

Technical Assistance for Assessment of Türkiye's Potential on Transition to Circular Economy

EuropeAid/140562/IH/SER/TR

Türkiye Compulsory Deposit Management System

Activity 3.1.3 Assessment of Economic Instruments Used in Integrated Waste Management

Workshop
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Turkish Environment Agency
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Ankara













TÜRKİYE COMPULSORY DEPOSIT MANAGEMENT SYSTEM

TURKISH ENVIRONMENT AGENCY



Why Deposit Management System

ENVIRONMENTAL

- Increasing recycling rate
- Reduction in environmental pollution
- Reduction of carbon emissions
- Increasing the economic life of landfill sites

SOCIAL

- Additional employment and economic support
- Making the participation of citizens in the recycling system visible
- Increasing environmental awareness

ECONOMIC

- More efficient and sustainable recovery system
- Recycled materials with high economic value
- Cost reduction in environmental services of municipalities
- Reduction in the need for primary raw materials and reduction in raw material imports

GLOBAL

- Compliance with the circular economy concept
- Supporting Türkiye's participation in global sustainable development action



Packaging and Product Classes in Scope

TÜRKİYE ÇEVRE AJANSI Product/	1st Class	2nd Class	3rd Class	4th Class
Packaging				
Beverage / Food 0,1- 3 Lt; • PET bottle • GLASS bottle • ALUMINUM bottle/can • HDPE • COMPOSITE • Other	 Soft drinks (coke, flavoured and/or fruit drinks, flavoured and/or fruit natural mineral drinks, flavoured water, tonic, other soft drinks etc.) Drinking water and spring water Natural mineral waters Alcoholic and non-alcoholic beers, including aromatised ones Malt drinks Energy drinks Sports drinks 	• Fruit juices/nectars with a fruit content of 50% or less	 Fruit juices / nectars with a fruit content above 50% Milk and drinkable dairy products 	 Wines, alcoholic beverages obtained by distillation and stilling Other/unspecified drinks Other unspecified liquid foods



PILOT STUDY-KIZILCAHAMAM/ANKARA

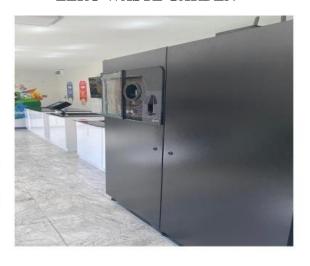
ENTRANCE TO SOĞUKSU NATIONAL PARK



CUMHURİYET SQUARE



ZERO WASTE GARDEN



KIZILCAHAMAM MUNICIPALITY



MARTYRS' PARK



ENTRANCE TO MİLET PARK





DEPOSIT MANAGEMENT SYSTEM

DEPOSIT INFORMATION MANAGEMENT SYSTEM DBYS

A. Deposit Information System

B. Product Printing and Tracking Operation

Deposit Management System Marked packaging / label production & packaging registration procedures

- C. Mobile Application and E-Wallet Application
- **D. Support Desk Service**
- E. Production/Supply of Machinery/Equipment

DIM Reader & Control and verification equipment to be used in Packaging / Label production facilities & Handheld control and verification equipment to be used in the field and manual return points & Verification and counting lines to be installed in the Verification Facility

F. Machine/Equipment Registration and DBYS (Depozit Information Management System) Integration



DEPOSIT FIELD MANAGEMENT SYSTEM DSYS

A. Infrastructure Installation

- A1. Procurement / Supply of DİMs (Deposit Return Machines) belonging to the System;
 - A2. Supply/Procurement of Equipment for Verification Facilities
- A3.Procurement / Supply of Hand Terminals and Other Equipment

B. Operation

B1. Establishment and Operation of Return Points

Equipment and Space Supply + Electricity, Internet and Personnel Supply

B2. Collection and Transportation Operations

Personnel & Vehicle & Transfer Centers

B3. Processing and Recovery

Verification facility & Packaging recovery facilities

DEPOSIT MANAGEMENT SYSTEM CURRENT STUDIES Deposit Information Management System (DBYS)

WEB PAGE

- Information and Announcements have started to be made via dbys.gov.tr.
- DBYS Company and Product Registration, Packaging Registration Processes are ongoing.

SPECIAL INK

- Special ink to be used in DYS Marking has been supplied.
- Product Printing is carried out.

