

*Montenegro
Berane, 3rd June 2025
Podgorica, 12th June 2025*

NARRATIVE REPORT

E-waste management workshops

Organized by:

MedWaves, the UNEP/MAP Regional Activity Centre for SCP,
the Ministry of Ecology, Sustainable Development and
Northern Region Development and NGO Roma Youth
Organization “Walk with us - Phiren Amenca”

INDEX OF THE REPORT

1. SUMMARY.....	5
2. INTRODUCTION.....	8
3. OPENING.....	9
4. WORKSHOP DEVELOPMENT.....	11
Session 1 - Berane.....	11
Session 2 - Podgorica.....	13
5. CONCLUSIONS.....	15
6. ANNEXES.....	16
Annex I - Agenda.....	16
Annex II – List of participants.....	17

1. SUMMARY

The **Workshops** in Montenegro on “**E-waste management and POPs**” topic were held in Berane on June 3rd and Podgorica on June 12th, in Montenegrin and with simultaneous interpretation into Roma language.

Persistent Organic Pollutants (POPs) are a group of toxic chemicals, including substances like Polybrominated Diphenyl Ethers (PBDEs), that have been widely used in electronic devices as flame retardants since the 1950s. Due to their persistence, toxicity, and ability to accumulate in living organisms, many POPs are now regulated under the Stockholm Convention, to which Montenegro is a party. These chemicals can be released into the environment through improper handling of electronic waste (e-waste), especially during open burning, manual dismantling, or chemical leaching processes.

E-waste generation in Montenegro has increased steadily in recent years, with the amount of electrical and electronic equipment placed on the market rising from 14.1 kg per inhabitant in 2010 to 15.0 kg in 2021. E-waste generated per inhabitant grew from 6.8 kg to 11.3 kg in the same period. However, **only about 3% of e-waste** is formally collected and treated¹, with the vast majority handled by the informal sector—mainly small enterprises and individuals, often from the Roma and Egyptian community. Informal practices such as open burning and acid leaching are documented, especially at private landfills and collection points, posing significant health and environmental risks due to the release of POPs, heavy metals (lead, mercury, cadmium), and dioxins.

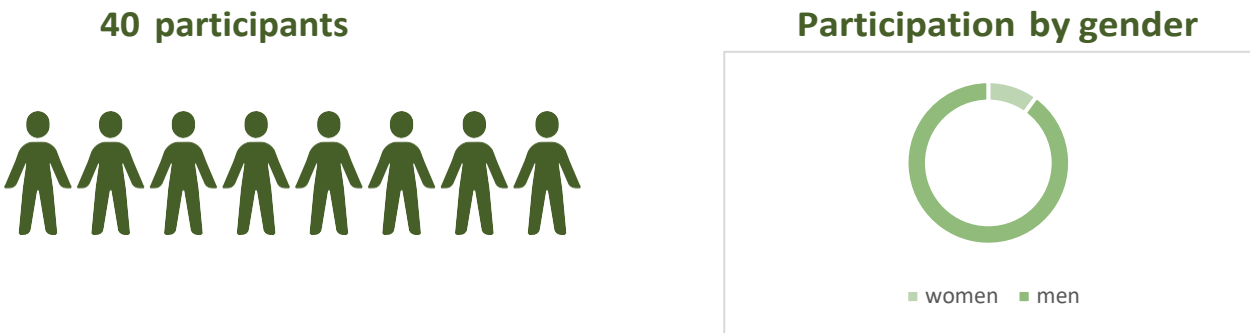
Montenegro’s legal framework for e-waste is **largely harmonized with EU regulations, including Extended Producer Responsibility (EPR)** for electrical and electronic equipment, but implementation remains limited. Most e-waste treatment companies pre-treat waste and export it abroad for further processing. NGOs play an important role in awareness-raising and collection initiatives, but infrastructure for separate collection and environmentally sound recycling is lacking.

