Single Digital Gateway

Technical Specifications

APIs for Single Digital Gateway

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V2.2	07-07-2021	Krzysztof Wojciechowski Pier Paolo Parzanese	Statistics on AS API structure description: - serviceID - subject matters and sub subject matter YAML file for statistics on AS
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V2.5	25-01-2024	Remzi-Silvia Mustafa	Updates related to YAML files: - Correction of date time accepted format - complianceEvidence accepted schema update - Payload examples update - Updates of subject-matters available as of date

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1. INTRODUCTION

This document provides the specifications for the different web APIs to be implemented to enable the transfer of statistics and feedback data from SDG Front Office tools or Member States systems to the common data repository in the SDG Back Office. It also gives the information on the security & authentication of the web API.

2. OVERVIEW

There are four main APIs in scope of the SDG platform to transfer data from the Common IT tools or Member States tools to the common data repository for further processing as well as analysis and data visualization purposes. One additional API is also foreseen to provide a message unique ID to be used when calling any of the main four APIs above.

In the table below is included a summary of the payloads to be transferred via the APIs and the frequency of transmission. The API data definition files, so called "swaggers", are created in a way to contain this information as outlined below.

	Statistics		Feedback on Quality		
Type of Service	**Information Services**	**Assistance Services**	**On-line procedures**	**Information Services**	**Assistance Services**
Payload	Number of visits	Number of requests		Found what you were looking for? (mutually exclusive options: YES/NO/PARTLY)	
	Countries from where users are visiting the webpage	Subject matter (specific categories for assistance cases)	Rate this procedure (star rating from 1 to 5) – mandatory field	Rate this page (star rating: from 1 to 5)	Rate the service provided (star rating from 1 to 5)
	Type of devices used to visit the webpage	Categories: - citizens or business -cross-border or national	Help us improve (open text box) – optional field*	Help us improve (open text box) – optional field*	Help us improve (open text box) – optional field*
		Average response time over a period of 6 months			
	Context data	Context data	Context data	Context data	Context data
			Additional survey	Additional survey	Additional survey
Frequency	Once per month	Twice per year	Monthly (in bulk) for alternative tool	Monthly (in bulk) for alternative tool	Monthly (in bulk) for alternative tool

*NB: The content of the open text box does not need to be provided when the feedback is collected by MS using an alternative feedback tool.

For information services only, MS using the common feedback tool can choose between the form including the open free text and the one without.
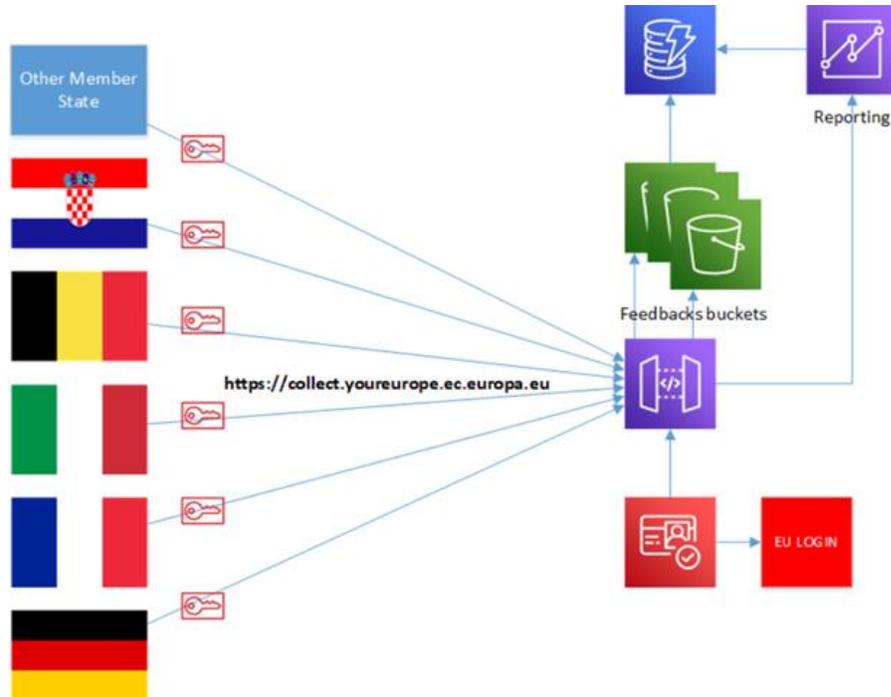
3. API SECURITY AND AUTHENTICATION

Authentication will be provided via an **API Key method** and a temporary secured API Gateway mechanism (the keys are only valid within a session and then expire). Each system environment (Acceptance and Production) has its own API key defined to be used in that environment and they are not interchangeable.