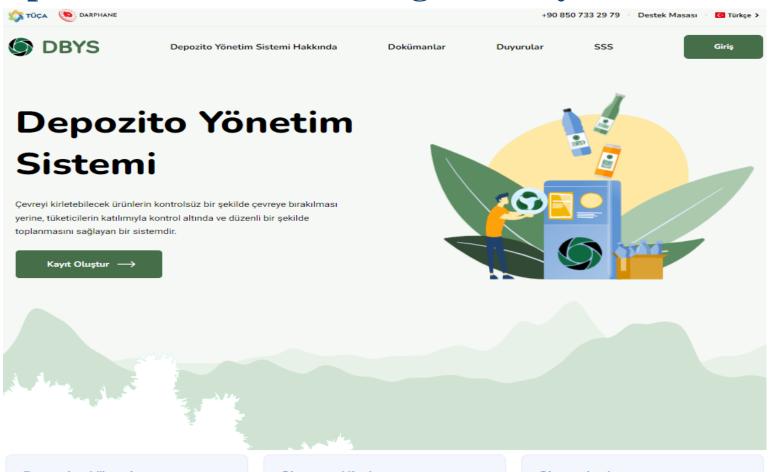
AUTHORISATION

• 40 Label/Packaging Manufacturers have been authorised to print with the DYS Mark.

PACKAGING REGISTRATION

Packaging registration procedures were initiated at the Packaging Approval
 Centre established within the Mint.

DEPOSIT MANAGEMENT SYSTEM CURRENT STUDIES Deposit Information Management System (DBYS)



Depozito Yönetim Sistemi Nedir?

Depozito Yönetim Sistemi, Çevre, Şehircilik ve İklim Değişikliği Bakanlığı tarafından belirlenen ve belirli bir depozito bedeli alınarak piyasaya sürülen ürünlerin tüketildikten sonra iade alınması ve depozito bedelinin geri ödenmesine dayanmaktadır.

Sisteme Kimler Dahildir?

Piyasaya sürenler, Etiket ve Ambalaj Üreticileri, Satış Noktaları, Aktarma ve Doğrulama Merkezleri, Geri Kazanım Tesisleri ve Taşıyıcı Firmalar, Darphane tarafından yetkilendirilmiş DYS kapsamındaki isletmelerdir.

Sistemin Amacı Nedir?

Depozito Yönetim Sistemi en başta sürdürülebilirlik olmak üzere, hem çevre kirliliğinin önüne geçmeyi hem de ekonomik olarak kayba dönüşen tek kullanımlık ambalaj üretim sistemini yenileyerek ekonomik olarak da katkı sunmayı amac edinmistir.

DEPOSIT MANAGEMENT SYSTEM CURRENT STUDIES Deposit Information Management System (DBYS)

