

Description of web services for access to the Specialized Electronic Tracking and Analysis System for the medicinal products, included in PDL

Automated interface

PRODUCTION ENVIRONMENT

Version 5.5, Revision 3

31 October 2020

List of changes

Date	Version	Introduced changes	Chapter Page
08.05.2019	1.0	Initial version	
24.05.2019	1.1		
28.05.2019	1.2		
10.06.2019	2.0		
19.06.2019	2.1		
12.09.2019	3.0	Description of services for package submission of data with inserted json and for verification of pharmacies, retailers, and recipients	
29.09.2019	4.0		
01.10.2019	4.1	Updated information for data submission using the single service (for submission of a single transaction) – supplemented parameters notes and export_planned_date .	Chapter 3.8, 4.1
		Created new point with a service description for receipt of information for a registered transaction.	4.1.2
		Added transaction 21, presentation of samples as an option for HMPWDA	Error! Reference source not found.
17.10.2019	4.2	Added new chapter with description of the transactions and the method for their use.	Chapter 2
		Added explanatory text for the Positive Drug List	Chapter 3
		Reflected changes in the parameters for requesting the service for package submission of data and in case of verifications of the processing results	item Error! Reference source not found.
22.10.2019	4.3	Correction of the web service for information for the submitted package. The values of "p_package_no" and "p_package_item_no" have been exchanged.	item Error! Reference source not found.
07.11.2019	4.4	Added new transaction type "Return to a manufacturer abroad". Transactions have been removed 7. Delivery for sales by a physician in a settlement without a pharmacy, 21. Presenting samples and 23. (MAPIH) - delivery to retailer, Deleted article "2.2 Unnecessary transactions"	item 2.1 item 2.2
13.11.2019	4.5	The service returning information for PDL is simplified – it contains less data.	item 3.1.1
		A new service has been added to download PDL in a csv format.	item 3.1.5
		Two new transactions are added – "Discovered surpluses" and "Receipt of returned medicinal products"	item 2.1 item 2.2
11.12.2019	4.6	Added description for a web service providing data for physicians and dentists, who have the right to keep medicinal products in settlements without a pharmacy	item 3.8
		Added description for a web service providing data for Outpatient care facilities	item 3.5
		Added description for a web service providing data for schools of higher education	item 3.6
		Added description for a web service providing data for health offices	item 3.7
		Added parameter p_postcode for web service for single submission of data trn for identification of a wholesale distribution, in cases where it is applicable	item 4.1
		Added parameter p_postcode for web service for package submission of data trn/v2/ for identification of a wholesale distributor, in cases where it is applicable	item Error! Reference source not found.
28.02.2020	5.0	Processed and reorganized content of this document. Two main sections have been created – for receipt of information from ЦЕСПА and submission of data to SETAS. Data submission has been reduced mostly to two types – single submission and package submission.	

Date	Version	Introduced changes	Chapter Page
02.03.2020	5.1.	Added description of a web service for extraction of data for the list of medicinal products, included in PDL, for which shortage in the territory of the Republic of Bulgaria has been found	item 3.9
		Added description of a web service for rejection transactions from a full package.	item 6
14.03.2020	5.2	New types of transactions have been added	item 2
		Amended information for the service with package submission of data with authorization and authentication	item 4.4
03.05.2020	5.3	Added information about web service for receiving data for medical treatment facilities for in-patient care	item 3.10
26.05.2020	5.4	Correction of the table with allocation of transactions – removed transaction for delivery in the country by HMPWDA	
		Added column "active", with a digital flag for activity of a medicinal product - contains the value "1" for active medicinal products and "0" for the non-active.	item 3.1.2
		Corrected description of the web service for wholesale distributors	item 3.4.2
		Corrected type of the parameter for transaction number from an internal system – p_actor_trn_no – it is already a string	item 4
		Corrected term for retroactive submission of data – up to 365 days	item 4.2.1.3
		Added option for reversal of a transaction for submitted transaction number from an internal system	item 4.6.1
12.08.2020	5.5	Three new transactions have been added – 41, 42 and 43. Amended table with distribution of the transactions.	item 2.1
		Corrected term of the verification for the report date.	item 4.1.2.2
		Added description for verification for the ZIP code of a recipient warehouse	item 4.1.2.8
		Added description for verification of a number of an order, act, etc.	item 4.1.2.9
		Added description of the verifications on the transaction level in a package for a ZIP code of a recipient warehouse and a number of an order/act	item 4.3.2.2 item 4.4.2.2
		The error codes table has been amended	item 4.3.4 item 4.4.4
		Added description of the submission method for a zero package	item 4.6
		A description has been added for the method of receiving information for submitted zero reports	item 4.7
22.10.2020	5.5 Revision 1	Adapted specification for production environment	
	5.5 Revision 2		
31.10.2020	5.5 Revision 3	Added description of protected service revtrns	item 5.2
		Added description of protected service revbatchs	item 6.2
		Added description for protected service for submission of package for delayed processing sendpkgs	item 4.5.2

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1 Introduction

The information in SETSA of the relation type.

For the purposes of presenting information from the obligated entities according to the Law on Medicinal Products in Humane Medicine of the type “system to system”, the web services described in this document have been developed, which provide an opportunity for interaction – information search and information submission.

The document describes the web services, developed for this purpose, a portion of which has been designated to receive information, and another part is designated for submitting the data required.

1.1 Used Abbreviations

Abbreviation	Meaning
BDA	Bulgarian Drug Agency www.bda.bg
NCPRMP	National Council on Prices and Reimbursement of Medicinal Products www.ncpr.bg
RHI	Regional Health Inspection
SETSA	Specialized Electronic Tracking and Analysis System for the medicinal products, included in PDL
PDL	Positive Drug List
MP	Medicinal Product
MAH	Marketing Authorization Holder
ARMAH	Authorized Representative of Marketing Authorization Holder
HPIA	Holder of Parallel Import Authorization
HMPWDA	Holder of Medicinal Products Wholesale Distribution Authorization
LMPHM	Law on Medicinal Products in Humane Medicine
DMS	Database Management System

2 Principle for using the transactions in SETSA

SETSA determined a selection of atomic transactions, which represent separate actions, related to the movement of medicinal products, such as delivery, sale, etc. The meaning of the transactions is to match the business processes, related to the movement of medicinal products in the medicinal products supply system in the Republic of Bulgaria.

The foundation of registration of the different movements in SETSA is presented by a supplier, recipient, and a particular action (transaction). Different transactions also have additional attributes, required for describing the action. These attributes are mandatory for some transactions and not mandatory for other transactions.

The atomic transactions subsequently are associated with a particular type of participant (MAH, HMPWDA, a pharmacy, etc.), thus determining whether this type of participant has the opportunity of using the particular type of transaction.

Finally, the verification performed at the time of submission of data shall check whether the reported transaction is authorized for the type of data submitting participant.

The main objective for the transactions, other than reporting the business processes, is to allow the calculation of the total number of medicinal products in the country. Each transaction shall be an increase of the quantity of particular products, decrease of the quantity of a particular product, or does not have any reference to the quantity, but instead only shows movement of medicinal products.

2.1 Atomic transactions in SETSA

The concept of the atomic transactions is to describe the actions for movement of medicinal products, regardless of the entity performing the activity.

SETSA registers and has the following types of atomic transactions available:

- 1. Delivery in the country** – Delivery of medicinal products from a manufacturer to a warehouse in the country;
- 2. Wholesale Distributor Delivery** – (MAH) Delivery of medicinal products directly (to HMPWDA), without passing through a warehouse;
- 3. Pharmacy delivery** – Delivery (supply) of medicinal products to a pharmacy;
- 4. Granting/Sale** - A participant reports a performed sale/granting of a medicinal product, wherein the medicinal product is leaving of the medicinal product supply network;
- 5. Foreign export** – Reporting for a completed export of medicinal products abroad;
- 9. Receiving medicinal products** - A participant reports received medicinal products;
- 10. Planned export abroad** – Reporting for a planned completed export of medicinal products abroad; (HMPWDA)
- 12. Blocked MP release** - Blocked medicinal products shall be released and shall be returned as available on the market;
- 13. Blocking of MP** - Blocking of a medicinal product, for which a blocking order has been issued. These medicinal products shall temporarily be subtracted from the total quantity for the country, and can be returned with transaction 12 Release, or shall not be returned, if they are destroyed;

- 15. Delivery from a warehouse in the country** – Delivery of medicinal products in the country;
- 16. Delivery to another HMPWDA** - Supply with medicinal products to other holders of wholesale distribution authorization;
- 17. Delivery to medical facility** – Delivery of medicinal products to medical treatment facilities for their own needs. The transaction covers deliveries to medical treatment facilities for outpatient care;
- 18. Delivery to a school of higher education** – Delivery with medicinal products to schools of higher education, which provide treatment activity as set forth in article 2a of the Medical Establishments Act, for their own needs;
- 19. Delivery of a health office** – Delivery of medicinal products to health offices, established in the institutions, set forth in article 26, paragraph 1, item 1 and 3 of the Health Act, for their own needs;
- 20. Delivery to shipowner** - Delivery of medicinal products to the shipowners in for their own needs for the purposes of providing medicinal products on board of the vessels, according to the Merchant Shipping Code;
- 24. Grant** – Grant of medicinal products
- 25. Rejection** – Rejection of medicinal products, in case their unsuitability, expired shelf life, etc. has been found;
- 26. Discovered shortages** – Discovered shortages of medicinal products, for example after discovering a theft, or post inventory;
- 27. Return to supplier** – Return of all or part of the delivered quantity;
- 28. Delivery to State Reserve** – Medicinal products delivered to the State Agency “State Reserve and War-Time Stocks”;
- 29. Delivery to the Ministry of Defence** - for the Ministry needs, with the exception of their departmental medical treatment facilities;
- 30. Delivery to the Ministry of the Interior** - for the Ministry needs, with the exception of their departmental medical treatment facilities;
- 31. Delivery to the Ministry of Health** – delivery to the Ministry of Health;
- 32. Delivery to Emergency Medical Care Center** – delivery to EMCC;
- 33. Transfer between own warehouses** – designated to reflect transfers between own warehouses of a single legal entity;
- 34. Transfer between pharmacies** – designated to reflect transfers between pharmacies of a single legal entity;
- 35. Delivery to another medical treatment facility** – designated to reflect deliveries between medical treatment facilities in the cases of using a pharmacy of another treatment facility;
- 36. Return to a supplier abroad** - Designated to return medicinal products to a manufacturer abroad.
- 37. Discovered surpluses** - Discovered surpluses of medicinal products, for example after inventory;
- 38. Receipt of returned medicinal products** – Reporting the returned medicinal products.

39. Receipt of medicinal products from grant – Designated for reporting to SETSA for received grant with medicinal products;

40. Receipt of MP from State Reserve – Designated for reflecting medicinal products, which are returned to the network from the State Reserve, missions, and medical points of MMA;

41. Return of blocked MP for destruction abroad – Designated to return medicinal products for destruction abroad.

42. Return of blocked medicinal products to supplier – Return of already blocked medicinal products to supplier.

43. Receipt of returned blocked medicinal products – Receipt of returned, blocked in advance medicinal products from a counterparty.

Note:

The delivery of medicinal products for medical treatment facilities for in-patient care shall be sent as a transaction **3. Delivery to a pharmacy**, which means the hospital pharmacy, which services the particular MTFIC. In the cases when MTFIC does not have its own pharmacy, but instead the MTFIC uses the services of another hospital pharmacy, the delivery shall be submitted as a supply to the servicing pharmacy, and subsequently to the hospital pharmacy with transaction **35. Delivery to another medical treatment facility** shall indicate the delivery to MTFIC, which is the end recipient.

2.2 Allocation of responsibilities

The allocation of the transactions has been presented in Table 1 Distribution of transactions among the participants.

The following criteria have been used to present the information:

1. The transactions applicable for the particular participant have been marked against an orange background;
2. Transactions increasing the total quantity of a particular medicinal product in the country are marked with the plus (+) symbol;
3. Transactions decreasing the total quantity of a particular medicinal product in the country are marked with the minus (-) symbol;
4. Transactions which do not change the total quantity of a particular medicinal product in the country are marked with a zero.