To successfully call API methods, a user must provide "x-api-key" header in the request. Member States will be assigned one security key for the "x-api-key" header and for all the main APIs, which will be used to authenticate the requests.
In case the value of "x-api-key" header provided by the user is correct the response code returned is 200 (OK). In case the key provided by the user is incorrect the response code returned is 403 (Forbidden).

Example of providing a header:
```
{
 'method': 'GET',
 'hostname': 'collect.youreurope.europa.eu',
 'path': '/unique-id',
 'headers': {
   'x-api-key': 'PL8DSJSJkds76nknmvah8YB'
 }
}
```

End-points of data collectors, used to push statistical or feedback data towards the common data repository, will be exposed to the EU and Member States services via a URL, as exposed in the following sections. Data will be stored in a raw data JSON format (Java Script Object Notation) in S3 buckets, to allow aggregation and visualisation on the dashboard.

The management of the keys is ensured by the technical support at the EC.

API keys can be retrieved by users with National Coordinator or Application Manager role through the user interface, under the System settings menu entry.

4. API FOR THE UNIQUE ID

This API has the purpose to generate a Unique ID that must be used when calling one of the other web APIs for transmitting statistical or feedback data for a specific reference period.

Before calling the web APIs to transfer Statistical data or Feedback data, the API for unique ID generation must be called first. The unique ID received in response should then be injected into the specific field in the relevant web API used to transfer a specific payload for a particular reference period. While using the unique ID for every web API call, the following points should be taken in account:

- If any of the web APIs are called to resend the data for a particular reference period for which a given Unique ID was generated, the Unique ID API should not be invoked again.
- Also when the consumer of this web API (i.e. any Member State service) wants to modify the payload already sent and resend it for the same reference period, the same Unique ID should be used again. When the SDG back-office receives JSON file with a given Unique ID already present in the system, it will overwrite the existing file with the new one.
- In case of manual file upload, this unique ID should also be used as file name.

The request and response structure for this API is described in the table below.

Request
No parameter required in the request

Response			
Parameter	Type	Required (Yes / No)	Notes
unique-id	String	Yes	Unique Id to respect to specific reference period for all web APIs

Unique ID generation

Unique ID endpoint URL - PRODUCTION: https://collect.youreurope.europa.eu/v1/unique-id

Unique ID endpoint URL - ACCEPTANCE: https://collect.sdgacceptance.eu/v1/unique-id

To generate a Unique ID required in the payload the Unique ID API must be called using a GET method and as a response it generates the unique id parameter value.

```
{
   "name": "Unique ID",
   "request": {
      "method": "GET",
      "header": [],
      "url": {
         "raw": ""
      }
   },
   "response": []
}
```

5. APIS FOR STATISTICS

Statistics on Information Services

This web API must be used for transferring the statistical data collected on Information services for a specific reference period to SDG common data repository. The reference period for sending this data is one month.

The web API does not allow sending data for multiple reference periods at once keeping the size of the JSON file within the allowed limit of 5 Mb. In case the data for a given reference period is required to be split due to the size limit, or the data for a given reference period required to be modified /

updated, the API should be called multiple times with specific reference period, each one with a different Unique ID.

The request and response structure for the API is described in the table below.