The Roma community across the Western Balkans, including Montenegro, forms the backbone of the informal sector engaged in collecting secondary raw materials. For many Roma families, the collection and sale of recyclables such as metals, plastics, and paper represent their primary - or often only - source of income. This work is typically carried out informally, outside the bounds of official employment or business registration, with individuals and family groups gathering materials from waste containers, landfills, and households. Although their work plays an important role in the circular economy and environmental protection, it is not always fully

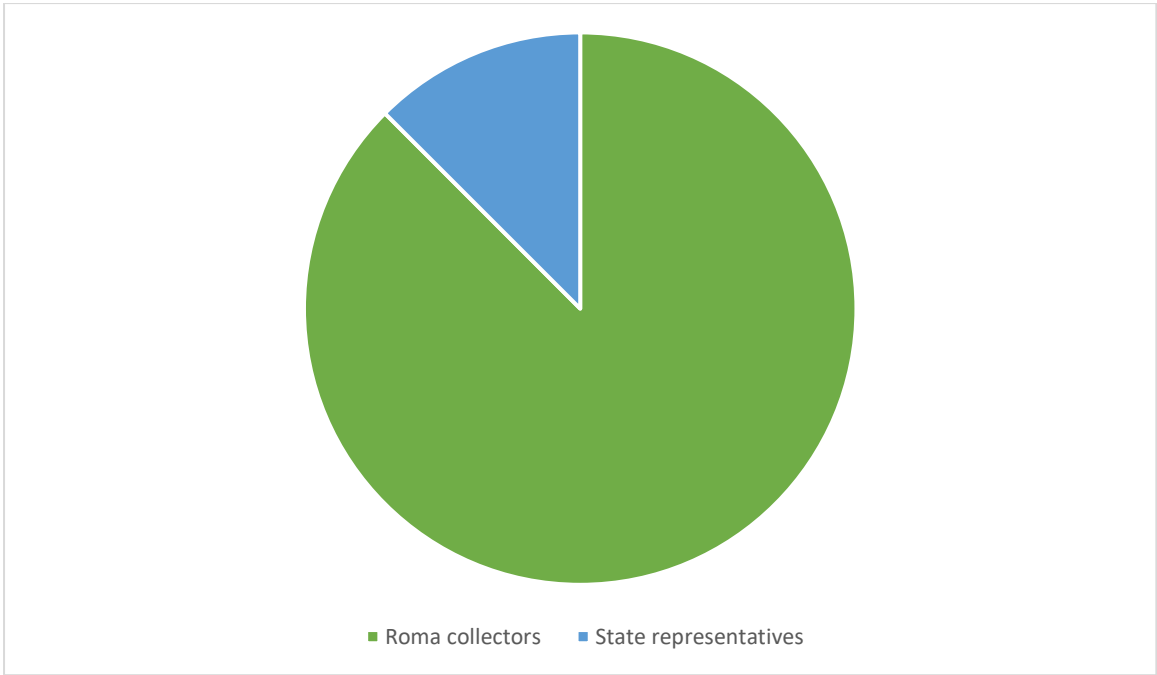
¹ N001-1300948SCF-V01 WEEE and ELV Recycling

recognized or appreciated. Roma waste collectors often operate in extremely challenging conditions, lacking protective equipment and access to social or health services, and are frequently exposed to discrimination and social exclusion. The work is physically demanding - an average collector may cover up to 20 km a day, with workdays stretching to 11 hours.

Numerous reports and policy recommendations highlight the need to formalize and integrate Roma waste collectors into official waste management systems. This can be achieved through education, access to protective equipment, support for establishing cooperatives, and inclusion in local and national circular economy strategies. Such measures would improve working conditions, reduce health and environmental risks, and provide greater social and economic security for the Roma community. Children and women are especially vulnerable to the health impacts of POPs and heavy metals, which include cancer, reproductive and developmental problems, immune suppression, and neurological damage.



Participation by sector



The workshop was organized by the MedWaves, the UNEP/MAP Regional Activity

Centre for SCP and TAUW in cooperation with the NGO Phiren Amenca and the Ministry of Ecology, Sustainable Development and Northern Region Development. Two workshops brought together a total of 40 participants, including representatives from state institutions, local institutions and the Roma community. Of the total participants, 5 were from state institutions, while the remaining 35 were menmembers of the Roma community actively involved in informal waste collection and management. The workshop was also attended by representatives of the Ministry of Ecology, Sustainable Development and Northern Region Development in both workshops and the representatives of the sanitation department in Berane, as a local representative. The presence of multiple stakeholders ensured a comprehensive and immediate discussion and exchange on the challenges and opportunities related to electronic waste management and the reduction of persistent organic pollutants (POPs) in Montenegro.

2. INTRODUCTION

The primary aim of the workshop was to strengthen the capacities of the Roma community for the safe management of electronic waste (e-waste) and to address the risks associated with persistent organic pollutants (POPs) in Montenegro, but also to ultimately reinforce the state's efforts in that matter. Guided by a grassroots organization and national experts from the Ministry, the workshop brought together the Roma community, who are directly involved in informal e-waste collection and processing.