Description of the automated interface of SETSA, version 5.5, revision 3

Transaction / Participant		MAH	ARMAH	MAH+AR MAH	HPIA	MAH + HMPWDA	HPIA + HMPWDA	HPIA + HMPWDA	HMPWDA	Pharmacy	Pharmacy in MTF	School of Higher Education	Health Office	Ship owner	Physician or dentists
1. Delivery in the country	HMPWDA	+1	+1	+1	+1	+1	+1	+1							
2. Delivery to a wholesale distributor	HMPWDA MAH	+1	+1	+1	+1	+1	+1	+1							
3. Delivery to a pharmacy	HMPWDA				-1	-1	-1	-1	-1						
4. Granting/sale										-1	-1	-1	-1	-1	-1
5. Export abroad	HMPWDA					-1	-1	-1	-1						
9. Receipt of medicinal products										+1	+1	+1	+1	+1	+1
10. Planned export abroad	HMPWDA					0	0	0	0						
12. Release of blocked medicinal products	HMPWDA	+1	+1	+1	+1	+1	+	+1	+1	+1	+1				
13. Blocking of MP	HMPWDA	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1				
15. Delivery from a warehouse in the country	HMPWDA	-1	-1	-1	-1	-1	-1	-1							
16. Delivery to another HMPWDA	HMPWDA MAH					0	0	0	0						
17. Delivery to medical treatment facility	HMPWDA				-1	-1	-1	-1	-1						
18. Delivery to a school of higher education	HMPWDA				-1	-1	-1	-1	-1						
19. Delivery to a health office	HMPWDA				-1	-1	-1	-1	-1						
20. Delivery to a ship owner	HMPWDA				-1	-1	-1	-1	-1						
24. Grant	HMPWDA	-1	-1	-1	-1	-1	-1	-1	-1	-1					
25. Rejection DS: INVENTORY Disposal	HMPWDA	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
26. Shortages DS: Inventory count minus	HMPWDA	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
27. Return to supplier	HMPWDA					-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
28. Delivery to State Reserve	HMPWDA					-1	-1	-1	-1						
29. Delivery to the Ministry of Defence	HMPWDA					-1	-1	-1	-1						
30. Delivery to the Ministry of Interior	HMPWDA					-1	-1	-1	-1						
31. Delivery to the Ministry of Health	HMPWDA					-1	-1	-1	-1						
32. Delivery to Emergency Medical Care Center	HMPWDA					-1	0	-1	-1						
33. Transfer between own shares	HMPWDA					0	0	0	0						

Description of the automated interface of SETSA, version 5.5, revision 3

34. Transfer between pharmacies											0	0				
35. Delivery to another medical treatment facility												-1				
36. Return to a manufacturer abroad	HMPWDA	-1	+1	+1	-1	-1	+1	-1	-1							
37. Established surpluses DS INVENTORY COUNT PLUS	HMPWDA	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1
38. Receipt of returned medicinal products	HMPWDA	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1				
39. Receipt of medicinal products from grant	HMPWDA											+1				
40. Receipt of MP from state reserve	HMPWDA											+1				
41. Return of blocked MP for destruction abroad	HMPWDA	0	0	0	0	0	0	0	0							
42. Return of blocked medicinal products to the supplier						0	0	0	0	0	0	0	0	0	0	0
43. Receipt of returned blocked medicinal products	HMPWDA MAH	0			0	0		0	0							

Table 1 Distribution of transactions among the participants

2.3 Web service for transactions verification

A reference web service is created for verification of the available atomic transactions in SETSA, allowing the display of the available atomic transactions, currently registered in SETSA. The service is RESTful and returns a result in JSON format. It shall be requested as follows:

Service endpoint:

<https://sespa.mh.government.bg/sespa/api/info/trntypes/>

Method: GET

Content-type: application/json

Result: returns a list of all atomic transactions in the form of:

```
{
  "items": [
    {
      "transaction_type_id": 1,
      "transaction_type_code": "ДОС",
      "transaction_type_name": "Доставка в страната",
      "transaction_type_desc": "Доставка на лекарствени продукти от
      производител в склад в страната."
    },
    {
      "transaction_type_id": 2,
      "transaction_type_code": "ДТЕ",
      "transaction_type_name": "Доставка на търговец на едро",
      "transaction_type_desc": "(ПРУ) Доставка на лекарствени продукти
      директно (на ТЕ), без да се преминава през склад."
    },
    .....
  ],
  "first": {
    "$ref": "http://sespa.mh.government.bg/sespa/api/info/trntypes/"
  },
  "next": {
    "$ref": "http://sespa.mh.government.bg/sespa/api/info/trntypes/?page=1"
  }
}
```

Whereas

"transaction_type_id" - transaction number;
"transaction_type_code" - transaction letter code;
"transaction_type_name" - short description of transaction;
"transaction_type_desc" - description of the designation of the transaction.

2.4 Verification of authorized transactions for a participant

Available web service that aids obtaining the available transactions in SETSA for the service requesting entity, depending on the service requesting entity type. The service is RESTful and returns a result in JSON format. It shall be requested as follows:

Service endpoint:

<https://sespa.mh.government.bg/sespa/api/info/actortrntypes/>

Method: GET

Content-type: application/json

Parameter: p_actor_reg_no – the participant registration number, received after approval of the SETSA access application

Example:

https://sespa.mh.government.bg/sespa/api/info/actortrntypes/?p_actor_reg_no=72484E8AE12384E2BD5211211D7C9093

Result: returns a list of all atomic transactions in the form of:

```
{
  "items": [
    {
      "transaction_type_id": 4,
      "transaction_type_code": "ОТПРОД",
      "transaction_type_name": "Отпускане/продажба",
      "transaction_type_desc": "Участник отчита извършена продажба/отпускане на ЛП, при което лекарствения продукт излиза от мрежата на лекарствоснабдяването."
    },
    {
      "transaction_type_id": 9,
      "transaction_type_code": "ПОЛК",
      "transaction_type_name": "Получаване на лекарствени продукти",
      "transaction_type_desc": "Участник отчита получени лекарствени продукти."
    },
    {
      "transaction_type_id": 12,
      "transaction_type_code": "ОСВО",
      "transaction_type_name": "Освобождаване на блокирани ЛП",
      "transaction_type_desc": "Блокираното количество се освобождава и се връща на пазара (чрез ТЕ)."
    },
    {
      "transaction_type_id": 13,
      "transaction_type_code": "БЛОК",
      "transaction_type_name": "Блокиране на ЛП",
      "transaction_type_desc": "Блокиране на лекарствен продукт, за който има издадена заповед за блокиране."
    },
    {
      "transaction_type_id": 24,
      "transaction_type_code": "ДАР",
      "transaction_type_name": "Дарение",
      "transaction_type_desc": "Даряване на лекарствени продукти"
    },
    {
      "transaction_type_id": 25,
      "transaction_type_code": "БРАК",
      "transaction_type_name": "Бракуване",
      "transaction_type_desc": "Бракуване на лекарствени продукти, когато е установена тяхната негодност, изтекъл срок на годност и др."
    },
    {
      "transaction_type_id": 26,
      "transaction_type_code": "ЛИП",
      "transaction_type_name": "Установени липси",
      "transaction_type_desc": "Установени липси на лекарствени продукти, например след установяване на кражба или след инвентаризация."
    }
  ]
}
```

```
{
  "transaction_type_id": 27,
  "transaction_type_code": "ВРЩД",
  "transaction_type_name": "Връщане към доставчик",
  "transaction_type_desc": "Връщане на цялото или част от доставено
количество"
},
{
  "transaction_type_id": 34,
  "transaction_type_code": "ТА",
  "transaction_type_name": "Трансфер между аптеки",
  "transaction_type_desc": "предназначена да отрази трансфери между
аптеки на едно юридическо лице."
}
],
"first": {
  "$ref": "http://sespa.mh.government.bg/sespa/api/info/actortrntypes/?p\_actor\_reg\_no=72484E8AE12384E2BD5211211D7C9093"
}
}
```

3 Excerpt of data from SETSA

For the successful and faultless operation with SETSA, a large portion of the information is available as reference RESTful web services, which can be requested using a GET delivery and return information which can be used in the construction of submission data.

All of these services are grouped in one module, called **info**, and have a common initial URL:

<https://sespa.mh.government.bg/api/info/...>

3.1 Positive Drug List

Subject to submission of information to SETSA are all medicinal products, included in the positive drug list, maintained by the National Council on Prices and Reimbursement of Medicinal Products. The positive drug list is renewed as a minimum every second day of the month and consists of four annexes. Submission of medicinal products information from all applications is required. Information about PDL is available at the following address:

<http://portal.ncpr.bg/registers/pages/register/view-medicament.xhtml>

Submission of medicinal products to SETSA shall be done using their codes, designated by NCPRMP. A medicinal product code means the code provided by NCPRMP at the time of generating the Positive Drug List.

In order to see the MP code, export of the result shall be completed, and the medicinal product shall be looked up.

For example - H03BB02, Thiamazole, trade name: "THYROZOL", 5 mg, x50

PDL code exists (NCPRMP): **2415**

A reference web service is prepared for the purposes of facilitating the look-up in SETSA, which returns information about active medicinal products in the list, returning additional information, other than the medicinal product code.

3.1.1 List of medicinal products in SETSA

RESTful web service, which returns the contents of the positive drug list, loaded into SETSA. Only the active medicinal products are contained in the result.

Endpoint:

<https://sespa.mh.government.bg/sespa/api/info/pls/>

Method: GET

Content-type: application/json

Result: returns all MP, available in SETSA, as follows:

```
{
  "items": [
    {
      "drug_id": 4634,
      "atc_code": "B02BD02",
      "inn": "Human coagulation factor VIII",
      "drug_trade_name": "Immunate",
      "forma": "Powder and solvent for solution for injection",
    }
  ]
}
```

```

    "active_substance": "500",
    "active_substance_measurement": "IU",
    "number_in_package": "1",
    "valid_from": "02.01.2019",
    "valid_to": "01.10.2061",
    "status": "Активен",
    "nhif_code": "BF199",
    "nscrlp_code": 2441,
    "owner_name": "Baxalta Innovations GmbH, Австрия",
    "active": 1,
    "is_active": "Y",
    "product_code": null,
    "pls_publish_date": "2014-09-01T21:00:00Z",
    "bg_drug_trade_name": null,
    "bg_forma": null,
    "updated_on": "2020-10-04T18:06:32Z",
    "nmbr_in_pkg": null,
    "nscrlp_drug_id": 25883,
    "producer": "Baxter AG - Austria"
  },
  {
    "drug_id": 4636,
    "atc_code": "B02BD02",
    "inn": "Human coagulation factor VIII",
    "drug_trade_name": "OCTANATE",
    "forma": "Powder and solvent for solution for injection",
    "active_substance": "1000",
    "active_substance_measurement": "IU",
    "number_in_package": "1 vial powder, 1 vial solvent 10 ml, 1
syringe, 1 transfer set",
    "valid_from": "02.01.2019",
    "valid_to": "01.10.2061",
    "status": "Активен",
    "nhif_code": "BF280",
    "nscrlp_code": 3650,
    "owner_name": "Octapharma (IP) SPRL, Белгия",
    "active": 1,
    "is_active": "Y",
    "product_code": null,
    "pls_publish_date": "2019-02-01T22:00:00Z",
    "bg_drug_trade_name": null,
    "bg_forma": null,
    "updated_on": "2020-10-04T18:06:32Z",
    "nmbr_in_pkg": null,
    "nscrlp_drug_id": 25889,
    "producer": "Octapharma Pharmazeutica Produktions GmbH,
Австрия; Octapharma SA - Франция; Octapharma AB - Швеция"
  },
  .....
],
"first": {"$ref": "http://sespa.mh.government.bg/sespa/api/info/pls/"}, "next": {"$ref": "http://sespa.mh.government.bg/sespa/api/info/pls/?page=1"}}

```

3.1.2 Display of data for medicinal product according to its code in NCPRMP

By requesting a web service and sending the code of the MP from NCPRMP, the data for this MP is returned.

Endpoint: <http://sespa.mh.government.bg/sespa/api/info/pls/16000>

Method: GET

Content-type: application/json

Result: returns MP, available in SETSA, as follows:

```
{
  "items": [
    {
      "drug_id": 5735,
      "atc_code": "L04AB04",
      "inn": "Adalimumab",
      "drug_trade_name": "Humira",
      "forma": "Solution for injection",
      "active_substance": "40 mg/0.4 ml",
      "active_substance_measurement": "-",
      "number_in_package": "2 pre-filled syringes + 2 alcohol pads",
      "valid_from": "02.01.2019",
      "valid_to": "01.10.2061",
      "status": "Активен",
      "nhif_code": "LF264",
      "nscrlp_code": 16000,
      "owner_name": "AbbVie Deutschland GmbH & Co. KG, Германия",
      "active": 1,
      "is_active": "Y",
      "product_code": null,
      "pls_publish_date": "2020-05-01T21:00:00Z",
      "bg_drug_trade_name": "ХУМИРА шпр.амп.40мг/0.4мл.х2",
      "bg_forma": null,
      "updated_on": "2020-10-04T18:06:32Z",
      "nmbr_in_pkg": 2,
      "nscrlp_drug_id": 38319,
      "producer": "AbbVie Biotechnology GmbH, Wiesbaden, Германия; AbbVie Biotechnology GmbH, Ludwigshafen, Германия"
    }
  ],
  "first": {"$ref": "http://sespa.mh.government.bg/sespa/api/info/pls/16000"}}}
```

3.1.3 Medicinal Product Search

By using the structure `?q={"nscrlp_code":4125}`, information can be received about a particular product according to its code in NCPMP.

Endpoint: [https://sespa.mh.government.bg/api/info/pls/?q={"nscrlp_code":4125}](https://sespa.mh.government.bg/api/info/pls/?q={)

[https://sespa.mh.government.bg/sespa/api/info/pls/?q={"nscrlp_code":2436}](https://sespa.mh.government.bg/sespa/api/info/pls/?q={)

Method: GET

Content-type: application/json

Result: returns MP, available in SETSA, as follows:

```
{
  "items": [
    {
      "drug_id": 4557,
      "atc_code": "A10BF01",
      "inn": "Acarbose",
      "drug_trade_name": "Aroba",
      "forma": "Tablet",
      "active_substance": "100",
      "active_substance_measurement": "mg",
      "number_in_package": "30",
      "valid_from": "02.01.2019",
      "valid_to": "01.10.2061",
    }
  ]
}
```

```

    "status": "Активен",
    "nhif_code": "AF523",
    "nscrlp_code": 4125,
    "owner_name": "Чайкафарма Висококачествените лекарства АД, България",
    "active": 1,
    "is_active": "Y",
    "product_code": null,
    "pls_publish_date": "2019-05-01T21:00:00Z",
    "bg_drug_trade_name": null,
    "bg_forma": null,
    "updated_on": "2020-10-04T18:06:32Z",
    "nmbr_in_pkg": null,
    "nscrlp_drug_id": 8886,
    "producer": "Чайкафарма Висококачествените лекарства АД, София, България"}
  ],
  "first": {"$ref": "http://sespa.mh.government.bg/sespa/api/info/pls/?q=%7B%22nscrlp_code%22:%224125%22%7D"}
}

```

Similarly, such order can be sent for name search for a medicinal product – through `?q={"drug_trade_name":"Aroba"}`. Once again this will return all data for the medicinal product in format JSON, as indicated hereinabove.