Request				
Parameter	Type	Version	Required (Yes / No)	Notes
informationServiceStats	Object	v2	Yes	An object representing statistics on information services.
uniqueId	string	v2	Yes	Unique ID for information services statistics submission for a specific reference period received from the UniqueID web API call.
referencePeriod	Object	v2	Yes	Container of the Start Date and End Date of the reference period.
startDate	string	v2	Yes	Start date of the reference period. Expressed in UTC time standard. The format must comply with ISO 8601 date-time profile. E.g.:2020-12-31T23:59:59.00Z (full-dateTfull-timeZ)
endDate	string	v2	Yes	End date of the reference period. Expressed in UTC time standard. The format must comply with ISO 8601 date-time profile. E.g.:2020-12-31T23:59:59.00Z (full-dateTfull-timeZ)
transferDate	string	v2	Yes	Date Time when the web API is called. Expressed in UTC time standard. The format must comply with ISO 8601 date-time profile. E.g.:2020-12-31T23:59:59.00Z (full-dateTfull-timeZ)
transferType	String (enum)	v2	Yes	Transfer type should be used as 'API' to call this web service.
nbEntries	integer	v2	yes	No of total entries including all source URL for which the statistics are sent.
Sources	Array of Objects	v2	Yes	An object representing statistical information about one source URL. Array of objects because a given Reference Period is associated to several URLs.
Source	object	v2	Yes	Object holding the statistical data
sourceUrl	string	v2	Yes	URL for which the statistics is collected.
statistics	Objects	v2	Yes	An object representing the statistical information for one particular source URL.
nbVisits	integer	v2	Yes	Total number of visits to the URL
originatingCountry	string	v2	Yes	This field holds the code of the country from which the visits are originated to the URL, as per ISO-3166 ALPHA 2 standard, except for Greece which should be described using 'EL'
deviceType	String (enum)	v2	Yes	Type of Device used to visit the URL. PC stands for laptop and desktop computers, including Macintosh. Enum: - PC - Tablet - Smartphone - Others

	Response	
Code		Message
200		OK
400		Bad request

To send statistics, first a Unique ID needs to be generated by calling the Unique ID API. The output should be used in the unique id field of the batch payload and also to name the JSON file. The Statistics API needs to be called with a POST method.

End-point URLs and example of payload.

Service	API endpoint URL
Statistics for Information Services PRODUCTION v2	https://collect.youreurope.europa.eu/v2/statistics/information-services
Statistics for Information Services ACCEPTANCE v2	https://collect.sdgacceptance.eu/v2/statistics/information-services
Method	POST
Example of payload v2	

```
{
    "uniqueId": "94b782bd-f4a4-42ff-a168-d5d9968257f2-1706043924070",
    "referencePeriod": {
        "startDate": "2023-12-01T00:00:00.00Z",
        "endDate": "2023-12-31T00:00:00.00Z"
    },
    "transferDate": "2024-01-10T12:46:55.00Z",
    "transferType": "API",
    "nbEntries" : 1,
    "sources": [
        {

            "sourceUrl" : "http ://test123.eu",
            "statistics": [
                {
                    "deviceType": "PC",
                    "nbVisits": 5,
                    "originatingCountry": "JP"
```

```
            }
        ]


    }
  ]
}
```

Statistics on Assistance Services

This web API must be used if the statistical data collected on assistance and problem-solving services cases for a specific reference period is to be transferred to the common data repository in an automated way.

Due to the specific nature of the assistance services, the upload of the statistics is also supported by a Manual upload (CSV file) method and an Online web-form method. In this latter case, the API is not going to be used.

JSON files sent via API should be named the same as the unique ID value received from the Unique ID API.

The reference period for collecting statistics on assistance services cases, both in a manual or automated way, is six month (twice per year). For instance, as of January data related to the second half of the previous year can be uploaded, while as of July, the data related to the first half of the current year can be uploaded.

The web API does not allow sending data for multiple reference period at once keeping the size of the JSON file within the allowed limit of 5 Mb. In case the data for a reference period is required to be split due to the size limit, or the data for a reference period required to be modified/updated, the API should be called multiple times, each one with a different unique ID.

The request and response structure for the API is described in the table below.

Parameter	Type	Version	Required (Yes / No)	Notes
			Request	
assistanceServiceStats	Object	v2	Yes	An object representing statistics on assistance services.
uniqueId	string	v2	Yes	Unique ID for assistance services statistics submission for a specific reference period collected from the Unique ID web API call.
referencePeriod	object	v2	Yes	Container for start date and end date
startDate	string	v2	Yes	Start Date of the reference period. Expressed in UTC time standard. The format must comply with ISO 8601 date-time profile. E.g.:2020-12-31T23:59:59.00Z (full-dateTfull-timeZ)
endDate	string	v2	Yes	End Date of the reference period. Expressed in UTC time standard. The format must comply with ISO 8601 date-time profile. E.g.:2020-12-31T23:59:59.00Z (full-dateTfull-timeZ)
transferDate	string	v2	Yes	Date Time when the web API is called Expressed in UTC time standard. The format must comply with ISO 8601