The workshops were conducted by Nevenka Vuksanović and translated in Roma language by Elvis Beriša, both representing Phiren Amenca.

The workshop opened with an overview of POPs, their sources, and their widespread use in electrical and electronic equipment. Participants were introduced to the specific challenges posed by POPs, such as their persistence in the environment and potential to cause serious health impacts, particularly when e-waste is handled through unsafe practices like open burning or acid leaching.

Through interactive discussions and practical demonstrations, the workshop addressed best practices for safe handling, the use of personal protective equipment, and the importance of proper segregation and storage of hazardous components. Real-life examples and case studies from local communities illustrated both the challenges and opportunities for improving e-waste management and reducing exposure to POPs. A significant portion of the workshop discussion was dedicated to exploring ways in which the community could be supported in the future to formalize and register their waste management activities. Participants from the state institutions emphasized the importance of creating pathways for informal collectors, particularly from the Roma community who is doing the most of the informal work with secondary raw materials, to become part of the formal economy through legal registration and business development support. Additionally, the discussion highlighted the critical need for modern equipment and machinery - such as cable stripping machines, shredders, and appropriate protective gear - that are essential for ensuring that all e-waste processing activities fully comply with environmental standards. By addressing both the legal and technical requirements, the workshop underscored the potential for sustainable livelihoods and safer working conditions within the community.

The workshop concluded with a review of ongoing initiatives, including partnerships between NGOs and public institutions, and recommendations for further action to ensure the protection of human health and the environment from the risks associated with electronic waste and POPs.

3. OPENING

Each workshop commenced with a welcome from the Phiren Amenca team, who introduced the objectives and structure of the sessions, emphasizing the importance of collaboration and open dialogue among all stakeholders. This was followed by the introduction of representatives from the Ministry of Ecology, Sustainable Development and Northernn Region Development. At the first workshop, the Ministry was represented by Ms. Jelena Kovačević and Ms. Ružica Brnović, while at the second workshop, Ms. Suzana Otašević and Ms. Dragana Raonić Popović addressed the participants. Ms. Senem Elçin Berber, Gender Specialist of MedProgramme Coordination Unit participated the first workshop in Berane.

In their opening remarks, the Ministry representatives reiterated the government's strong commitment to improving electronic waste management and addressing the challenges posed by persistent organic pollutants (POPs) in Montenegro. They highlighted that education and awareness-raising are fundamental pillars for achieving progress in this field, and stressed that proper handling and treatment of waste are key to safeguarding both human health and the environment. The Ministry also expressed readiness to work closely with all relevant actors, including local communities, NGOs, and informal waste collectors², to develop sustainable solutions and ensure the alignment of national practices with European and international standards.

The introductory session further encouraged all participants to introduce themselves, share their professional backgrounds, and describe the conditions and challenges they face in their daily work. This open exchange helped to foster a sense of mutual understanding and set a constructive tone for the rest of the workshop, ensuring that the discussions would be grounded in the real experiences and needs of those most directly involved in e-waste management.

Senem Elcin Berber, who attended the first workshop in Montenegro, conducted in-depth interviews to capture personal stories reflecting the realities of hazardous chemicals exposure in the country. One interview features Edin, a young male participant who attended the awareness training and shared his perspective on the importance of education and safe practices in managing hazardous chemicals. The second story centers on a woman from Berane, engaged in the informal sector, who faces

-
- ² **Informal waste collectors:** Individuals or groups collecting and handling waste outside formal employment, often relying on this activity as their main source of income.
 - **Informal sector:** The wider economic sphere that includes all unregulated and unregistered work, including but not limited to waste collection.

significant social and economic challenges. Married at 15, illiterate, and a mother of seven, her experience highlights the vulnerabilities and daily struggles of women in informal waste management. These personal accounts provide valuable insight into the impact of awareness-raising activities and underscore the urgent need for targeted support and inclusive solutions within the community.

4. WORKSHOP DEVELOPMENT

Session 1 – Workshop in Berane

The workshop in Berane opened with a warm welcome from the organizing team, followed by introductions from all participants. This initial exchange set a collaborative tone and encouraged everyone to share their backgrounds and daily experiences in waste collection and processing. The formal presentation then guided the group through essential topics, beginning with an overview of persistent organic pollutants (POPs), their sources, and the risks they pose to both human health and the environment. The current situation regarding electronic waste in Montenegro was outlined, including the types of waste most commonly encountered and the legal framework governing its management.