Method: GET

Content-type: application/json

[https://sespa.mh.government.bg/sespa/api/info/pls/?q={"drug_trade_name":"Aroba"}](https://sespa.mh.government.bg/sespa/api/info/pls/?q={)

```

{
  "items": [
    {
      "drug_id": 4557,
      "atc_code": "A10BF01",
      "inn": "Acarbose",
      "drug_trade_name": "Aroba",
      "forma": "Tablet",
      "active_substance": "100",
      "active_substance_measurement": "mg",
      "number_in_package": "30",
      "valid_from": "02.01.2019",
      "valid_to": "01.10.2061",
      "status": "Активен",
      "nhif_code": "AF523",
      "nscrlp_code": 4125,
      "owner_name": "Чайкафарма Висококачествените лекарства АД, България",
      "active": 1,
      "is_active": "Y",
      "product_code": null,
      "pls_publish_date": "2019-05-01T21:00:00Z",
      "bg_drug_trade_name": null,
      "bg_forma": null,
      "updated_on": "2020-10-04T18:06:32Z",
      "nmbr_in_pkg": null,
      "nscrlp_drug_id": 8886,
      "producer": "Чайкафарма Висококачествените лекарства АД, София, България"}
  ],
  "first": {"$ref": "http://sespa.mh.government.bg/sespa/api/info/pls/?q=%7B%22drug_trade_name%22:%22Aroba%22%7D"}
}

```

3.1.4 Search for part of a trade name of the medicinal product

By using the structure `?q={"drug_trade_name":{"$like":"<text>%25"}}`, information can be received about a particular product, starting with the text `<text>`.

[https://sespa.mh.government.bg/sespa/api/info/pls/?q={"drug_trade_name":{"\\$like":"Z%25"}}](https://sespa.mh.government.bg/sespa/api/info/pls/?q={)

The order from the previous example shall return all medicinal products, the trade name of which starts with Z.

3.1.5 Download the Positive Drug List in a csv file

REST web service, which allows downloading the full PDL, loaded in SETSA as a csv file. The web file also includes the inactive medicinal products.

Endpoint: <https://sespa.mh.government.bg/sespa/api/info/plsincsv>

Method: GET

Content-type: text/csv

Result: returns all MP, available in SETSA, as follows:

```
DRUG_ID, ATC_CODE, INN, DRUG_TRADE_NAME, FORMA, ACTIVE_SUBSTANCE,
ACTIVE_SUBSTANCE_MEASUREMENT, NUMBER_IN_PACKAGE, VALID_FROM, VALID_TO, STATUS, NHIF_CODE,
NSCRLP_CODE, OWNER_NAME, IS_ACTIVE, PRODUCT_CODE, PLS_PUBLISH_DATE, BG_DRUG_TRADE_NAME,
BG_FORMA, UPDATED_ON, NMBR_IN_PKG, APPENDIX, NSCRLP_DRUG_ID, PRODUCER, MERCHANT_FINAL_PRICE,
RETAILER_FINAL_PRICE
```

```
4556,A10BD20,"Empagliflozin, Metformin",Synjardy,Film coated tablet,5 mg/ 1000,mg,60,2019-01-
01T22:00:00Z,2061-09-30T21:00:00Z,Активен,AF533,15521,"Boehringer Ingelheim International
GmbH, Германия",Y,,2017-01-01T22:00:00Z,,2019-11-
13T09:38:16Z,60,PDL_APPENDIX_2,29438,"Boehringer Ingelheim Pharma GmbH & Co.KG, Германия;
Boehringer Ingelheim Ellas A.E., Гърция",84.22,97.18
```

```
4558,A10BF01,Acarbose,Glucobay 100,Tablet,100,mg,30,2019-01-01T22:00:00Z,2061-09-
30T21:00:00Z,Активен,AF273,3528,"Bayer AG, Германия",Y,,2019-05-01T21:00:00Z,,2019-11-
13T09:38:16Z,,PDL_APPENDIX_2,8885,"Bayer AG, Германия",7.38,8.76
```

```
4559,A10BG03,Pioglitazone,Pioglitazone Accord,Tablet,45,mg,30,2019-01-01T22:00:00Z,2061-09-
30T21:00:00Z,Активен,AF454,1400,"Accord Healthcare Limited, Обединено Кралство",Y,,2019-07-
01T21:00:00Z,,2019-11-13T09:38:16Z,,PDL_APPENDIX_2,43369,"Accord Healthcare Limited,
Обединено кралство",25.43,29.75
```

Whereas,

DRUG_ID - Identification of the medicinal product in SETSA;

ATC_CODE - Anatomical-therapeutic code /ATC code/;

INN - International Non-Patent Name /INPN/;

DRUG_TRADE_NAME – Trade name of the medicinal product;

FORMA - Formulation

ACTIVE_SUBSTANCE - Quantity of the active medicinal substance;

ACTIVE_SUBSTANCE_MEASUREMENT - Measurement units of the quantity of active ingredient;

NUMBER_IN_PACKAGE - Final package;

VALID_FROM - Initial date of inclusion in the list;

VALID_TO - End date of attendance in the list;

STATUS – Condition of MP – active/inactive;

NHIF_CODE - Code of the National Health Insurance Fund for the medicinal product;

NSCRLP_CODE - Code of the medicinal product from PDL of NCPRMP;

OWNER_NAME - Marketing Authorization Holder;

ACTIVE – Flag which shows whether the medicinal product is active - it contains values "1" for active medicinal products and "0" for the inactive ones.

IS_ACTIVE - Flag, which shows whether MP is active: Y - yes, N - no.;

PRODUCT_CODE - Product code of manufacturer;

PLS_PUBLISH_DATE - Date of inclusion in PDL;

BG_DRUG_TRADE_NAME – Trade name of the medicinal product in Bulgarian language;

BG_FORMA - Formulation in Bulgarian language;

UPDATED_ON - Date of the last update;

NMBR_IN_PKG - Digital expression of the contents of the package for calculation;

APPENDIX - Number of the application from PDL;

NSCRIP_DRUG_ID - Identification of MP in NCPMP;

PRODUCER - Manufacturer of the medicinal product;

MERCHANT_FINAL_PRICE -

RETAILER_FINAL_PRICE -

3.2 Medicinal products recipients

The recipients, respectively the suppliers of medicinal products, are available through the RESTful web service for reference and verification. Their Uniform Identification Codes or authorization numbers shall be used as values for filing data to SETSA.

Endpoint:

<https://sespa.mh.government.bg/sespa/api/info/recipients/>

Method: GET

Content-type: application/json

Result: returns the recipients, available in SETSA, as follows:

```
{
  "items":
    [{"recipient_id": 8217,
      "eik": null,
      "ial_permit_no": "АП-1800",
      "ial_permit_date": "2019-01-27T22:00:00Z",
      "description": "ЙОРДАНОВИ ФАРМА ООД",
      "recipient_type": 4,
      "address": "гр. Първомай, ул. Орфей, бл. 2",
      "postcode": null},
     {"recipient_id": 8218,
      "eik": null,
      "ial_permit_no": "АП-1803",
      "ial_permit_date": "2019-02-06T22:00:00Z",
      "description": "КРАСИ СТОЯНОВА ЕООД",
```

```

    "recipient_type": 4,
    "address": "гр. Варна, ул. Дубровник № 52",
    "postcode": null},
...
}

```

3.3 Pharmacies

RESTful web service, which returns a list of all pharmacies, available in the BDA registry for issued retail marketing authorizations with medicinal products in a pharmacy.

3.3.1 List of all pharmacies in the BDA registry

Service endpoint:

<https://sespa.mh.government.bg/sespa/api/info/pharma/>

Method: GET

Content-type: application/json

Result:

```

{
  "items": [
    {
      "pharmacy_id": 4646,
      "permit_no": "3429",
      "permit_date": "2010-08-16T21:00:00Z",
      "pharmacy_name": "\"АНИТА - ИРЕН\" ЕООД",
      "address": "с.Капитан Андреево, община Свиленград",
      "management_address": "ул. Родопи 6",
      "manager": "Цветана Гаврилова Калайджиева",
      "pharma_city": "с. Капитан Андреево",
      "pharma_address": "община Свиленград, ул. Бузлуджа 1 А",
      "activities": "търговия на дребно с лекарствени продукти, с изключение на
отпускани по лекарско предписание, с ръководител помощник-фармацевт ",
      "pharmacy_type": "ЧА",
      "assistant_pharmacist": null,
      "nhif_contract": null,
      "is_active": "Y"
    },
    {
      "pharmacy_id": 4647,
      "permit_no": "3430-3",
      "permit_date": "2019-04-23T21:00:00Z",
      "pharmacy_name": "СЛАВИНАФАРМ ЕООД",
      "address": "гр. Добрич 9300",
      "management_address": "ж.к. Дружба, бл. 26, вх. А, ет. 7, ап. 21",
      "manager": "Златка Иванова Миланова", "pharma_city": "гр. Добрич",
      "pharma_address": "ж.к. Русия 1, УПИ-III, кв. 509",
      "activities": "търговия на дребно с лекарствени продукти, с изключение на
приготвяни по магистрална и фармакопейна рецептура",
      "pharmacy_type": "ЧА",
      "assistant_pharmacist": null,
      "nhif_contract": "Y",
      "is_active": "Y"}
  ]
}

```

Where:

pharmacy_id - SETSA identification,

permit_no - BDA authorization No.,

permit_date - BDA authorization date,
pharmacy_name - Company name,
address - Seat,
management_address - Registered office,
manager - Manager,
pharma_city - Address of pharmacy - city,
pharma_address - Address of pharmacy,
activities - Activities,
pharmacy_type - Pharmacy type,
assistant_pharmacist - deputy pharmacist,
nhif_contract - existence of a contract with the National Health Insurance Fund,
is_active - is the pharmacy active

3.3.2 Search of a pharmacy per authorization number

Service endpoint:

https://sespa.mh.government.bg/api/info/pharma/{permit_no}

Method: GET

Content-type: application/json

where {permit_no} is the BDA authorization number, for which information is being searched:

Example:

<https://sespa.mh.government.bg/sesp/api/info/pharma/АП-200>

Result:

```
{
  "items": [
    {
      "pharmacy_id": 5315,
      "permit_no": "АП-200",
      "permit_date": "2012-07-25T21:00:00Z",
      "pharmacy_name": "\"ФАРМАЦИЯ 2012\" ЕООД",
      "address": "гр. Ихтиман 2050",
      "management_address": "ул. \"Цар Освободител\" № 103",
      "manager": "Румяна Василева Николова",
      "pharma_city": "гр. Исперих",
      "pharma_address": "ул. \"Христо Ясенов\" № 2 б",
      "activities": "търговия на дребно с лекарствени продукти, с изключение на
      приготвяни по магистрална и фармакопейна рецептура",
      "pharmacy_type": "ЧА",
      "assistant_pharmacist": null,
      "nhif_contract": "Y",
      "is_active": null
    }
  ],
  "first": {
    "$ref": "http://sespa.mh.government.bg/sespa/api/info/pharma/%D0%90%D0%9F-200"
  }
}
```

3.4 Medicinal Product Wholesale Distributors

The Medicinal Product Wholesale Distributors Authorization Holders, who have received an authorization by BDA and are entered in a register of the Medicinal Product Wholesale Distributors are available with the RESTful web service for inquiries and references.