				date-time profile. E.g.:2020-12-31T23:59:59.00Z (full-dateTfull-timeZ)
transferType	String (enum)	v2	Yes	Transfer type should be used as 'API' to call this web service.
nbEntries	integer	v2	Yes	No of total entries including all assistance and problem solving services for which the statistics are sent.
Sources	Array of Objects	v2	Yes	An object representing statistical information about one assistance and problem-solving service. Array of objects because a given Reference Period is associated to several assistance and problem-solving services.
source	object	v2	Yes	Object holding the statistical data
serviceId	string	v2	Yes	Identifier(id) of the assistance and problem-solving service for which the statistics is collected.
Statistics	Object	v2	Yes	An object representing the statistical information for one assistance and problem-solving service.
urlStatistics	Array of Objects	v2	Yes	Array of objects because the same assistance and problem-solving service could have several combination of statistics depending on different values of the more granular fields on which the statistics are collected.
nbRequests	integer	v2	Yes	Total number of requests for the assistance and problem-solving service
categoryOfUser	string (enum)	v2	Yes	Enumeration as "citizen", "business", "business and citizens" For version v2, a validation should check when the service type has the code NCPCH or ODR, the category of user must be citizen
subjectMatter	string (enum)	v2	Yes	Specific subject matters for an assistance service. The list of subject-matters will be agreed with the assistance services and provided at a later stage.
sub-subjectMatter	string (enum)	v2	Yes (if subject matter has sub-subject matters)	Sub category for the subject matter. The list of sub-subject-matters will be agreed with the assistance services and provided at a later stage. Field should not be included if subject matter has no available sub-subject matter.
situationOfUser	string (enum)	v2	Yes	Enumeration as "cross-border", "national" For version v2, a validation should check when the subject matter has the code NCP1, NCP2, NCP3 or NCP4 the situation of user must be cross-border
avgResponseTime	integer	v2	Yes	average response time, in days

	Response	
Code		**Message**
200		OK
400		Bad request

To send statistics, a Unique ID needs to be generated first by calling a Unique ID API. The output should be used as a unique id in batch payload. The Statistics API needs to be called with a POST method.

End-point URLs and example of payload.

Service	API endpoint URL
Statistics for Assistance Services PRODUCTION v2	https://collect.youreurope.europa.eu/v2/statistics/assistance-services
Statistics for Assistance Services ACCEPTANCE v2	https://collect.sdgacceptance.eu/v2/statistics/assistance-services
Method	POST

Example of payload v2

```json
{
  "uniqueId": "99eb2d04-a489-4e64-b168-8fe4155de7dd-1705668842444",
  "referencePeriod": {
    "startDate": "2023-06-01T00:00:00Z",
    "endDate": "2023-12-31T00:00:00Z"
  },
  "transferDate": "2024-01-18T00:00:00Z",
  "transferType": "API",
  "nbEntries": 2,
  "sources": [
    {
      "serviceId": "4a68c53b-1729-43f1-8530-4debb628a179",
      "statistics": [
        {
          "nbRequests": 100,
          "categoryOfUser": "citizen",
          "subjectMatter": "ECC1",
          "sub-subjectMatter": "d",
          "situationOfUser": "national",
          "avgResponseTime": 43
        }
      ]
    },
```

```
  {
    "serviceId": "d6388309-803e-4358-977e-b999ae8c33a4",
    "statistics": [
      {
        "nbRequests": 100,
        "categoryOfUser": "business and citizens",
        "subjectMatter": "EURES7",
        "situationOfUser": "cross-border",
        "avgResponseTime": 43
      }
    ]
  }

]
}
```

6. APIS FOR FEEDBACK ON QUALITY

Feedback on Quality First Level Survey

This web API must be used for transferring the data collected about the first level user feedback regarding information services, online procedures or assistance and problem-solving services cases.

The integration with the API is only relevant if the feedback data is collected using an alternative national tool.

If the SDG common user feedback tool is used, there is no need to integrate this API.

The frequency for sending feedback data in bulk is every month, which also means that the reference period to send the data is one month.

Before being sent, the data collected should be mapped to the available fields described in the swagger. This part of mapping must be done at the Member State side, as the data may be different depending on the different tools used.

The web API does not allow sending data for multiple reference period at once keeping the size of the JSON file within the allowed limit of 5 Mb. In case the data for a reference period is required to be split due to the size limit, or the data for a reference period required to be modified / updated, the API should be called multiple times, each one with a different unique ID.