As the presentation progressed, participants learned about the health and safety hazards associated with informal e-waste processing. The trainer emphasized the importance of safe dismantling practices, the use of personal protective equipment, and the proper storage of hazardous materials. Practical demonstrations and real-life examples helped make these recommendations tangible and relevant to the group.



Workshop in Berane:
Safe management of electronic waste (e-waste) and Persistent organic pollutants (POPs) topic

A substantial part of the workshop was devoted to open discussion, during which participants spoke candidly about the challenges they face. One of the most pressing issues was the removal of waste containers from their settlement, which has complicated proper waste disposal and increased the risk of illegal dumping. This concern prompted a municipal sanitation worker to join the conversation, offering the opportunity for direct dialogue about potential solutions and future joint actions.

Participants also described the economic difficulties they encounter, such as being forced to sell collected materials at very low prices, which undermines their ability to sustain their livelihoods. They explained that waste is gathered from various sources, including calls from people with old vehicles and materials brought by community members or collected from nearby illegal dump sites. Most of the processing is done manually, with cables stripped by hand and vehicles dismantled piece by piece. Some participants use a furnace to burn tires, but protective equipment is rarely used, apart from basic helmets for heat protection.

The discussion naturally shifted toward the topic of formalization and a sustainable support from the Ministry. Many participants expressed interest in understanding how they could transition from informal to formal waste management, or using the current formal Roma collector, recognizing that registration and official recognition could open doors to state support, subsidies, and better working conditions. However, they also voiced concerns about the lack of tools, outdated facilities, and limited access to protective equipment, all of which hinder their ability to meet environmental standards and operate safely. Questions were raised about whether the state could provide tax exemptions or financial incentives to support this transition.

Family roles in waste processing were also discussed. While women are not typically involved in these activities (unlike the field findings), children usually attend school, although older children sometimes assist their parents. The group expressed a collective desire for better opportunities, including access to modern tools, facility upgrades, and expanded markets for selling recovered materials.

During this workshop, a notable moment was the participation of a municipal sanitation worker, who joined the discussion as both a representative of the local institution and someone in a managerial position. His involvement provided valuable insight into the institutional perspective on waste management challenges faced by the community. He listened attentively to the concerns raised by participants, particularly regarding the removal of waste containers from the settlement, and offered practical suggestions for potential solutions. His willingness to engage directly with community members fostered constructive, but at times harsh dialogue and demonstrated the importance of cooperation between local authorities and informal waste collectors in addressing shared problems and improving waste management practices.

Throughout the workshop, every aspect of the presentation was covered and discussed in depth, ensuring that the content was directly relevant to the participants' lived experiences. The session concluded with a sense of shared purpose and a commitment to continue working together to find practical solutions for safer and more sustainable waste management in their community.

Session 2 - Workshop in Podgorica - Moving away from PFAS-containing AFFF

After introductory remarks and participant introductions, the session began with a comprehensive presentation that covered all key topics related to hazardous chemicals, persistent organic pollutants (POPs), and electronic waste management. The presentation provided a foundation for understanding the health and environmental risks associated with improper e-waste handling, as well as the legal and practical aspects of safe waste management.

As the workshop progressed, the discussion naturally shifted to the everyday realities faced by those working in the informal sector in Podgorica and Bar. Participants described how waste is collected from various sources: much of the material is brought in by individuals who gather secondary raw materials from city waste containers, households, and even from nearby landfills. The main types of waste collected include cables, metals, brass, aluminium, and vehicles, with brass and copper-containing cables being the most valuable. Processing is typically done manually, using basic tools such as grinders, cutters, and screwdrivers. Unlike some other sites, burning is not practiced; instead, cables are stripped by hand and small components are carefully extracted. Gas bottles and fire extinguishers are emptied and then sold as whole units, while car batteries are sold intact.



Workshop in Podgorica: Safe management of electronic waste (e-waste) and Persistent organic pollutants (POPs) topic

Despite the risks, the use of personal protective equipment remains minimal, and participants openly acknowledged the health hazards they face on a daily basis. Extracted metals are sold to major exporting companies, but the profit margins are often quite low, as the buyers control pricing and market access. Residual waste is disposed of in public containers or taken to private landfills, sometimes with the help of personal connections to avoid dumping fees. Hazardous byproducts, such as old oil from vehicles, are often disposed of in ways that pose environmental risks, such as dumping in the ground.