3.4.1 List of all Wholesale Distributors in the BDA registry

Service endpoint:

<https://sespa.mh.government.bg/sespa/api/info/wholesalers/>

Method: GET

Content-type: application/json

Result:

```
{
  "items": [
    {
      "wholesaler_id": 100,
      "permit_no": "IV-P-T-EU-037",
      "permit_date": "2013-04-14T21:00:00Z",
      "wholesaler_name": "\u041d\u0414\u041a \u0422\u0420\u0415\u0419\u0414\u0418\u041d\u0413\u0410 \u0415\u041e\u041e\u0414",
      "wholesaler_address": "\u0413\u0440. \u041c\u0430\u043d\u0430\u0441\u0442\u0438\u0440\u0441\u043a\u0438 \u043b\u0438\u0432\u0430\u0434\u0438-\u0437\u0430\u043f\u0430\u0434\u0410 \u0411\u0443\u043b. \u0414\u0443\u043d\u0430\u0432 \u2116 49",
      "warehouse_address": "\u0413\u0440. \u041c\u0430\u043d\u0430\u0441\u0442\u0438\u0440\u0441\u043a\u0438 \u043b\u0438\u0432\u0430\u0434\u0438-\u0437\u0430\u043f\u0430\u0434\u0410 \u0411\u0443\u043b. \u0414\u0443\u043d\u0430\u0432 \u2116 49",
      "postcode": 6300,
      "responsible": "\u041f\u0440\u0435\u0441\u043b\u0430\u0432\u0430 \u0411\u043e\u0440\u0435\u0432\u0430 \u0414\u044f\u043a\u043e\u0432\u0430",
      "warehouse_manager": "-",
      "narcotic_substances": "Y",
      "radiopharmaceuticals": "Y",
      "immunological": "Y",
      "valid_to": null,
      "deletion_reason": null,
      "legal_notes": "-",
      "active": "Y"
    },
    {
      "wholesaler_id": 101,
      "permit_no": "IV-P-T-EU-S-038-1",
      "permit_date": "2017-02-27T22:00:00Z",
      "wholesaler_name": "\u0410\u041b\u0412\u041e\u0413\u0415\u041d \u0424\u0410\u0420\u041c\u0410 \u0411\u042c\u041b\u0413\u0410\u0420\u0418\u041d\u0418\u0418 \u0415\u041e\u041e\u0414",
      "wholesaler_address": "\u0413\u0440. \u0421\u043e\u0444\u0438\u044f 1680, \u0440\u0430\u0439\u043e\u043d \u0412\u0438\u0442\u043e\u0448\u0430, \u0436. \u043a. \u041c\u0430\u043d\u0430\u0441\u0442\u0438\u0440\u0441\u043a\u0438 \u043b\u0438\u0432\u0430\u0434\u0438-\u0437\u0430\u043f\u0430\u0434\u0410 \u0411\u0443\u043b. \u0414\u0443\u043d\u0430\u0432 \u2116 49",
      "warehouse_address": "\u0413\u0440. \u0421\u043e\u0444\u0438\u044f 1220, \u0440\u0430\u0439\u043e\u043d \u0421\u0435\u0440\u0434\u0438\u043a\u0430, \u0443\u043b. \u041f\u044a\u0440\u0432\u0430 \u0411\u044a\u043b\u0433\u0430\u0440\u0441\u043a\u0430 \u0430\u0440\u043c\u0438\u044f \u2116 18",
      "postcode": 1220,
      "responsible": "\u0414\u0438\u043b\u044f\u043d\u0430 \u0413\u0435\u043e\u0440\u0433\u0438\u0435\u0432\u0430 \u041f\u043e\u0434\u043e\u043b\u0435\u0448\u0435\u0432\u0430",
      "warehouse_manager": "-",
      "narcotic_substances": "Y",
      "radiopharmaceuticals": "Y",
      "immunological": "Y",
      "valid_to": null,
      "deletion_reason": null,
      "legal_notes": "-",
      "active": "Y"
    },
    .....
  ],
}
```

```
}
```

3.4.2 Search of a wholesale distributor per authorization number

Service endpoint:

<https://sespa.mh.government.bg/sespa/api/info/wholesalers/{permit-no}>

Method: GET**Content-type:** application/json

Where {permit-no} is the number of the authorization issued by BDA.

Example:

<https://sespa.mh.government.bg/sespa/api/info/wholesalers/IV-P-T021>

Result:

```
{
  "items": [
    {
      "wholesaler_id": 101,
      "permit_no": "IV-P-T-EU-S-038-1",
      "permit_date": "2017-02-27T22:00:00Z",
      "wholesaler_name": "\"АЛВОГЕН ФАРМА БЪЛГАРИЯ\" ЕООД",
      "wholesaler_address": "гр. София 1680, район Витоша, ж.к. \"Манастирски ливади-зопод\"бул. \"България\" № 86, ет. 1",
      "warehouse_address": "гр. София 1220, район Сердика, ул.\"Първа Българска армия\" № 18; тел 02/441 71 36,0888 70 90 06, факс02/444 71 39 ",
      "eik": "201035481",
      "postcode": 1220,
      "responsible": "Диляна Георгиева Подолешева ",
      "warehouse_manager": "-",
      "narcotic_substances": null,
      "radiopharmaceuticals": null,
      "immunological": "Y",
      "valid_to": null,
      "deletion_reason": null,
      "legal_notes": "-",
      "active": "Y"
    }
  ],
  "first": {"$ref": "http://isr.mh.government.bg/test/ial\_ses/ial/sespa/wholesalers/IV-%D0%A0-%D0%A2-EU-S-038-1"
}
}
```

Where:

wholesaler_id - SETSA identification;

permit_no - No. of wholesale distribution authorization with MP from BDA;

permit_date - Date of wholesale distribution authorization with MP;

wholesaler_name - Name of the entity, which has received the authorization;

wholesaler_address - Seat and registered office, which has received the authorization;

warehouse_address - Address of the premise/s for storage of MP;

eik - Uniform identification code;

postcode - ZIP code of the premise for storage of MP, which is used as identification of the warehouse;

responsible - Name of accountable Master of Pharmacy;

warehouse_manager - Name of head of warehouse;

narcotic_substances - flag regarding working with medicinal products, containing narcotic substances;

radiopharmaceuticals - flag regarding working with medicinal products, containing Radiopharmaceuticals;

immunological - flag regarding working with medicinal products, containing immunologic MP and MP obtained from human blood and plasma;

valid_to - Date of deleting the authorization from the register;

deletion_reason - reason for deleting the authorization from the register;

legal_notes - Remarks on the registered circumstances;

active - Is the authorization active;

3.5 Medical treatment facilities for outpatient care

According to article 207, paragraph 1, item 5a, letter "A" of LMPHM, the holders of medicinal products wholesale distribution authorization supply medical establishments with medicinal products for their own needs.

The service provides information about the medical treatment facilities for outpatient care available in SETSA, which can be indicated as recipients. The service only includes the medical treatment facilities for outpatient care because the medical treatment facilities for in-patient care receive medicinal products through their hospital pharmacy, which has been entered in the pharmacies registry.

Service endpoint:

<https://sespa.mh.government.bg/sespa/api/info/lz/>

Method: GET

Content-type: application/json

Result:

```
{
  "items": [
    {
      "lz_id": 777,
      "eik": "101163040",
      "lz_name": "ЕТ \"Д-Р РАЙНИЧКА ВЛАДИМИРОВА-ДОБРО-ДЕНТ-ИПП ДЕНТАЛНА П\"",
      "address": "УЛ.\"ВАСИЛ АПРИЛОВ\" № 7",
      "ekatte_code": 4279,
      "lz_code": "0103112015",
      "lz_type": 112
    }
  ]
}
```

```

    },
    {
      "lz_id": 778,
      "eik": "101163503",
      "lz_name": "ЕТ\Д-Р МАРГАРИТА ДАНЕВА-СТОЯНОВА-ИППМП-ЛЕКАР ПО ДЕНТ.МЕД",
      "address": "Т.АЛЕКСАНДРОВ № 15 А",
      "ekatte_code": 2676,
      "lz_code": "0101112001",
      "lz_type": 112
    },
    {
      "lz_id": 779,
      "eik": "202367698",
      "lz_name": "\"ДОКТОР ВАСИЛКА ЧАПКЪНОВА-ИНДИВИДУАЛНА ПРАКТИКА ЗА ПЪРВИЧНА
ДЕНТАЛНА ПОМОЩ\ЕООД",
      "address": "\"БЪЛГАРИЯ\" №37",
      "ekatte_code": 56126,
      "lz_code": "0133112004",
      "lz_type": null
    },
    .....
  }

```

where:

- lz_id** - identification in SETSA,
- eik** – UIC of the medical facility,
- lz_name** - name of the medical facility,
- address** - address of the medical facility,
- ekatte_code** – code of the settlement under EKATTE,
- lz_code** - registration number of medical establishment (from the RHI),
- lz_type** – Type of the medical facility.

3.6 Schools of Higher Education

According to article 207, paragraph 1, item 5a, letter “b of LMPHM, the holders of medicinal products wholesale distribution authorization supply with medicinal products schools of higher education, which provide treatment activity according to article 2a of the Medical Facilities Act for their own needs. The service provides information about the schools of higher education, available in SETSA, which can be indicated as recipients.

Service endpoint:

<https://sespa.mh.government.bg/sespa/api/info/universities/>

Method: GET

Content-type: application/json

Result:

```
{
```

```
"items": [  
  {  
    "university_id": 2,  
    "eik": "114540185",  
    "uni_name": "Медицински университет - Плевен",  
    "city": "Плевен",  
    "address": "ул. \"Св. Климент Охридски\" №1"  
  },  
  {  
    "university_id": 3,  
    "eik": "000455471",  
    "uni_name": "Медицински университет - Пловдив",  
    "city": "Пловдив",  
    "address": "бул. Васил Априлов 15 А"  
  },  
  {  
    "university_id": 4,  
    "eik": "831385737",  
    "uni_name": "Медицински университет - София",  
    "city": "София",  
    "address": "бул. Акад. Ив. Гешов № 15"  
  },  
  .....  
}
```

Whereas,

university_id – SETSA identification;

eik – uniform identification code;

uni_name – name of the school of higher education;

city – settlement of the school of higher education;

address – address of the school of higher education.

3.7 Health offices

According to article 207, paragraph 1, item 5a, letter “c” of LMPHM, the holders of medicinal products wholesale distribution authorization supply with medicinal products the institutions for their own needs, set forth in article 26, paragraph 1, item 1 and 3 of the Health Act for the health offices, established therein. The service provides information about the health offices available in SETSA, which can be indicated as recipients.

Service endpoint:

<https://sespa.mh.government.bg/sespa/api/info/zk/>

Method: GET

Content-type: application/json

Result:

```
{  
  "items": [  
    {
```

```

        "health_office_id": 593,
        "district_code": "02",
        "reg_no": "0244009247",
        "reg_date": "2017-11-01T22:00:00Z",
        "ho_name": "Здравен кабинет към ОУ \"Александър Георгиев - Коджакафалията\"",
        "address": "Бургас, ул.\"Юрий Венелин\" №2",
        "municipality": "Бургас",
        "activities": "профилактика и промоция на здравето на учениците;",
        "responsible_person": "Основно училище \"Александър Георгиев - Коджакафалията\"",
        "legal_data": "Булстат 177136576",
        "management_address": "Бургас, ул.\"Юрий Венелин\" №2",
        "management_municipality": "Бургас",
        "eik": null,
        "firm_name": null
    },
    {
        "health_office_id": 594,
        "district_code": "02",
        "reg_no": "0244009262",
        "reg_date": "2017-11-23T22:00:00Z",
        "ho_name": "Здравен кабинет в детска градина",
        "address": "Приморско, ул.\"Славянска\" №2",
        "municipality": "Приморско",
        "activities": "провеждане на профилактични и противоепидемични дейности, оказване
на долекарска помощ при спешни състояния",
        "responsible_person": "Целодневна детска градина",
        "legal_data": "Булстат 000048381",
        "management_address": "Приморско, ул.\"Славянска\" №2",
        "management_municipality": "Приморско",
        "eik": null,
        "firm_name": null
    },
    .....
}

```

Whereas,

health_office_id – SETSA identification,
district_code - district code,
reg_no – registration number in the RHI,
reg_date – registration date,
ho_name – description of the unit,
address – address of the unit,
municipality - municipality
activities – registered activities
responsible_person - accountable person,
legal_data - ,
management_address - registered office,
management_municipality - managing municipality,

eik - Uniform Identification Code,

firm_name - company name.

3.8 Physicians and dentists, who have the right to keep medicinal products in settlements without a pharmacy

According to article 207, paragraph 1, item 6 of the LMPHM, the holders of medicinal products wholesale distribution authorization supply with medicinal products physicians and dentists when the settlement does not have a pharmacy, under terms and conditions, determined in an ordinance by the Minister of Health

The service provides information about the physicians and dentists, available in SETSA, which have the right to store medicinal products, which can be indicated as recipients. These physicians and dentists have authorizations issued by the RHI for storage of MP in settlements where no pharmacy is available.

Service endpoint:

<https://sespa.mh.government.bg/sespa/api/info/phident/>

Method: GET

Content-type: application/json

Result:

Returns data in the following manner:

```
{
  "items": [
    {
      "pd_id": 2,
      "district_code": "01",
      "permit_no": "1",
      "responsible_person": "Д-р Стефан Стоянов Веселински",
      "health_establishment": "Д-р Ст. Веселински – Индивидуална практика за първична медицинска помощ" E00Д",
      "town": "с. Церово, общ. Благоевград",
      "address": "Кметство",
      "reg_no": "0103111066"
    },
    {
      "pd_id": 3,
      "district_code": "01",
      "permit_no": "№1/ 21.07.2016",
      "responsible_person": "Д-р Райна Иванова Механджиева",
      "health_establishment": "\"Д-р Райна Механджиева – Амбулатория за индивидуална практика за първична медицинска помощ\" E00Д",
      "town": "с. Рибново, общ. Гърмен",
      "address": "Селска здравна служба",
      "reg_no": "0111111031"
    },
    .....
  ]
}
```

where:

pd_id - identification in SETSA,
district_code - district code,
permit_no - Number of RHI authorization,
responsible_person - Person safekeeping the medicinal products,
health_establishment - name of the medical facility,
town - settlement,
address – address of the practice,
reg_no - registration number of medical establishment (from RHI).

3.9 Excerpt of a list for medicinal products with established shortage

List of medicinal products included in the Positive Drug List, for which shortage has been found in the territory of the Republic of Bulgaria, shall be available as a RESTful web service.

Service endpoint:

<https://sespa.mh.government.bg/sespa/api/info/shortagelist/>

Method: GET

Content-type: application/json

Result:

```
{
  "items": [
    {
      "drug_name": "Humira",
      "inn": "Adalimumab",
      "active_substance": "40 mg/0.4 ml",
      "drug_form": "Solution for injection",
      "number_in_package": "2 pre-filled syringes + 2 alcohol pads",
      "valid_from": "2019-04-21T21:00:00Z"
    },
    {
      "drug_name": "Humira",
      "inn": "Adalimumab",
      "active_substance": "20 mg/0.2 ml",
      "drug_form": "Solution for injection",
      "number_in_package": "2 prefilled syringes + 2 alcohol pads",
      "valid_from": "2019-04-21T21:00:00Z"
    }
  ],
  "first": {
    "$ref": "http://sespa.mh.government.bg/sespa/api/info/shortagelist/"
  }
}
```

Where:

drug_name – Name of the medicinal product;

inn – International Non-Patent Name;

active_substance - active ingredient;

drug_form – formulation;

number_in_package – number per package;

valid_from – date of inclusion in the list.

