> <li>Employees (permanent)</li> <li>Employees (part time)</li> <li>Number of employees in s</li> <li>Number of employees in s</li> </ul>	Seasonal  TEAMS SR  We yea Pocetak sezone (mesec) i Kraj se (mesec) su obavezna polja. Season Start (month) and Seaso (month) are mandatory fields.  Fa hift 1 hift 2				
	-					+
Previous Next					Save	Cancel
		Arr	ange dashboard	English	Admin	



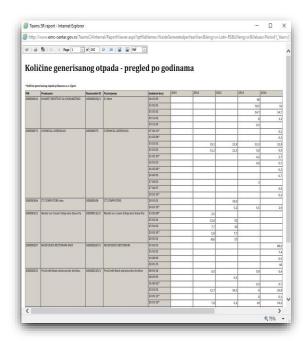


#### COMPETENT AUTHORITY PORTAL - Reports -

# Based on data obtained, it was created dozens of analytical reports which are, according to requests, submitted to interested parties.

	Opis	Količina (t)	
01	OTPADI KOJI NASTAJU U ISTRAŽIVANJIMA, ISKOPAVANJIMA IZ RUDNIKA ILI KAMENOLOMA, I FIZIČKOM I HEMUSKOM TR	370219,24	
02	OTPADI IZ POLIOPRIVREDE, HORTIKULTURE, AKVAKULTURE, ŠUMARSTVA, LOVA I RIBOLOVA, PRIPREME I PRERADE HRA	368522,48	
13	OTPADI OD PRERADE DRVETA I PROIZVODNJE PAPIRA, KARTONA, PULPE, PANELA I NAMEŠTAJA	26718,68	
14	OTPADI IZ TEKSTILNE, KRZNARSKE I KOŽARSKE INDUSTRUE	171465,3	
5	OTPADI OD RAFINISANJA NAFTE, PREČIŠĆAVANJA PRIRODNOG GASA I PIROLITIČKOG TRETMANA UGLJA	5573,11	
6	OTPADI OD NEORGANSKIH HEMUSKIH PROCESA	1699,14	
17	OTPADI OD ORGANSKIH HEMUSKIH PROCESA	5698,01	
8	OTPADI OD PROIZVODNJE, FORMULACIJE, SNABDEVANJA I UPOTREBE PREMAZA (BOJE, LAKOVI I STAKLENE GLAZURE), L	3418,48	
19	OTPADI IZ FOTOGRAFSKE INDUSTRIJE	1229,56	
.0	OTPADI IZ TERMIČKIH PROCESA	4426161,83	
1	OTPADI OD HEMIJSKOG TRETMANA POVRŠINE I ZAŠTITE METALA I DRUGIH MATERIJALA; HIDROMETALURGIJA OBOJENI	1291,95	
2	OTPADI OD OBLIKOVANJA I FIZIČKE I MEHANIČKE POVRŠINSKE OBRADE METALA I PLASTIKE	51728,71	
3	OTPADI OD ULIA I OSTATAKA TEČNIH GORIVA (OSIM JESTIVIH ULIA I ONIH U POGLAVLIMA 05, 12 I 19)	11663,2	
4	OTPADNI ORGANSKI RASTVARAČI, SREDSTVA ZA HLAĐENJE I POTISNI GASOVI (OSIM 07 108)	87,88	
5	OTPAD OD AMBALAŽE, APSORBENTI, KRPE ZA BRISANJE, FILTERSKI MATERIJALI I ZAŠTITNE TKANINE, AKO NUE DRUGAČU	88587,28	
6	OTPADI KOJI NISU DRUGAČIJE SPECIFICIRANI U KATALOGU	46226,26	
	GRAĐEVINSKI OTPAD I OTPAD OD RUŠENJA (UKLJUČUJUĆI I ISKOPANU ZEMIJU SA KONTAMINIRANIH LOKACIJA)	204034,18	
8	OTPADI OD ZDRAVSTVENE ZAŠTITE LJUDI I ŽIVOTINJA I/ILI S TIM POVEZANOG ISTRAŽIVANJA (IZUZEV OTPADA IZ KUHINJ	6809,84	
9	OTPADI IZ POSTROJENJA ZA OBRADU OTPADA, POGONA ZA TRETMAN OTPADNIH VODA VAN MESTA NASTAJANIA I PRIP		
0	KOMUNALNI OTPADI (KUĆNI OTPADI SUČNI KOMERCIJALNI I INDUSTRIJSKI OTPADI), UKLJUČUJUĆI ODVOJENO SAKUPLJE	72710,38	