The request and response structure for the API is described in the table below.

Request			
Parameter	**Type**	**Required (Yes / No)**	**Notes**
Feedback	object	No	Object holding all the information about a single feedback. The specific REST API path for this object should be used only for SDG Front Office tool.
category	string (enum)	Yes	Enumeration as "Information", "Procedure", "Assistance"
rating	Integer (enum)	Yes	Rating of the service received of the related categories.
source	string	Yes	URL of the source service. In general, the referrer for webpages will be collected automatically. If URL is not present, for instance when collecting feedback about Assistance Services, the identifier of the service in the SDG repository should be used instead and added as the parameter to the URL.
foundInformation	String (enum)	No	This field must be filled in only when the feedback is about Information Services. One of the enumeration ["Yes", "No", "Partly"].
helpUsImprove	string	No	Additional information received from the end-user in the open text box is mapped to this field. It applies only to the common feedback tool where the open free text field is available.
feedbackBatch	object	No	Container for the feedback data for a reference period. The REST API path related to this object should be used by Member States.
uniqueId	string	yes	Unique ID for feedback submission for a specific reference period received from the Unique ID web API call.
referencePeriod	object	Yes	Container of start date and end date
startDate	string	Yes	Start Date of the reference period. Expressed in UTC time standard. The format must comply with ISO 8601 date-time profile. E.g.:2020-12-31T23:59:59.00Z (full-dateTfull-timeZ)
endDate	string	Yes	End Date of the reference period. Expressed in UTC time standard. The format must comply with ISO 8601 date-time profile. E.g.:2020-12-31T23:59:59.00Z (full-dateTfull-timeZ)
transferDate	string	Yes	Date Time when the web API is called. Expressed in UTC time standard. The format must comply

			with ISO 8601 date-time profile. E.g.:2020-12-31T23:59:59.00Z (full-dateTfull-timeZ)
transferType	String (enum)	yes	Enumeration as "API", "Manual". Transfer type should always be as 'API' to call this web service.
nbEntries	integer	Yes	No of total entries including all services for which the feedback is sent.
feedbacks	Array of Objects	yes	An object representing the feedback for different source services. This object internally refers to the object 'feedback'.

Response	
Code	**Message**
200	OK
400	Bad request

This API can be used for transferring the data collected in the first level user feedback regarding information services, online procedures or assistance and problem-solving services cases.

To send feedback data in bulk, a Unique ID needs to be generated first by calling a Unique ID API. The output should be used as a unique ID in the batch payload and to name the JSON file. The Feedback API needs to be called with a POST method.

End-point URLs and example of payload.

Service	API endpoint URL
Information Services 1st level feedback PRODUCTION	https://collect.youreurope.europa.eu/v1/feedback/quality/batch
Information Services 1st level feedback ACCEPTANCE	https://collect.sdgacceptance.eu/v1/feedback/quality/batch
Method	POST
Example of payload	

```json
{
    "uniqueId": "eb9566db-a7f8-4da5-a66f-6a07c2bc31ed-1706025088956",
    "referencePeriod": {
        "startDate": "2012-09-27T00:00:00.00Z",
        "endDate": "2016-09-27T00:00:00.00Z"
    },
    "transferDate": "2024-01-24T00:00:00.00Z",
    "transferType": "API",
    "nbEntries": 2,
    "feedbacks": [         {
            "source": "http://reffererdomain.org/assistance-services/survey",
            "category": "Information",
            "rating": 3,
            "foundInformation": "Partly",
            "helpUsImprove": "feedback with free text"

        },
        {
            "source": "http://referrerdomain.org/assistance-services/survey",
            "category": "Information",
            "rating": 3,
            "foundInformation": "Partly"
        }
    ]
}
```

Service	API endpoint URL
Online Procedure 1st level feedback PRODUCTION	https://collect.youreurope.europa.eu/v1/feedback/quality/batch
Online Procedure 1st level feedback ACCEPTANCE	https://collect.sdgacceptance.eu/v1/feedback/quality/batch
Method	POST