3.10 Medical treatment facilities for inpatient care

The web service provides information for all medical treatment facilities for inpatient care, available in SETSA.

Service endpoint:

<https://sespa.mh.government.bg/sespa/api/info/hospitals/>

Method: GET

Content-type: application/json

Result:

```
{
  "items": [
    {
      "hosp_id": 188,
      "eik": "147138653",
      "hospital_code": "0204211024",
      "hospital_type": "МБАЛ",
      "hospital_name": "\"Многопрофилна болница за активно лечение - Лайф Хоспитал\" ЕООД, гр. Бургас",
      "permit_no": "МБ-331",
      "permit_date": "2017-06-04T21:00:00Z",
      "district": "02",
      "municipality": "04",
      "city": "07079",
      "adress": "гр. Бургас, ж.к. \"Изгрев\", бул. \"Димитър Димов\" / Панорамен път/ и гр. Св. Влас, община Несебър, ул. \"Ивайло\" 11А"
    },
    {
      "hosp_id": 189,
      "eik": "147098760",
      "hospital_code": "0204212025",
      "hospital_type": "СБАЛ",
      "hospital_name": "\"Специализирана очна болница за активно лечение - Бургас\" ООД, гр. Бургас",
      "permit_no": "СБ-340",
      "permit_date": "2016-09-07T21:00:00Z",
      "district": "02",

```

```
        "municipality": "04",
        "city": "07079",
        "address": "гр. Бургас, Ж.К. \"П. Р. Славейков\", ул. \"Георги Минков\" № 174 (
до спортна зала \"Младост\")"
    },
    .....
  ],
  "first": {"$ref": "http://sespa.mh.government.bg/sespa/api/info/hospitals/"
}, "next": {"$ref": "http://sespa.mh.government.bg/sespa/api/info/hospitals/?page=1"}
```

Where:

hosp_id – identification of the medical facility in SETSA;

eik – UIC of the medical facility,

hospital_code – code of the medical facility, issued in the registration of the RHI (RHC);

hospital_type – type of the medical facility;

hospital_name – name of the medical facility;

permit_no – number of the authorization of the medical facility;

permit_date – date of the authorization of the medical facility;

district - area code of the area where the medical facility is situated;

municipality - code of the municipality of the medical facility;

city - code of the settlement under EKATTE;

address – address of the medical facility.

4 Submission of data to SETSA

4.1 Single submission of data for completed deliveries without authentication

The single submission of data for performed deliveries shall be performed through submission of data for the provided particular transaction on the level of docket number of medicinal products.

The submission of data shall be performed with a RESTful web service, which is designated to receive data from the obligated entities in the form of single transaction.

Service endpoint:

<https://sespa.mh.government.bg/sespa/api/data/trn/>

Method: POST

Content-type: application/json; charset=utf-8

Parameters:

p_actor_reg_no (string) => Registration number of the participant in SETSA. This is a code containing 32 symbols, which is generated at the time of the subject registration. It shall be generated and sent by e-mail after successful registration. It is required for simple identification when submitting data;

p_report_date (timestamp) => Date and time of performance of the transaction;

p_drug_code (integer) => Code of MP from NCPRMP;

p_quantity (number) => Quantity of the medicinal product in packages. Allows submission of fractional numbers;

p_trn_type (integer) => Type of transaction, for example "Delivery of MP to a pharmacy", an integer. A mandatory field. The values are according to nomenclature, please refer to transaction types and the description of transactions in article 2 Principle for using the transactions in SETSA;

p_recipient_code (string) => Recipient code, BDA authorization, or RHI registration number;

p_available_qty (number) => Available quantity, remaining in storage after the delivery. Allows submission of fractional numbers;

notes (string) => Remarks and comments to the transaction;

p_drug_product_code (string) => Product code of MP on GTIN (analogical to the one from verification), if it exists;

p_country (string) => country code in case of export or import. Mandatory field in case of transactions related to planned or completed export. The country codes under ISO 3166-1 are completed, and if there is more than one country, they are divided with a semicolon.

p_batch_no (string) => docket number of the medicinal product;

export_planned_date (date) => date of planned export. Mandatory field in case of submission of data for transactions with planned export;

p_actor_trn_no (string) => number of an internal system transaction. Designated to ensure compliance with the transactions between SETSA and the system of the data submitting entity.

p_postcode (number) => a ZIP code of the warehouse of the wholesale distributor, where the medicinal products are delivered or where they are received;

p_rcpt_postcode – ZIP code of the receiving warehouse.

It shall be indicated in the header of the application

Content-Type application/json

The parameters shall be placed inside the body of the json format, for example:

```
{
  "p_actor_reg_no": "37D991EBA14166B9659284D5802616C0",
  "p_report_date": "2019-04-19T14:47:00Z",
  "p_drug_code": 2546,
  "p_quantity": 5,
  "p_trn_type": 2,
  "p_recipient_code": "IV-P-T-EU-S-022-6",
  "p_available_qty": 0,
  "notes": "НЯКАКЪВ КОМЕНТАР",
  "p_drug_product_code": "05026598234578",
  "p_country": "GB",
  "p_batch_no": 805515,
  "export_planned_date": "2019-12-28T00:00:00Z",
  "p_postcode": 1407
}
```

Response from SETSA:

The successful completion is confirmed with a status code 201 Created.

The transaction number is returned in json format:

```
{
  "TRANSACTION_ID": 72
}
```

Note: User and password parameters shall be added for additional security of service.

4.1.1.1 Possible values for recipient (p_recipient_code)

When data is submitted, the interface expects to send a recipient code. It shall be as follows:

For wholesale distributors – UIC or No. of authorization from BDA;

For pharmacies and pharmacies of medical facilities – number of the BDA authorization;

For medical establishments, respectively physicians and dentists – registration number of the practice from RHI;

For health offices – RHI registration number;

For ship owners – UIC;

For schools of higher education – UIC;

In case of a single submission of data, it shall not be necessary to submit a recipient code in the following cases:

- delivery in the country - "the recipient" is a warehouse
- sale/granting of MP - recipients are citizens/patients
- completed export - "the recipient" is abroad
- planned export - "the recipient" is abroad
- blocking - "the recipient" is a warehouse
- Delivery to State Agency "State Reserve"
- delivery to the Ministry of Education
- Delivery to the Ministry of Interior
- Delivery to the Ministry of Health
- Return to a manufacturer abroad

These are the transactions 1, 4, 5, 10, 13, 25, 26, 28, 29, 30, 31, 36, 37. In this case SETSA automatically designates the recipient and records the recipient in the transaction.

4.1.2 Verification of the input data in case of single submission of data

In case of single data submission, a verification shall be made at the time of submission and in case an error is found, it shall return immediately.

The verifications which shall be performed are as follows:

4.1.2.1 Verification for a registered participant

In case the submitted registration number of the participant in SETSA, the following error shall be returned `'Wrong registration number!'`;

This means that the registration number has not been found among the registered participants.

4.1.2.2 Verification of the transaction data

The date of the report shall be verified to not be a future date or a date earlier than 365 days prior to the report submission date.

In case the condition is not fulfilled, the following error shall be returned `'The date deviates from the permitted date!'`.

4.1.2.3 Verification of a Medicinal Product

In case the submitted code of the medicinal product has not been found in PDL, or it is no longer active, the following error shall be returned `'Wrong drug code or drug is not active!'`;

4.1.2.4 Verification of transaction data

The different types of registrations have various types of associated transactions, which could be submitted to SETSA. The submitted transaction numbers shall be compliant with the type of the participant. In case the submitted transaction number is not consistent with the participant type, the following error shall be returned `'Wrong transaction type provided!'`;

4.1.2.5 Verification of the submitted quantity

The submitted values for the quantities of the transaction and the available quantity shall be verified for having positive values.

Note: The concept of this is that there is a special type of transaction, which shall have the meaning of a negative quantity.

Furthermore, the quantity, subject to the transaction, shall be inspected to not be zero.

In case of inconsistency, the following error shall be returned 'Wrong quantity provided!';

4.1.2.6 Recipient verification

In case the SETSA recipient cannot be found, the following error shall be returned 'Wrong recipient provided!';

The recipient verification shall be performed depending on the transaction type. The existence of a registered recipient on the provided permit number from BDA, on UIC, or a RHI number.

In case this is a wholesale distributor, the ZIP code shall also be searched for. SETSA shall determine the recipient by the submitted UIC or BDA authorization number and the warehouse ZIP code.

4.1.2.7 Verification for submitted ZIP code of recipient

Verification for identification of a particular wholesale distributor warehouse – the submission of a ZIP code as a characteristic of the recipient or supplier is verified.

In the cases where the transactions are related to a delivery or receipt by a retailer, the existence of a ZIP code from the warehouse where the delivery comes from shall be inspected.

In case the SETSA recipient cannot be found, the following error shall be returned 'Postcode not provided!';

4.1.2.8 Verification of the ZIP code of the receiving warehouse. (p_rcpt_postcode)

Verification for identification of a particular warehouse of a wholesale distributor, recipient of medicinal products, for example under transactions 16 and 33 – verification of the existence of the ZIP code as a characteristic of the recipient of MP.

The following error is returned 'Recipient postcode not provided, or recipient postcode is not correct!';

4.1.2.9 Verification for order/act number (p_notes)

Verification for Order/Deed of Findings/Document number for transactions 25, 26 and 37.

The following error is returned 'Respective act not provided or act is too short in parameter notes!'

4.1.2.10 Other errors

In case of other errors, the respective error from the database shall be returned, accompanied by status code 400 Bad Request.

4.1.3 Receipt of registered transaction information

RESTful web service, which is designated to show data for a particular transaction.

Service endpoint:

https://sespa.mh.government.bg/sespa/api/data/trn/{transaction_no}

Method: GET

Content-type: application/json; charset=utf-8

Parameters: accepts the transaction number as a parameter

where {transaction_no} is the number of the transaction with required information:

Example: <https://sespa.mh.government.bg/sespa/api/data/trn/250>

Result: Returns result for the particular transaction as follows:

```
{
  "transaction_no": 250,
  "transaction_type": 3,
  "report_date": "2019-09-25T14:24:27Z",
  "created_on": "2019-09-26T14:26:49Z",
  "reversed": "0"
}
```

4.2 Single submission of data for completed deliveries with authentication

The service is analogical to the service for single submission of data, detailed in the previous article, with the difference that it is protected and a token, username, and password, obtained during the authentication registration, needs to be submitted.

Service endpoint:

<https://sespa.mh.government.bg/sespa/api/data/trns/>

Method: POST

Content-type: application/json; charset=utf-8

Parameters:

Other than the parameters, detailed in the previous article, the service requires submission of a username and password, obtained during registration, as follows:

p_username (string) – username for SETSA, obtained during registration;

p_password (string) – password, associated with the username.

It shall be indicated in the header of the application

Content-Type application/json

An access token (bearer token) shall also be submitted in the header. The receipt of a token has been detailed in article 7 Receiving access token to the SETSA web services.

The parameters shall be placed inside the body text of the application in json format,

Example:

```
{
  "p_username": "IS_DE12EE39",
  "p_password": "AGAPGB9b",
  "p_actor_reg_no": "DE12EE39AD9A0B468AE96D3D066D1678",
  "p_report_date": "2020-01-30T00:00:00Z",
  "p_drug_code": 2546,
  "p_quantity": 5,
  "p_trn_type": 1,
  "p_recipient_code": "101010101",
  "p_postcode": 1336,
  "p_available_qty": 0,
  "notes": "НЯКАКЪВ КОМЕНТАР",
  "p_batch_no": "8080"
}
```

4.2.1 Verification of the input data in case of single submission of data

In case of single data submission, a verification shall be made at the time of submission and in case an error is found, it shall return immediately.

The verifications which shall be performed are as follows:

4.2.1.1 Registered participant verification

In case the submitted registration number of the participant in SETSA, the following error shall be returned 'Wrong registration number!';

This means that the registration number has not been found among the registered participants.

4.2.1.2 Verification for a valid user and password

The verification compares the value of the hash function of the submitted username and password, together with the registration number, to the ones stored in SETSA, and return the following error in case of mismatch 401 Unauthorized.

4.2.1.3 Verification of the transaction data

The date of the report shall be verified to not be a future date or a date earlier than 365 days prior to the report submission date.

In case the condition is not fulfilled, the following error shall be returned 'The date deviates from the permitted date!'.

4.2.1.4 Verification of a Medicinal Product

In case the submitted code of the medicinal product has not been found in PDL, or it is no longer active, the following error shall be returned 'Wrong drug code or drug is not active!';

4.2.1.5 Verification of transaction data

The different types of registrations have various types of associated transactions, which could be submitted to SETSA. The submitted transaction numbers shall be compliant with the type of the participant. In case the submitted transaction number is not consistent with the participant type, the following error shall be returned 'Wrong transaction type provided!';

4.2.1.6 Verification of the submitted quantity

The submitted values for the quantities of the transaction and the available quantity shall be verified for having positive values.

Note: The concept of this is that there is a special type of transaction, which shall have the meaning of a negative quantity.

Furthermore, the quantity, subject to the transaction, shall be inspected to not be zero.