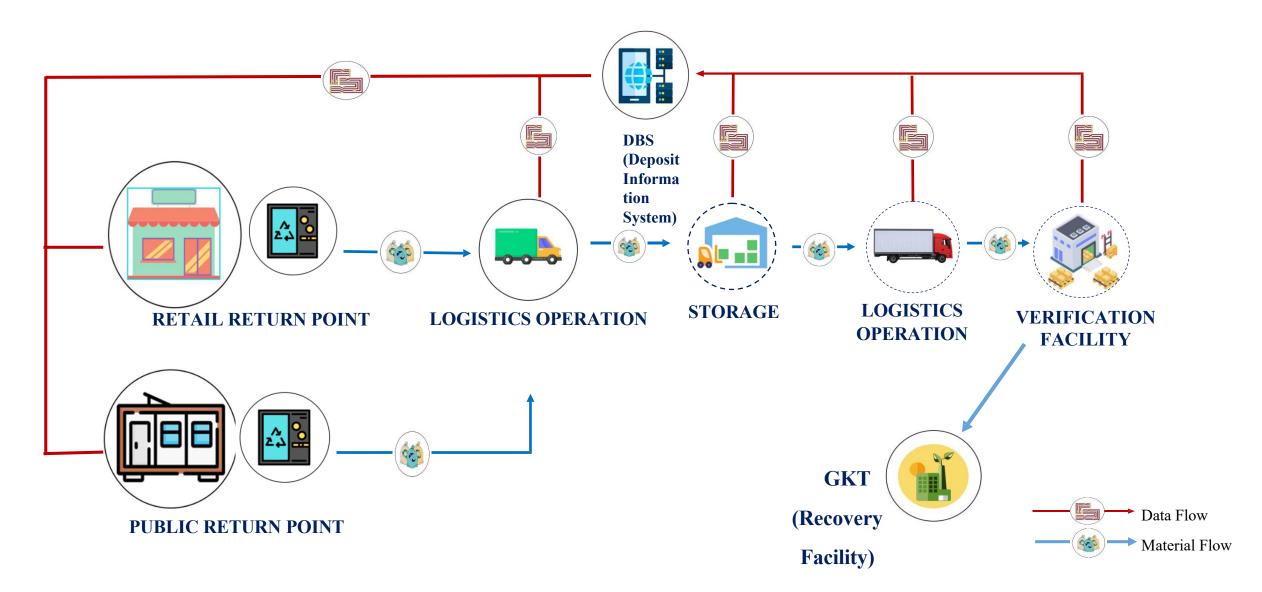
Guidance Documents

- DBYS User Manual
- DYS Marking, Adhesion DYS Labelling and Packaging Criteria
- Packaging Approval Screens User Guide
- Packaging Approval Center Procedure
- Label and Packaging Manufacturers Authorisation Guide
- Label and Packaging Manufacturer Facility Process Guide
- Label and Packaging Manufacturer Control and Inspection Procedure
- Guide for Manual Return Points Control Application
- Deposit Return Machines Certification Procedure
- Verification Facilities Counting Lines Certification Procedure



Deposit Field Management System

GENERAL OPERATIONS AND PROCESSES





Principles Related to the Return Points



TÜÇA Ürkiye çevre ajans

The types and minimum capacities of the DIMs to be used at the **return points** shall not cause any of their functions to become inoperable for more than 1 hour in total per day, or some of their functions not to function correctly or cause users to be unable to use these functions for this reason

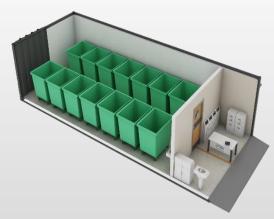


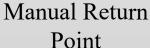
- Barcode scanning terminals,
- Infrastructure where they can make transactions with online connection to DBYS,
- An environmentally safe area for the collection and storage of returned empty packaging,

The registration procedures of the return points are carried out through DBYS within the framework of administrative, financial and technical issues determined by the Agency and/or the institution, organisation or enterprise authorised by the Agency.











Automated Return Point



Principles Related to Machinery/Equipment



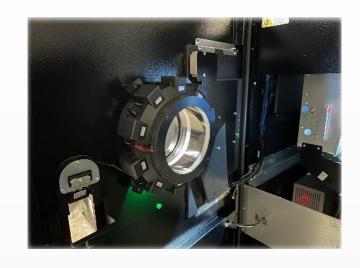
- Deposit return machines and
- identification/verification equipment to be produced / procured for use specific to the System

must meet the criteria and requirements determined within the scope of the system.

Registration of machinery/equipment manufacturers/suppliers that meet the requirements determined by the Agency and/or the institution, organisation or enterprise authorised by the Agency is carried out.



Mobile Barcode and Special Ink
Scanner



DIM Verification Unit



Integration of machines/equipment with DBYS and **The process for the procurement and use of operations within the DYS** is provided by the coordination of the DSYS Operator

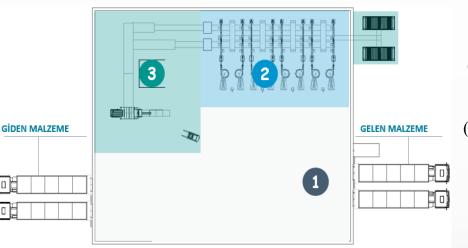


Principles Related to Verification Facilities



Verification Facilities should, as a minimum, have;

- Counting and sorting lines with verification and control equipment with scanners of the type and model registered by the DBYS Operator,
- The equipment that ensures that the packages coming from the sorting line are treated in such a way that they cannot be re-admitted to the system,
- Infrastructure with the capacity, technology and operating principles deemed appropriate by the Agency and approved by the DSYS Operator,
- Infrastructure to monitor the whole process through DBYS by using barcode reading and tracking system,



(1-Entry of packaging with deposit,
2-Verification Unit (verification+counting+sorting)
3-Bailing)



An Example of a Modern Verification Facility



RETURN POINTS

Sales Points;

- Shopping centers,
- Department stores and chain stores with a sales area of 400 m² or more,
- Chain stores with a sales area of less than 400 m², those specified in DESUP shall

Provide sufficient space and necessary infrastructure and personnel support for the establishment of a return point with a Deposit Return Machine (DIM) in accordance with DESUP, take environmental measures for these areas and keep these areas actively in service during working hours

- Other sales points with less than 400 m² sales area,
 - Online and remote sales points that carry out online sales of packaged products within the scope of the system,

are obliged to inform consumers about the return points where they can return empty packaging in accordance with DESUP. Sufficient space, necessary infrastructure and personnel support may be required for the establishment of return points.