The discussion highlighted several persistent challenges: the lack of adequate tools and equipment for efficient and environmentally sound processing, limited access to protective gear, and the absence of stable and fair market opportunities. Participants also described the traditional division of labour, with women generally not involved in processing activities (mentioned by participants) and children attending school, though some older children may assist their families.

A significant portion of the workshop focused on the potential for formalization and improvement of working conditions. Many participants expressed a desire to transition from informal to formal operations, recognizing that registration and compliance with environmental standards could provide access to state support, subsidies, and safer working conditions. However, they also voiced concerns about the barriers they face, including the costs of upgrading facilities, obtaining necessary equipment, and navigating the legal requirements for formalization.

Throughout the workshop, the presentation topics were thoroughly addressed and discussed in relation to the participants' real-life experiences. The session concluded with a strong sense of community and a shared commitment to seeking practical solutions for safer, more sustainable, and more equitable waste management practices in Podgorica.



5. CONCLUSIONS

From a logistical perspective, both workshops were implemented successfully, with strong engagement from all participants. The second one was postponed due to religious reasons. The high level of commitment was evident throughout the sessions, as attendees actively contributed to discussions, openly shared their experiences and worries, and collaboratively explored solutions to the challenges faced in informal waste management.

The exchange of knowledge and practical examples from local and international contexts enabled participants to better understand the health and environmental risks associated with improper handling of electronic waste and persistent organic pollutants (POPs), but also to understand in which way the financial support from the State functions. Therefore, the workshops highlighted the urgent need for improved tools, safer working conditions, and greater access to protective equipment, as well as the importance of fair and stable market opportunities for those working in the informal sector.

Participants recognized that formalization of their activities is a crucial step toward ensuring both economic security and environmental protection. However, they also identified significant barriers, including limited resources, lack of technical support, and challenges in navigating the legal framework. The importance of ongoing dialogue and collaboration between the informal sector, government institutions, NGOs, and private companies was emphasized as essential for developing sustainable solutions. Both sessions underscored the value of continued education and capacity-building, not only to improve day-to-day practices but also to empower communities to advocate for their rights and needs. Building partnerships at the local and national level, and learning from international best practices, were identified as key strategies for overcoming technological and economic barriers.

In Serbia, municipal partnerships have been established in cities such as Novi Sad and Belgrade, where local authorities have signed agreements with waste picker associations. This integration enables informal collectors to participate in the official waste management system, resulting in improved working conditions and access to social and health services for collectors. These developments are documented in Osman Balic's presentation, "Collectors of secondary raw materials for a more certain future" (RCC Roma Integration 2020, Podgorica, 2014).

In North Macedonia, "The Pakomak" project stands out as a notable social enterprise initiative. It integrates informal collectors into the official packaging waste management system by providing them with training, necessary equipment, and formal employment contracts. This approach enhances income stability and social protection for collectors, while also supporting broader goals of social inclusion and improved environmental outcomes. Details on this initiative can be

found in the report " Inclusive Mobility of Secondary Raw Material Collectors" by Heinrich Böll Stiftung (2020).

In Croatia, municipalities such as Zagreb, Split, and Rijeka have introduced voucher and incentive schemes to encourage informal collectors to participate in formal recycling streams. These programs offer direct payments or vouchers redeemable for goods and services, thereby improving income security for collectors and promoting environmentally responsible practices. Such schemes are typically supported by local governments in partnership with NGOs, aiming to formalize the sector and increase recycling rates. Further information is available in the Heinrich Böll Stiftung report (2020).

The workshops demonstrated that the community is well aware of the risks associated with improper waste management. However, due to the lack of appropriate tools and equipment, participants sometimes resort to unsafe or environmentally unsound practices. This highlights the urgent need for targeted support and investment in modern tools and technologies, enabling the community to handle waste safely and in accordance with environmental standards.