In case of inconsistency, the following error shall be returned 'Wrong quantity provided!';

4.2.1.7 Recipient verification

In case the SETSA recipient cannot be found, the following error shall be returned 'Wrong recipient provided!';

The recipient verification shall be completed, depending on the transaction type. The existence of a registered recipient on the provided permit number from BDA is based on UIC or a RHI number.

In case this is a wholesale distributor, the ZIP code shall also be searched for. SETSA shall determine the recipient by the submitted UIC or BDA authorization number and the warehouse ZIP code.

4.2.1.8 *Verification for submitted ZIP code of recipient*

Verification for identification of a particular wholesale distributor warehouse – the submission of a ZIP code as a characteristic of the recipient or supplier is verified.

In the cases where the transactions are related to a delivery or receipt by a retailer, the existence of a ZIP code from the warehouse where the delivery comes from shall be inspected.

In case the SETSA recipient cannot be found, the following error shall be returned 'Postcode not provided!';

4.2.1.9 *Verification of the ZIP code of the receiving warehouse. (p_rcpt_postcode)*

Verification for identification of a particular warehouse of a wholesale distributor, recipient of medicinal products, for example under transactions 16 and 33 – verification of the existence of the ZIP code as a characteristic of the recipient of MP.

The following error is returned 'Recipient postcode not provided, or recipient postcode is not correct!';

4.2.1.10 *Verification for order/act number (p_notes)*

Verification for Order/Deed of Findings/Document number for transactions 25, 26 and 37.

The following error is returned 'Respective act not provided or act is too short in parameter notes!'

4.2.1.11 *Other errors*

In case of other errors, the respective error from the database shall be returned, accompanied by status code 400 Bad Request.

4.2.2 *Receipt of registered transaction information*

RESTful web service, which is designated to show data for a particular transaction.

Service endpoint:

https://sespa.mh.government.bg/sespa/api/data/trns/{transaction_no}

Method: GET

Content-type: application/json; charset=utf-8

Parameters: accepts the transaction number as a parameter

where {transaction_no} is the number of the transaction with required information:

Example: <https://sespa.mh.government.bg/sespa/api/data/trns/250>

Result: Returns result for the particular transaction as follows:

```
{
  "transaction_no": 250,
  "transaction_type": 3,
  "report_date": "2019-09-25T14:24:27Z",
  "created_on": "2019-09-26T14:26:49Z",
  "reversed": "0"
}
```

4.3 Package submission of data with inserted json without authentication

The package submission of data represents submission of groups (packages) of single transaction at the same time.

The submission of data shall be performed with a RESTful web service, which is designated to receive data from the obligated entities in packages consisting of multiple transactions.

4.3.1 Data submission

The header of the application shall indicate Content-Type shall be application/json. The parameters shall be placed inside the body text of the application in json format.

Service endpoint:

<https://sespa.mh.government.bg/sespa/api/data/batchtrn/>

Method: POST

Content-type: application/json

Application body:

The application body shall be submitted in JSON format and shall consist of a header and part with description of the transactions. The header contains identification data for the package – participant registration number, report date and parameter for package verification or registration.

Example:

```
{
  "p_actor_reg_no": "0B1C9D219B5CAEA9E67C31E79EE09A0B",
  "p_report_date": "2019-11-29T23:35:56Z",
  "p_check_only": "N",
  "transactions": [
    {
      "p_drug_code": 2546,
      "p_quantity": 100,
      "p_trn_type": 2,
      "p_recipient_code": "101010101",
      "p_postcode": 1336,
      "p_available_qty": 900,
      "p_drug_product_code": "05026598234578",
      "p_batch_no": "805515",
      "p_notes": "test",
      "p_actor_trn_no": "125"
    },
    {
      "p_drug_code": 2543,
      "p_quantity": 500,
      "p_trn_type": 2,
      "p_recipient_code": "101010101",
      "p_postcode": 1336,
      "p_available_qty": 1500,
      "p_drug_product_code": "05026598239988",
      "p_batch_no": "80DD15",
      "p_actor_trn_no": "126"
    }
  ]
}
```

Parameters description:

Package header

p_actor_reg_no (string) => Registration number of the participant in SETSA. This is a code containing 32 symbols, which is generated at the time of the subject registration. It is generated and sent by e-mail after successful registration. It is required for simple identification when submitting data.

p_report_date (timestamp) => Date and time of performance of the transaction.

p_check_only (string) => A parameter which shows whether to only perform a package verification (if a "Y" value has been submitted), or whether to verify and process the package (in case this parameter is missing or in case its value is "N")

Package body

p_drug_code (number) => Code of MP from NCPMP.

p_quantity (number) => Quantity of the medicinal product in packages. Allows submission of fractional numbers;

p_trn_type (number) => Type of transaction, for example "Delivery of MP to a pharmacy", an integer. A mandatory field. The values are according to nomenclature, please refer to transaction types and the description of transactions in article 2 Principle for using the transactions in SETSA.

p_recipient_code (string) => Recipient code, BDA authorization, or RHI registration number;

p_available_qty (number) => Available quantity, remaining in storage after the delivery. Allows submission of fractional numbers;

p_notes (string) => Remarks and comments to the transaction;

p_drug_product_code (string) => Product code of MP on GTIN (analogical to the one from verification), if it exists;

p_country (string) => country code in case of export or import. Mandatory field in case of transactions related to planned or completed export. The country codes under ISO 3166-1 are completed, and if there is more than one country, they are divided with a semicolon;

p_batch_no (string) => docket number of the medicinal product;

p_export_planned_date (date) => date of planned export. Mandatory field in case of submission of data for transactions with planned export;

p_actor_trn_no (string) => number of an internal system transaction. Designated to ensure compliance with the transactions between SETSA and the system of the data submitting entity.

p_postcode (number) => the ZIP code of the warehouse of the wholesale distributor, where the medicinal products are delivered or where they are received.

Note:

1. The package submission of data allows the combination of different transactions, different medicinal products, and various recipients.
2. In case of a package submission of data, it shall not be necessary to submit a recipient code in the following cases:

- delivery in the country - "the recipient" is a warehouse
- sale/granting of MP - recipients are citizens/patients
- completed export - "the recipient" is abroad
- planned export - "the recipient" is abroad
- blocking - "the recipient" is a warehouse
- Delivery to State Agency "State Reserve"
- delivery to the Ministry of Education
- Delivery to the Ministry of Interior
- Delivery to the Ministry of Health
- Return to a manufacturer abroad

These are the transactions 1, 4, 5, 10, 13, 25, 26, 28, 29, 30, 31, 36, 37. In this case SETSA automatically designates the recipient and records the recipient in the transaction.

After data submission, the inspections detailed in article 4.3.2 Verifications of input data in case of package submission **Error! Reference source not found.** shall be performed and the following information shall be returned synchronously:

```
{
  "package_errors": 0,
  "package_no": 2350,
  "transactions_count": 2,
  "transactions_with_errors": 0
}
```

Whereas

"package_no" is the package number in SETSA;

"package_errors" shall be the total number of errors in the package, the sum for all transactions;

"transactions_count" is the number of transactions in the package;

"transactions_with_errors" is the number of transactions, where an error has been found.

The package shall be loaded in a temporary area, where the verifications are performed and all transactions containing an error shall be marked and the transactions not containing an error shall be registered in SETSA, and in case a parameter "p_check_only":"Y" has been submitted, the registration shall be omitted and processing information shall be returned.

The errors on a package level are immediately visible, while the errors on transactions level are visible after requesting the service with a GET request and they can be found in the column "status" and "error_status".

4.3.2 Verifications of input data in case of package submission

After the submission and the successful receipt of the package in SETSA, the following logical verifications shall be performed:

4.3.2.1 On a package level

1. p_actor_reg_no - Verification of existence of this registration. Returns the error 'Wrong registration number!'

2. p_report_date - Date verification - to not be a future date and not be 7 days in the past. Returns the error 'Date different from permitted dates!'

4.3.2.2 On a transaction level

After package submission, each transaction in the package shall be subject to the following verifications:

1. p_drug_code - Verification of existence of code in PDL and active code at the time of submission. This error has an error code 1;
2. p_quantity - Verification of submitted quantity - it shall not be null, negative or zero. This error has an error code 2;
3. p_trn_type - Transaction verification - is it permitted for this submitting entity type. This error has an error code 4;
4. p_recipient_code - Verification of the existence of the recipient code. This error has an error code 8;
5. p_available_qty - Inspection for the available quantity not being less than zero. This error has an error code 16;
6. p_batch_no - verification if empty. This error has an error code 32;
7. p_country - verification if empty in case the transaction is 5 or 10. This error has an error code 64;
8. p_export_planned_date – Verification if empty in case the transaction is 5 or 10. This error has an error code 128;
9. p_postcode – Verification for identification of a particular wholesale distributor warehouse – the submission of a ZIP code as a characteristic of the recipient or supplier is verified. This error has an error code 256;
10. p_rcpt_postcode – – Verification for identification of a particular warehouse of a wholesale distributor, recipient of medicinal products under transactions 16 and 33 – verification of the existence of the ZIP code as a characteristic of the recipient of MP. This error has an error code 512.
11. p_notes – Verification for Order/Deed of Findings/Document number for transactions 25, 26 and 37. This error has an error code 1024.

Note: Not all errors are applicable for all transactions. Some errors do not occur for certain transactions, because they are not relevant.

4.3.3 Receiving information about the processing

The transactions submitted in a single package can be seen with a GET order, as detailed herein below.

Service endpoint:

<https://sespa.mh.government.bg/sespa/api/data/batchtrn/>

Method: GET

Content-type: application/json

Parameters: "p_package_no", "p_actor_reg_no"

Example:

https://sespa.mh.government.bg/sespa/api/data/batchtrn/?p_package_no=16746&p_actor_reg_no=DE12EE39AD9A0B468AE96D3D066D1678

Result:

The service returns json, which contains all submitted transactions in the package, which looks as follows:

```
{
  "items": [
    {
      "p_actor_reg_no": "DE12EE39AD9A0B468AE96D3D066D1678",
      "p_package_no": 16746,
      "p_package_item_no": 429392,
      "p_drug_code": 2546,
      "p_quantity": 100,
      "p_trn_type": 5,
      "p_recipient_code": null,
      "p_postcode": null,
      "p_available_qty": 350,
      "p_drug_product_code": "01234567890123",
      "p_country": "DE",
      "p_batch_no": "855884",
      "trn_id": 26793,
      "p_notes": null,
      "p_export_planned_date": null,
      "status": 0,
      "error_status": null,
      "p_actor_trn_no": null
    },
    {
      "p_actor_reg_no": "DE12EE39AD9A0B468AE96D3D066D1678",
      "p_package_no": 16746,
      "p_package_item_no": 429393,
      "p_drug_code": 2543,
      "p_quantity": 50,
      "p_trn_type": 5,
      "p_recipient_code": null,
      "p_postcode": null,
      "p_available_qty": 450,
      "p_drug_product_code": "05026598239988",
      "p_country": "DE",
      "p_batch_no": "80DD15",
      "trn_id": 26794,
      "p_notes": null,
      "p_export_planned_date": null,
      "status": 0,
      "error_status": null,
      "p_actor_trn_no": null
    }
  ],
  "first": {
    "$ref": "https://sespa.mh.government.bg/sespa/api/data/batchtrn/?p_package_no=16746&p_actor_reg_no=DE12EE39AD9A0B468AE96D3D066D1678"
  }
}
```

4.3.4 Reading errors in case of package submission of data

The data submitted shall be verified for errors after the package submission.

The errors on a transaction level shall be summed up in "status", where only a single number shall be displayed, which represents the full range of errors (sum of the error codes).

Example:

- in case of a wrong code of MP, the value of "status" shall be 1;
- In case of a wrong code of MP + wrong transaction, the value of "status" shall be 5, which is the sum of 1 and 4 (the two individual error codes);
- "status":8 shall mean a wrong or a missing recipient => "p_recipient_code":null;
- "status":28 shall mean "wrong transaction code" + "wrong or missing recipient" + "wrong available quantity";

Analogically, if all possible errors exist in the transaction, the number shall be 511. All error combinations shall be covered with a number between 1 and 511.

A transaction in which there is no error has the value "status":0.

Alternatively, the value of "error_status" shows the errors divided with a semicolon, in order to provide an easier way of reading the result.

For example

- "error_status": "8;16;" shows that the submitted transaction has a wrong or a missing recipient => "p_recipient_code": null and a wrong or missing available quantity => "p_available_qty": null;
- "error_status": null shows that there are no open errors in the line.

The value of "p_actor_trn_no": "126" shows the number of the internal system transaction, submitted with the package.

In case no parameter is submitted "p_check_only", or in case it has been submitted as "p_check_only":"N", at the end of processing, all submitted transactions, in which no errors have been found (with "status":0 and "error_status": null) shall be registered as transactions in SETSA. Respectively the value of "trn_id" shows the number of this registered transaction from the SETSA package. It is only available for the transactions, in which no errors have been found.

In case the "p_check_only":"Y" parameter has been submitted, at the end of processing, the submitted shall not be registered as transactions in СЕСПА. Respectively the value of "trn_id" in the answer shall be null.

No.	errors	value
1	MP error code	1
2	wrong quantity	2
3	Wrong transaction code	4
4	wrong or missing recipient	8
5	wrong available quantity	16
6	Docket number is missing	32
7	wrong export country	64
8	wrong date of planned export	128
9	missing warehouse ZIP code	256
10	missing receiving warehouse ZIP code (p_rcpt_postcode)	512
11	missing order/act number (p_notes)	1024

4.4 Package submission of data with inserted json with authentication

The package submission of data represents submission of groups (packages) of single transaction at the same time.