Draft Marking/Labeling Criteria



(Additional Provision)

Compliance with the structural criteria in Annex-4 until



	Rules Related to Glass Packaging	(1) It shall not be painted except for the coloring made at the time of production.
		(2) Must not be made of opal and lead glass.
		(3) The outer surfaces shall not have any fixed components (basket, mesh, plastic or textile sheath/coating, etc.), ceramic components, metal
		rings and stamps.
		(4) Aluminium, plastic and natural cork caps can be used. Porcelain and lead caps cannot be used.
		(5) Adhesive, glued psb labels shall be used.
		(6) At least 60% of raw materials recovered from glass packaging waste shall be used in the production. At least 70% of the raw material to be
		used shall be obtained from deposit empty glass packaging collected within the scope of these Procedures and Principles.
	Rules Related to PET Packaging	(1) Only PET material shall be used in its production, PP, PE, PLA type plastics shall not be used.
		(2) Their color shall be transparent or transparent light blue. Metallic colors should not be used.
		(3) Caps shall be made of HDPE or PP material and PS, PVC and thermosetting plastics or metal caps shall not be used. The same restriction
		shall be observed for stamping on bottles. The use of metal caps will only be possible with the approval of the Agency.
		(4) Single layer safety strips must be used; only Glaskin and Bestpet coatings and additives shall be used. Multilayer security strips without a
		binding layer can be used on coloured pet bottles.
		(5) The labels to be used must be made of OPP, PE, PP, PET and paper material, OPS, PVC and metallic labels and heavy metallic adhesive
		inks shall not be used. Metallic foil labels will only be possible with the approval of the Agency.
		(6) The adhesives to be used shall be soluble in water or alkaline solutions and resin type adhesives shall not be used.
		(7) At least 50% of raw materials recovered from plastic packaging waste shall be used in its production. At least 70% of the raw material to be
		used shall be obtained from deposit empty plastic packaging collected within the scope of these Procedures and Principles.
	Rules Related to Aluminum Packages	(1) The label material on the packaging shall be made of paper, OPP, PE, PET material, and glues suitable for these labels to be removable
		when washed at maximum +70°C shall be used.
		(2) The adhesives to be used shall be soluble in water or alkaline solutions and resin type adhesives shall not be used.
		(3) The sleeve material to be used for the wrapping on the packaging surface shall be PE, OPP, PET.
		(4) The surface of the packaging shall be at minimum smoothness and there shall be no surface roughness that will make it difficult to read the
		barcode / QR code / logo.
		(5) In the absence of labelling for marking, the markings shall be embossed or printed on the packaging.



PROCEDURES AND PRINCIPLES Financial Considerations

The financial elements of the system are mainly;

- Deposit fee,
- Deposit contribution fees,
- System registration and transaction fees,
- Tfees related to transactions,
- Guarantees,
- Service fees paid for the services of DBYS and DSYS Operators and other related parties acting on their behalf for the establishment, operation and sustainability of DBYS and DSYS,
- Proceeds from the sale of packaging to recycling facilities,

Application principles and guidelines for financial matters It is also determined by the agency and announced to the interested parties.



DEPOSIT CONTRIBUTION FEE(**DEKAB application**)

Additional Article 11 of the Environmental Law titled "Recovery contribution fee" (Additional: 29/11/2018-7153/8 Art.): *Marketers/importers who implement a deposit system throughout the country in line with the principles determined by the Ministry are exempted from the first paragraph of this article for the products they place on the market with a deposit.*

Additional Article 12 of the Environmental Law titled Deposit (Additional: 29/11/2018-7153/8 Art.): Producers, importers and marketers of products subject to compulsory deposit application and wholesale or retail sales units offering the products covered by the deposit to consumers/users; must fulfil their administrative, financial and technical obligations for the establishment, operation and monitoring of the deposit system."

Article 23 of the Regulation on Control of Packaging Wastes: "Fees and guarantees other than the deposit fee to be applied within the deposit management system shall be determined and managed by the Agency in line with the representation ratios of the relevant parties by taking as basis the financial cost of the deposit management system investment, the costs of operating and maintaining the system, the costs of depreciation of fixed assets, management and monitoring expenses and costs consisting of return on equity and the operating income of the deposit management system."

Amendment to the Procedures and Principles for the Implementation of the Regulation on Recovery Contribution Fee dated 02.06.2023 and published on 66745475-020-6572817

- A recovery participation fee declaration will be submitted by the marketers.
- The code numbers they have received from the Agency (in the form of 10-digit TUCAXXXXXY defined via https://dbys.gov.tr) will be used.
- The Deposit Participation Fees (DEKAB) to be collected from the marketers will be the same as the current recovery participation fee amounts determined for the current period.
- The assessment, collection and receipt of DEKAB amounts (including offsetting and refund) will be carried out through the Deposit Information Management System (dbys.gov.tr) application.
- DEKAB receipts will be collected in the same periods as the declaration periods carried out by the Revenue Administration Presidency and within the month following the month in which these declarations are submitted.



Thank You.

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