6. ANNEXES

Annex I - Agenda

Annex II – List of participants

AGENDAS OF THE WORKSHOPS



UPRAVLJANJE ELEKTRONSKIM OTPADOM

AGENDA

Berane, hotel "Berane"

10.30 - 11:00 Dolazak i registracija

11:00 - 11:10 Dobrodošlica i uvod u radionicu
11:10 - 11:20 Icebreaker – vježba za razbijanje leda
11:20 - 12:00 Šta je POP-s i kako je moj posao povezan sa njim?
12:00 - 12:20 Diskusija o POP-ovima

12:20 - 13:00 Kafe pauza

13:00 - 13:20 Kako POP-s utiče na životnu sredinu?
13:20 - 13:40 Kako POP-sovi štete nama i ljudima oko nas?
13:40 - 14:00 Šta možemo, a šta ne smijemo raditi
14:00 - 14:20 Diskusija - kako možemo unaprijediti naš svakodnevni rad?
14:20 - 14:30 Sumiranje diskusije i zaključci

14:30 Ručak i odlazak učesnika



UPRAVLJANJE ELEKTRONSKIM OTPADOM

AGENDA

Podgorica, hotel "Ramada"

9.30 - 10:00 Dolazak i registracija

10:00 - 10:10 Dobrodošlica i uvod u radionicu
10:10 - 10:20 Icebreaker – vježba za razbijanje leda
10:20 - 11:00 Šta je POP-s i kako je moj posao povezan sa njim?
11:00 - 11:20 Diskusija o POP-ovima

11:20 - 12:00 Kafe pauza

12:00 - 12:20 Kako POP-s utiče na životnu sredinu?
12:20 - 12:40 Kako POP-sovi štete nama i ljudima oko nas?
12:40 - 13:00 Šta možemo, a šta ne smijemo raditi
13:00 - 13:20 Diskusija - kako možemo unaprijediti naš svakodnevni rad?
13:20 - 13:30 Sumiranje diskusije i zaključci

13:30 Ručak i odlazak učesnika



LISTS OF PARTICIPANTS



Монгол
Министрийн Төрийн
Санаа

УПРАВЛЈАНЈЕ ЕЛЕКТРОНСКИМ ОТПАДОМ

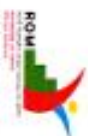
Radionica

HOTEL Podgorica- 12. 6. 2025.

LISTA UČESNIKA/CA

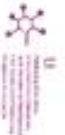
	IME I PREZIME	KONTAKT	POTPIS
1.	Kenca A.H.		
2.	Drapen Rendi Pjuni		
3.	Enada Gpuri		
4.	Enen Zecur	069 835 755	
5.	Enen Secury	069 49 1289	
6.	Enen Secury	069-765-548	
7.		069-834 109	
8.		065-961 643	
9.		069-401339	
10.	FASOKESHARI	069 224 487	





Монгол
Министрийн
Хүрээ
Монгол Улсын
Министрийн
Хүрээ
Монгол Улсын
Министрийн
Хүрээ

11.	Төгс. Гусан	068 569 630	Төгс
12.	ЭНГАН НАНГА	068-705-562	Эн
13.	МАНУЛА 2,24K ✓		М
14.	Хүс Бөртө	068 143 215	Хүс
15.	Себастиан Касиди	069 810 510	Себастиан
16.			
17.			
18.			
19.			
20.			
21.			
22.			
23.			
24.			
25.			





Montenegro
Ministry of Ecology,
Sustainable Development and Northern Region Development

UPRAVLJANJE ELEKTRONSKIM OTPADOM

Radionica

HOTEL Berane - 3. 6. 2025.

LISTA UČESNIKA/CA

	IME I PREZIME	KONTAKT	POTPIS
1.	Elvis Božić	069189215	
2.	Nasrula Vukosavljević	067/830-955	
3.	Božica Bradić	069-025-876	
4.	Jelena Kotleu	067201349	
5.	FERRI BERISA	069437422	
6.	Božica Hygen	069510813	
7.	Željko Elvin Becker	Željko.becker@un.org	
8.	SINANA Džurđević	069-678-359	
9.	SADIMIR BEČIĆ	069284020	
10.	Genarajević	069754070	



11.	HEMEL-DEJTAZI	069725 227	
12.	Pravica-Bevoda-	069.733554	
13.	DRONI MUSTAFI	069-433123	
14.	ROBERTI-MITAZI	069-72-75-25	
15.	ALMIR BERISI		
16.	KEST DIERANI	069628236	
17.	IGOR LEP	069860654	Li
18.	GILLEN BEGA	069484803	Bo
19.	DRAGAN D	068387788	gl
20.	NIKALIN D	069678311	
21.	DRAGAN	069703233	Bo
22.	LEODIRANI	069657344	
23.	ROSO DUBOVI	/	
24.	SELIMOLIC/IZIK		ZDR ALKO
25.	ALMIR DIERANI	06943704	

What What

ANDRIJANO, JELIMOVIC