The service is analogical to the service for package submission of data, detailed in the previous article, with the difference that it is protected and a token, username, and password, obtained during the authentication registration.

4.4.1 Data submission

The submission of data shall be performed with a RESTful web service, which is designated to receive data from the obligated entities in packages consisting of multiple transactions. The service is analogical to the one in article 4.3 **Package submission of data with inserted json**, but it requires the submission of a user name and password, received during the registration. Additionally, a valid access token shall be submitted, according to article 7 Receiving access token to the SETSA web services.

Service endpoint:

<https://sespa.mh.government.bg/sespa/api/data/batchtrns/>

Method: POST

Content-type: application/json

Parameters: Other than the parameters, detailed in article 4.3 **Package submission of data with inserted json**, the service requires submission of a user name and password, obtained during registration, as follows:

p_username (string) – username for SETSA, obtained during registration;

p_password (string) – password, associated with the username.

It shall be indicated in the header of the application

Content-Type application/json

An access token (bearer token) shall also be submitted in the header. The receipt of a token has been detailed in article 7 Receiving access token to the SETSA web services.

The parameters shall be placed inside the body text of the application in json format,

Parameters description:

Package header

p_actor_reg_no (string) => Registration number of the participant in SETSA. This is a code containing 32 symbols, which is generated at the time of the subject registration. It is generated and sent by e-mail after successful registration. It is required for simple identification when submitting data.

p_report_date (timestamp) => Date and time of performance of the transaction.

p_username (string) – username for SETSA, obtained during registration;

p_password (string) – password, associated with the username.

p_check_only (string) => A parameter which shows whether to only perform a package verification (if a "Y" value has been submitted), or whether to verify and process the package (in case this parameter is missing or in case its value is "N")

Package body

p_drug_code (number) => Code of MP from NCPRMP.

p_quantity (number) => Quantity of the medicinal product in packages. Allows submission of fractional numbers;

p_trn_type (number) => Type of transaction, for example "Delivery of MP to a pharmacy", an integer. A mandatory field. The values are according to nomenclature, please refer to transaction types and the description of transactions in article 2 Principle for using the transactions in SETSA.

p_recipient_code (string) => Recipient code, BDA authorization, or RHI registration number;

p_available_qty (number) => Available quantity, remaining in storage after the delivery. Allows submission of fractional numbers;

p_notes (string) => Remarks and comments to the transaction;

p_drug_product_code (string) => Product code of MP on GTIN (analogical to the one from verification), if it exists;

p_country (string) => country code in case of export or import. Mandatory field in case of transactions related to planned or completed export. The country codes under ISO 3166-1 are completed, and if there is more than one country, they are divided with a semicolon;

p_batch_no (string) => docket number of the medicinal product;

p_export_planned_date (date) => date of planned export. Mandatory field in case of submission of data for transactions with planned export;

p_actor_trn_no (string) => number of an internal system transaction. Designated to ensure compliance with the transactions between SETSA and the system of the data submitting entity.

p_postcode (number) => the ZIP code of the warehouse of the wholesale distributor, where the medicinal products are delivered or where they are received.

Note:

3. The package submission of data allows the combination of different transactions, different medicinal products, and various recipients.
4. In case of a package submission of data, it shall not be necessary to submit a recipient code in the following cases:
 - delivery in the country - "the recipient" is a warehouse
 - sale/granting of MP - recipients are citizens/patients
 - completed export - "the recipient" is abroad
 - planned export - "the recipient" is abroad
 - blocking - "the recipient" is a warehouse
 - Delivery to State Agency "State Reserve"

- delivery to the Ministry of Education
- Delivery to the Ministry of Interior
- Delivery to the Ministry of Health
- Return to a manufacturer abroad

These are the transactions 1, 4, 5, 10, 13, 25, 26, 28, 29, 30, 31, 36, 37. In this case SETSA automatically designates the recipient and records the recipient in the transaction.

After data submission, the inspections detailed in article 4.3.2 **Verifications of input data in case of package submission** **Error! Reference source not found.** shall be performed and the following information shall be returned synchronously:

Example:

```
{
  "p_actor_reg_no": "0B1C9D219B5CAEA9E67C31E79EE09A0B",
  "p_report_date": "2019-11-29T23:35:56Z",
  "p_username": "IS_DE12EE39",
  "p_password": "AGAPGB9b",
  "p_check_only": "N",
  "transactions": [
    {
      "p_drug_code": 2546,
      "p_quantity": 100,
      "p_trn_type": 2,
      "p_recipient_code": "101010101",
      "p_postcode": 1336,
      "p_available_qty": 900,
      "p_drug_product_code": "05026598234578",
      "p_batch_no": "805515",
      "p_notes": "test",
      "p_actor_trn_no": "125"
    },
    {
      "p_drug_code": 2543,
      "p_quantity": 500,
      "p_trn_type": 2,
      "p_recipient_code": "101010101",
      "p_postcode": 1336,
      "p_available_qty": 1500,
      "p_drug_product_code": "05026598239988",
      "p_batch_no": "80DD15",
      "p_actor_trn_no": "126"
    }
  ]
}
```

Result:

After data submission, the inspections detailed in article 4.3.2 **Verifications of input data in case of package submission** **Error! Reference source not found.** shall be performed and the following information shall be returned synchronously:

```
{
  "package_errors": 0,
  "package_no": 2350,
}
```



```
"transactions_count": 2,  
"transactions_with_errors": 0  
}
```

Whereas

"package_no" is the package number in SETSA;

"package_errors" shall be the total number of errors in the package, the sum for all transactions;

"transactions_count" is the number of transactions in the package;

"transactions_with_errors" is the number of transactions, where an error has been found.

The package shall be loaded in a temporary area, where the verifications are performed and all transactions containing an error shall be marked and the transactions not containing an error shall be registered in SETSA, and in case a parameter "p_check_only":"Y" has been submitted, the registration shall be omitted and processing information shall be returned.

The errors on a package level are immediately visible, while the errors on transactions level are visible after requesting the service with a GET request and they can be found in the column "status" and "error_status".

4.4.2 Verifications of input data in case of package submission

After the submission and the successful receipt of the package in SETSA, the following logical verifications shall be performed:

4.4.2.1 On a package level

1. p_actor_reg_no - Verification of existence of this registration. Returns the error 'Wrong registration number!'
2. p_report_date - Date verification - to not be a future date and not be 7 days in the past. Returns the error 'Date different from permitted dates!'

4.4.2.2 On a transaction level

After package submission, each transaction in the package shall be subject to the following verifications:

1. p_drug_code - Verification of existence of code in PDL and active code at the time of submission. This error has an error code 1;
2. p_quantity - Verification of submitted quantity - it shall not be null, negative or zero. This error has an error code 2;
3. p_trn_type - Transaction verification - is it permitted for this submitting entity type. This error has an error code 4;
4. p_recipient_code - Verification of the existence of the recipient code. This error has an error code 8;
5. p_available_qty - Inspection for the available quantity not being less than zero. This error has an error code 16;
6. p_batch_no - verification if empty. This error has an error code 32;
7. p_country - verification if empty in case the transaction is 5 or 10. This error has an error code 64;

8. p_export_planned_date – Verification if empty in case the transaction is 5 or 10. This error has an error code 128;
9. p_postcode – Verification for identification of a particular wholesale distributor warehouse – the submission of a ZIP code as a characteristic of the recipient or supplier is verified. This error has an error code 256;
10. p_rcpt_postcode – – Verification for identification of a particular warehouse of a wholesale distributor, recipient of medicinal products under transactions 16 and 33 – verification of the existence of the ZIP code as a characteristic of the recipient of MP. This error has an error code 512.
11. p_notes – Verification for an order number / document for transactions 25, 26 и 37. This error has an error code 1024.

Note: Not all errors are applicable for all transactions. Some errors do not occur for certain transactions, because they are not relevant.

4.4.3 Receiving information about the processing

The transactions submitted in a single package can be seen with a GET order, as detailed herein below.

Service endpoint:

<https://sespa.mh.government.bg/sespa/api/data/batchtrns/>

Method: GET

Content-type: application/json

Parameters: "p_package_no", "p_actor_reg_no"

Example:

https://sespa.mh.government.bg/sespa/api/data/trn/batchtrns/?p_package_no=16746&p_actor_reg_no=DE12EE39AD9A0B468AE96D3D066D1678

Result:

The service returns json, which contains all submitted transactions in the package, which looks as follows:

```
{
  "items": [
    {
      "p_actor_reg_no": "DE12EE39AD9A0B468AE96D3D066D1678",
      "p_package_no": 16746,
      "p_package_item_no": 429392,
      "p_drug_code": 2546,
      "p_quantity": 100,
      "p_trn_type": 5,
      "p_recipient_code": null,
      "p_postcode": null,
      "p_available_qty": 350,
      "p_drug_product_code": "01234567890123",
      "p_country": "DE",
      "p_batch_no": "855884",
```

```

        "trn_id": 26793,
        "p_notes": null,
        "p_export_planned_date": null,
        "status": 0,
        "error_status": null,
        "p_actor_trn_no": null
    },
    {
        "p_actor_reg_no": "DE12EE39AD9A0B468AE96D3D066D1678",
        "p_package_no": 16746,
        "p_package_item_no": 429393,
        "p_drug_code": 2543,
        "p_quantity": 50,
        "p_trn_type": 5,
        "p_recipient_code": null,
        "p_postcode": null,
        "p_available_qty": 450,
        "p_drug_product_code": "05026598239988",
        "p_country": "DE",
        "p_batch_no": "80DD15",
        "trn_id": 26794,
        "p_notes": null,
        "p_export_planned_date": null,
        "status": 0,
        "error_status": null,
        "p_actor_trn_no": null
    }
],
"first": {
    "$ref": "https://sespa.mh.government.bg/sespa/api/data/batchtrns/?p_package_no=16746&p_actor_reg_no=DE12EE39AD9A0B468AE96D3D066D1678"
}
}

```

4.4.4 Reading errors in case of package submission of data

The data submitted shall be verified for errors after the package submission.

The errors on a transaction level shall be summed up in **"status"**, where only a single number shall be displayed, which represents the full range of errors (sum of the error codes).

Example:

- in case of a wrong code of MP, the value of **"status"** shall be 1;
- In case of a wrong code of MP + wrong transaction, the value of **"status"** shall be 5, which is the sum of 1 and 4 (the two individual error codes);
- **"status":8** shall mean a wrong or a missing recipient => **"p_recipient_code":null**;
- **"status":28** shall mean "wrong transaction code" + "wrong or missing recipient" + "wrong available quantity";

Analogically, if all possible errors exist in the transaction, the number shall be 511. All error combinations shall be covered with a number between 1 and 511.

A transaction in which there is no error has the value **"status":0**.

Alternatively, the value of **"error_status"** shows the errors divided with a semicolon, in order to provide an easier way of reading the result.

For example

- `"error_status": "8;16;"` shows that the submitted transaction has a wrong or a missing recipient => `"p_recipient_code": null` and a wrong or missing available quantity => `"p_available_qty": null;`
- `"error_status": null` shows that there are no open errors in the line.

The value of `"p_actor_trn_no": "126"` shows the number of the internal system transaction, submitted with the package.

In case no parameter is submitted `"p_check_only"`, or in case it has been submitted as `"p_check_only": "N"`, at the end of processing, all submitted transactions, in which no errors have been found (with `"status": 0` and `"error_status": null`) shall be registered as transactions in SETSA. Respectively the value of `"trn_id"` shows the number of this registered transaction from the SETSA package. It is only available for the transactions, in which no errors have been found.

In case the `"p_check_only": "Y"` parameter has been submitted, at the end of processing, the submitted shall not be registered as transactions in SETSA. Respectively the value of `"trn_id"` in the answer shall be `null`.

No.	errors	value
1	MP error code	1
2	wrong quantity	2
3	Wrong transaction code	4
4	wrong or missing recipient	8
5	wrong available quantity	16
6	docket number is missing	32
7	wrong export country	64
8	wrong date of planned export	128
9	missing warehouse ZIP code	256
10	missing receiving warehouse ZIP code (p_rcpt_postcode)	512
11	missing order/act number (p_notes)	1024

4.5 Package submission of a package for deferred processing

The service is stipulated for large packages with transactions, which are processed asynchronously. The service accepts the package and stores it for follow-up processing. The processing is performed on the basis of the principle "first in - first out".

After submission of the package, SETSA shall only return information about the registered number of the submitted package.

4.5.1 Submission of a package for deferred processing without authentication

Service endpoint:

<https://sespa.mh.government.bg/sespa/api/data/sendpkg/>

Method: POST

Content-type: application/json

Application body:

The application body shall be submitted in JSON format and shall consist of a header and part with description of the transactions. The header contains identification data for the package – participant registration number, report date and parameter for package verification or registration.

Example:

```
{
  "p_actor_reg_no": "0B1C9D219B5CAEA9E67C31E79EE09A0B",
  "p_report_date": "2019-11-29T23:35:56Z",
  "p_check_only": "N",
  "transactions": [
    {
      "p_drug_code": 2546,
      "p_quantity": 100,
      "p_trn_type": 2,
      "p_recipient_code": "101010101",
      "p_postcode": 1336,
      "p_available_qty": 900,
      "p_drug_product_code": "05026598234578",
      "p_batch_no": "805515",
      "p_notes": "test",
      "p_actor_trn_no": "125"
    },
    {
      "p_drug_code": 2543,
      "p_quantity": 500,
      "p_trn_type": 2,
      "p_recipient_code": "101010101",
      "p_postcode": 1336,
      "p_available_qty": 1500,
      "p_drug_product_code": "05026598239988",
      "p_batch_no": "80DD15",
      "p_actor_trn_no": "126"
    }
  ]
}
```

Parameters: The parameters are analogical to the parameters detailed in article 4.3 **Package submission of data with inserted json**.