		t - Internet Explorer c-centar.gov.rs/TeamsCAInterna	/ReportViev	rer.aspx?rptfileName=Emis	sionsteAi	Polls	itantView&la	1q=sr-Latn-RS&Ullang=sr&Va	lues=Pe	riod Year=
213	910	Q Page 1 ≥ of 65 D	01 II	2 H 🗉						
Em	Emisije u vazduh po zagađujućim materijama									
Sodina	P18	Produzaća	Nacionalni Id	Postrojenje	Opština postrojenja	-	Aktivnesti	Naziv izvora	Broj izvora	Pretok
2014	100000266	PHOENEX Pharma d.o.o.	100000266/1	Phoesix Pharma d.o.o.	Beograd- Čukarica	u.		KOTLARNICA BG	1	628,3
2014	100000266	PHOENIX Pharma d.o.o.	200000266/1	Phoenix Pharma d.o.o	Beograd- Čukanica	2		KOTLAGNICA BG	1	628,3
2014	100000255	PHOENEX Pharma d.o.o.	300000356/1	Phoenix Pharma dio.o	Beograd- Čukanica	ne -		KOTLARNICA LE	2	622,6
2014	100000266	PHOENEX Pharma d.o.o.	300000266/1	Phoenix Pharma d.o.o	Beograd- Čukanica	Ne .		KOTLARMICA LE	1	622,6
2014	100000266	PHOENEK Pharma d.o.o.	1/385000008	Phoenix Pharma d.o.o	Beograd- Čukarica	e.		KOTLARNICA NS	1	405,87
2014	100000266	PHOENIK Pharma d.o.o.	100000266/1	Phoesix Pharma d.o.o	Beograd- Čukarica	No.		KOTLARNICA NS	1	406,87
2054	100000709	Coca-Cola Hallanic Bottling Company- Srbija, Industrija Dezalkoholnih Pića DO	100000709	COCA-COLA HBC-SRBUA	Beograd- Zemun	No.		Parma kotlarnica	1	1075,4
2014	100066709	Caca-Cola Helenic Bottling Company- Srbija, Industrija Bezalkoholnih Pica DO Caca-Cola Helenic Bottling Company-	200000709	COCA-COLA HEC-S78UA	Beograd- Zemun Beograd-	No.		Parna kotiarnica	1	1075,4
2014	100000709	Srbija, Industrija Bezalkoholnih Piča DO	200000709	COCA-COLA HBC-S78UA	Zerrun	10		Parna kotiamica	1	1075,4
2014	100000709	Coce-Cola Hellenic Bottling Company- Srbija, Industrija Bezalkoholnih Piča DO Coca-Cola Hellenic Bottling Company-	100000709	COCA-COLA HSC-SP81A	Beograd- Zemun Beograd-	Ne .		Toplovodna kotlarnica	2	150,7
2014	100000709	Srbija, industrija Bezalkoholnih Piča DO Coca Cola Hellenic Bottling Company-	100000709	COCA-COLA HISC-SRBUA	Zismun Secerad-	re .	-	Toplovodna kotlarnica	2	150,7
2054	100000709	Srbija, industrija Bezaikoholnih Pića DO Beogradska industrija piva, slada i	100000709	COCA-COLA MBC-SRBIA Beogradska industrija piva,	Zsmun Beograd-	Ne .		Toplovodna kotlarnica	2	150,7
2014	100000856	bezakoholnih pida - 5 P ed Beogradska industrija piva, slada i	100000856	slada i bezalkoholnih pića - 61P a Bezeradska industrija piva.	Sevski vera Begerad-	Re .		kotao TE 156	5	30000
2514	100000856	bezsikoholnih piza - B P ed Beceradska industrija piva, slada i	100000856	slada i bezelkoholnih pica - 6IP a Begeradska industrija piva.		No.	-	kotao TE 166	1	30000
2014	100000856	becalloholnih pića - BIP ad	200000856	slada i bezalkoholnih pića - BIP a		~		kotao TE 166	1	30000
2014	100000969	industrija mesa PKB IMES doo	200000969	Farma Vice) Industrija mesa PKB IMES doo	Politula Beogradi	-	7.(a).(k) 7.(a).(k)	ispust od gajenja krmaca Ispust od gajenja krmaca	1	-
2014	100000969	industrija mesa PKB IMES dog	100000969	Farma Vicolj Industrija mesa PKB IMES doo,	Palifula Beograd-	-	7.(4).(9)	Ispust od gajenja krmaca	1	+
2014	10000969	Industrija mesa PKB IMES dog	10000969	Farma Vizalj Industrija mesa PKS IMES doo,	Palitula Beograd-	Da .	7.(a).(ii)	ispust od gajenja krmaca	1	-
2014	100000969	Industrija mesa PKB IMES doo	10000969	Farma Vizelj Industrija mesa PNZ IMES doo,	Palilula Beograd-	6	7.(a)(ii)	ispust od gajenja krmaca	1	+
2014	100000969	industrija masa PKB IMES doo	200000069	Ferme Vizēj Industrija mesa PIZI IMES doo,	Pelitula Beograd-	a	7.(4)(8)	ispust od gajenja tovnih ovinja	2	-
2014	100000969	industrīja mesa PKB IMES doo	100000969	Parma Vicelj Industrija mesa PKB IMES doo, Parma Vicelj	Palikula Beograd- Palikula	Di	7.(4).(0)	Ispust od gajenja tovnih svinja	2	+
0									-	>



22



## THANK YOU FOR YOUR ATTENTION!