Result:

```
{
  "package_no": 17007
}
```

Results for the processing can be verified using the method detailed in article 4.3.3 **Receiving information about the processing**.

Analogically, the reading of errors cannot be done in the method detailed in article 4.3.4 **Reading errors in case of package submission of data**.

4.5.2 Submission of a package for deferred processing with authentication

The service is analogical to the service for package submission for deferred processing, detailed in the previous article, with the difference that it is protected and a token, user name and password, obtained during the authentication registration, needs to be submitted.

Service endpoint:

<https://sespa.mh.government.bg/sespa/api/data/sendpkg/>

Method: POST

Content-type: application/json

Application body:

The application body shall be submitted in JSON format and shall consist of a header and part with description of the transactions. The header contains identification data for the package – participant registration number, report date and parameter for package verification or registration.

Other than the parameters, detailed in the previous article, the service requires submission of a username and password, obtained during registration, as follows:

p_username (string) – username for SETSA, obtained during registration;

p_password (string) – password, associated with the username.

It shall be indicated in the header of the application

Content-Type application/json

An access token (bearer token) shall also be submitted in the header. The receipt of a token has been detailed in article 7 Receiving access token to the SETSA web services.

Example:

```
{
  "p_actor_reg_no": "0B1C9D219B5CAEA9E67C31E79EE09A0B",
  "p_report_date": "2019-11-29T23:35:56Z",
  "p_check_only": "N",
  "p_username": "IS_DE12EE39",
  "p_password": "AGAPGB9b"
  "transactions":
    [
      {
        "p_drug_code": 2546,
        "p_quantity": 100,
        "p_trn_type": 2,
        "p_recipient_code": "1010101",
        "p_postcode": 1336,
        "p_available_qty": 900,
        "p_drug_product_code": "05026598234578",
        "p_batch_no": "805515",
        "p_notes": "test",
        "p_actor_trn_no": "125"
      },
      {
        "p_drug_code": 2543,
        "p_quantity": 500,
        "p_trn_type": 2,
        "p_recipient_code": "1010101",
        "p_postcode": 1336,
        "p_available_qty": 1500,
        "p_drug_product_code": "05026598239988",
      }
    ]
}
```

```
        "p_batch_no": "80DD15",
        "p_actor_trn_no": "126"
    }
}
]
```

Parameters: The parameters are analogical to the parameters detailed in article 4.4 Package submission of data with inserted json with authentication.

Result:

```
{
  "package_no": 17007
}
```

Results for the processing can be verified using the method detailed in article 4.3.3 **Receiving information about the processing**.

Analogically, the reading of errors cannot be done in the method detailed in article 4.3.4 **Reading errors in case of package submission of data**.

4.6 Submission of a zero report

The term zero report in SETSA shall be used for designation that during the reporting period (for the respective day) there has not been any movement of medicinal products, included in the Positive Drug List, or the unit has not been operating. Sending a zero report is important and valuable, because it eliminates the likelihood of the report not being completed or sent.

In the cases in which a particular obligated entity is not open, due to holidays (weekends or public holidays), or due to any other reason, a zero report needs to be filed.

4.6.1 Sending a zero report without authentication

A zero report shall be filed for each reporting unit by requesting a RESTful web service as follows:

Service endpoint:

<https://sespa.mh.government.bg/sespa/api/data/zeroreport/>

Method: POST

Content-type: application/json

Parameters: none

Example:

Body

```
{
  "p_actor_reg_no": "DE12EE39AD9A0B468AE96D3D066D1678",
  "p_report_date": "2020-07-05T00:00:00Z",
  "p_postcode": 1336
}
```

Result:

```
{
```

```
  "ZERO_REPORT_NO": 11
}
```

4.6.1.1 Possible errors for data submission

ORA-20001: Wrong registration number!

ORA-20002: The date deviates from the permitted date!

ORA-20003: Postcode not provided, or postcode is not correct!

ORA-20004: A zero report has already been filed for this day (06.07.2020).

4.6.2 Filing a zero report with authentication

The service is analogical to the one in article 4.6.1 Sending a zero report without , but it also requires the submission of a user name and password, received during the registration. Additionally, a valid access token shall be submitted, according to article 7 Receiving access token to the SETSA web services.

Service endpoint:

<https://sespa.mh.government.bg/api/data/zeroreports/>

Method: POST

Content-type: application/json

Parameters: none

Example:

Body

```
{
  "p_actor_reg_no": "DE12EE39AD9A0B468AE96D3D066D1678",
  "p_report_date": "2020-07-07T00:00:00Z",
  "p_postcode": 1336,
  "p_username": "IS_DE12EE39",
  "p_password": "AGAPGB9b"
}
```

Result:

```
{
  "ZERO_REPORT_NO": 13
}
```

4.6.2.1 Possible errors for data submission

ORA-20001: Wrong registration number!

ORA-20002: The date deviates from the permitted date!

ORA-20003: Postcode not provided, or postcode is not correct!

ORA-20004: A zero report has already been filed for this day (06.07.2020).

4.7 Receipt of information for registered zero reports

Service endpoint without authentication (token):

<https://sespa.mh.government.bg/sespa/api/data/zeroreport/>

Service endpoint with authentication (token):

<https://sespa.mh.government.bg/sespa/api/data/zeroreports/>

Method: GET

Content-type: application/json

Parameters: p_actor_reg_no

Example:

https://sespa.mh.government.bg/sespa/api/data/zeroreport/?p_actor_reg_no=DE12EE39AD9A0B468AE96D3D066D1678

Result:

```
{
  "items": [
    {
      "zero_report_id": 29,
      "p_report_date": "2020-07-18T22:00:00Z",
      "p_postcode": 1336,
      "submit_date": "2020-07-19T20:42:02Z"
    },
    {
      "zero_report_id": 13,
      "p_report_date": "2020-07-04T21:00:00Z",
      "p_postcode": 1336,
      "submit_date": "2020-07-09T20:44:48Z"
    },
    {
      "zero_report_id": 21,
      "p_report_date": "2020-07-05T21:00:00Z",
      "p_postcode": 1336,
      "submit_date": "2020-07-09T20:54:06Z"
    }
  ],
  "first": {
    "$ref": "http://sespa.mh.government.bg/sespa/api/data/zeroreport/?p_actor_r
eg_no=DE12EE39AD9A0B468AE96D3D066D1678"
  }
}
```

5 Rejection of transaction

Rejecting a specific previous transaction shall be performed using the automated interface of SETSA by requesting a web service for reversal.

This service shall mark the transaction as reversed (cancelled) and it shall no longer be considered in the calculation of quantity, or when drafting references.

5.1 Refusal of single transaction without authentication

The web service for reversal of transactions shall be available at the following address <https://sespa.mh.government.bg/sespa/api/data/revtrn/>. It shall be requested with a POST request, it shall accept parameters, listed in the body of the application, as follows:

Service endpoint: [/revtrn/https://sespa.mh.government.bg/sespa/api/data](https://sespa.mh.government.bg/sespa/api/data/revtrn/)

Method: POST

Content-type: application/json

Parameters:

Body:

```
{
  "p_transaction_id":214,
  "p_actor_reg_no":"0B1C....."
}
```

Where:

"p_transaction_id" is the number of the reversal transaction, received from SETSA, or a number of the transaction from an internal system, submitted with the transaction data,

"p_actor_reg_no" is the registration number of the participant, obtained during the registration.

The response in case of successful reversal is status 200 OK, and:

```
{
  "process_status": "The transaction has been reversed successfully."
}
```

In case of unsuccessful reversal, an error shall be returned.

5.2 Refusal of a single transaction with authentication

The service is analogical to the service for reversal of transaction, detailed in the previous article, with the difference that it is protected and a token, username, and password, obtained during the authentication registration, needs to be submitted.

The protected web service for reversal of a transaction shall be available at the following address <https://sespa.mh.government.bg/sespa/api/data/revtrns/>

It shall be requested with a POST request, it shall accept parameters, listed in the body of the application, as follows:

Service endpoint: [/revtrns/https://sespa.mh.government.bg/sespa/api/data](https://sespa.mh.government.bg/sespa/api/data/revtrns/)

Method: POST

Parameters:

Content-type: application/json

Other than the parameters, detailed in the previous article, the service requires submission of a username and password, obtained during registration, as follows:

p_username (string) – username for SETSA, obtained during registration;

p_password (string) – password, associated with the username.

It shall be indicated in the header of the application

Content-Type application/json

An access token (bearer token) shall also be submitted in the header. The receipt of a token has been detailed in article 7 Receiving access token to the SETSA web services.

Body:

```
{
  "p_username": "IS_DE12EE39",
  "p_password": "AGAPGB9b",
  "p_transaction_id": 214,
  "p_actor_reg_no": "0B1C....."
}
```

Where:

"p_transaction_id" is the number of the reversal transaction, received from SETSA, or a number of the transaction from an internal system, submitted with the transaction data,

"p_actor_reg_no" is the registration number of the participant, obtained during the registration.

The response in case of successful reversal is status 200 OK, and:

```
{
  "process_status": "The transaction has been reversed successfully."
}
```

In case of unsuccessful reversal, an error shall be returned.

6 Refusal of transactions from a complete package

Rejecting a submitted package with transactions shall be performed through the automated SETSA interface, by requesting a web service for refusal of a package with transactions.

This service shall mark all transactions from a particular package as reversed (cancelled) and they shall not longer be considered in the calculation of quantity or when drafting references.

6.1 Rejection of transactions from a complete package without authentication

The web service for reversal of a complete package of transactions shall be available at the address <https://sespa.mh.government.bg/sespa/api/data/revbatch>. It shall be requested with a POST request, it shall accept parameters, listed in the body of the application, as follows:

Service endpoint:

[/revbatchhttps://sespa.mh.government.bg/sespa/api/data](https://sespa.mh.government.bg/sespa/api/data/revbatch)

Method: POST

Content-type: application/json

Parameters:

Body:

```
{
  "p_package_no":214,
  "p_actor_reg_no":"0B1C....."
}
```

Where:

"p_package_no" is the number of the package for rejection,

"p_actor_reg_no" is the registration number of the participant, obtained during the registration.

the response in case of successful rejection of all transactions in the package is a status 200 OK and:

```
{
  "process_status": "Транзакциите от пакета са отказани успешно."
}
```

In case of unsuccessful reversal, an error shall be returned.

The refusal of transactions from a package, out of which only some of the transactions are registered, shall only mark the registered transactions as rejected.

6.2 Rejection of transaction from a complete package with authentication

The service is analogical to the service for reversal of a package of transactions, detailed in the previous article, with the difference that it is protected and a token, user name and password, obtained during the authentication registration, needs to be submitted.

The web service for reversal of transactions is available at the following address <https://sespa.mh.government.bg/sespa/api/data/revbatchs>. It shall be requested with a POST request, it shall accept parameters, listed in the body of the application, as follows:

Service endpoint:

<https://sespa.mh.government.bg/sespa/api/data/revbatchs>

Method: POST

Content-type: application/json

Parameters:

Other than the parameters, detailed in the previous article, the service requires submission of a username and password, obtained during registration, as follows:

p_username (string) – username for SETSA, obtained during registration;

p_password (string) – password, associated with the username.

It shall be indicated in the header of the application

Content-Type application/json

An access token (bearer token) shall also be submitted in the header. The receipt of a token has been detailed in article 7 Receiving access token to the SETSA web services.

Body:

```
{
  "p_username": "IS_DE12EE39",
  "p_password": "AGAPGB9b",
  "p_package_no": 214,
  "p_actor_reg_no": "0B1C....."
}
```

Where:

"p_package_no" is the number of the package for rejection,

"p_actor_reg_no" is the registration number of the participant, obtained during the registration.

the response in case of successful rejection of all transactions in the package is a status 200 OK and:

```
{
  "process_status": "Транзакциите от пакета са отказани успешно."
}
```

In case of unsuccessful reversal, an error shall be returned.

The refusal of transactions from a package, out of which only some of the transactions are registered, shall only mark the registered transactions as rejected.

7 Receiving access token to the SETSA web services

In the production environment, the web services of SETSA are protected with the help of OAuth2 authorization protocol.

Unique ClientID and ClientSecret shall be generated during the registration of each user.

Using this authorization approach, in order to use the web services of SETSA, an access token shall be taken and afterwards, using that token, the services shall be requested, and the header of the applications shall be submitted through the token received in advance.

The following service shall be requested in order to receive a token:

Endpoint:

<https://sespa.mh.government.bg/sespa/api/oauth/token>

by submitting the parameters Client ID and Client Secret, obtained during registration.

Example:

```
C:\>curl -i -k --user Q17g6_DBI89d0LRQMZeAbQ...:6KfPuobP8HMtf9GrI7mIPw.. --data
"grant_type=client_credentials" https://sespa.mh.government.bg/sespa/api/oauth/token
HTTP/1.1 200
Date: Thu, 22 Oct 2020 09:09:49 GMT
Server: Apache/2.4.6 (CentOS) OpenSSL/1.0.2k-fips
X-Frame-Options: SAMEORIGIN
Content-Type: application/json
Transfer-Encoding: chunked
```

```
{"access_token":"Qrdb0Dx6THD02Iin96ZgoQ","token_type":"bearer","expires_in":3600}
```

The received token is valid for 3,600 seconds and after expiration of this time period, a new one shall be taken, in order to continue the operation.