Example of payload

```json
{
    "uniqueId": "eb9566db-a7f8-4da5-a66f-6a07c2bc31ed-1706025088956",
    "referencePeriod": {
        "startDate": "2012-09-27T00:00:00.00Z",
        "endDate": "2016-09-27T00:00:00.00Z"
    },
    "transferDate": "2024-01-24T00:00:00.00Z",
    "transferType": "API",
    "nbEntries": 2,
    "feedbacks": [        {
            "source": "http://referrerdomain.org/assistance-services/survey",
            "category": "Procedure",
            "rating": 1,
            "helpUsImprove": "feedback with free text"
        },
        {
            "source": "http://referrerdomain.org/assistance-services/survey",
            "category": "Procedure",
            "rating": 1
        }
    ]
}
```

Service	API endpoint URL
Assistance Services 1st level feedback PRODUCTION	https://collect.youreurope.europa.eu/v1/feedback/quality/batch
Assistance Services 1st level feedback ACCEPTANCE	https://collect.sdgacceptance.eu/v1/feedback/quality/batch

Method	POST

<div align="center">Example of payload</div>

```
{

    "uniqueId": "eb9566db-a7f8-4da5-a66f-6a07c2bc31ed-1706025088956",

    "referencePeriod": {

        "startDate": "2012-09-27T00:00:00.00Z",

        "endDate": "2016-09-27T00:00:00.00Z"

    },

    "transferDate": "2024-01-24T00:00:00.00Z",

    "transferType": "API",

    "nbEntries": 2,

    "feedbacks": [          {

            "source": "http://referrerdomain.org/assistance-
services/survey?id=123",

            "rating": 1,

            "category": "Assistance"

        },

        {

            "source": "http://referrerdomain.org/assistance-
services/survey?id=123",

            "rating": 2,

            "category": "Assistance"

        }

    ]

}
```

Feedback on Quality Second Level Survey

The second level feedback survey can be accessed in two ways:

1) The end-user fills up the first level user feedback via the common user feedback tool or an alternative national tool and clicks on 'Submit feedback'. Following the successful submission, a "Thank You" page is displayed providing the link to the second level survey.
2) Through the provided link, the end-user can directly open the second level survey form and fill it in.

As for the first level user feedback, an API can be called to data. If called from the common feedback tool, a single instance of feedback is sent in one call. If the API is called from a national service, it is used to send second level feedback in bulk, potentially for different URLs collectively, for a specific

reference period. For Member States the reference period to send the second level feedback data is one month.

The questions included in the second level survey for the different types of services is presented in the following tables. When mapping the answers to the web API, the abbreviations of the questions should be properly maintained as described in the swaggers itself.

User survey for detailed feedback on information

Questions	Answers
Was the information accurate?	(star rating from 1 to 5)
Was the information comprehensive enough?	(star rating from 1 to 5)
Was the language easy to understand?	(star rating from 1 to 5)
Was the date of the last update (publication) indicated on the page?	YES/NO/I do not know
Was the name of the authority responsible for the content published on the page?	YES/NO/I do not know
Did the page include references, links to legal acts?	YES/NO/not relevant
Was the information available in English?	YES/NO/I do not know

User survey for detailed feedback on cross-border accessibility of an online procedure

Questions	Answers
Were the instructions for completing the procedure available in English?	YES/NO/I do not know
Was it easy to fill in the form?	(star rating from 1 to 5)
Were you able to use your national eID or eSignature?	YES/NO/not applicable
Could you upload any documents required in electronic format?	YES/NO/partly/not applicable
Were you able to pay any fees online?	(YES/NO/not applicable)

User survey for detailed feedback on an assistance or problem solving service

Question	Answers
Was it made clear enough to you in advance what you could expect from the service offered?	(star rating from 1 to 5)
How easy was it to submit your request?	(star rating from 1 to 5)
Was your request handled within the indicated time frame?	(star rating from 1 to 5)
Were you informed about any delays?	(YES/NO/not applicable)
Were you able to pay online for the service?	(YES/NO/not applicable)

The request and response structure for the API is described in the table below.

Request			
Parameter	**Type**	**Required (Yes / No)**	**Notes**

Components	Object	No	Object holding Definition of parameters. Not for mapping.
Rating	Integer	No	User rating from 1 (worst) to 5 (best) or empty ("").

yesNoUnknown	String (enum)	No	enum:
			    - Yes
			    - No
			    - I do not know

yesNoNotRelevant	String (enum)	No	enum:
			    - Yes
			    - No
			    - Not relevant

yesNoNotApplicable	String (enum)	No	enum:
			    - Yes
			    - No
			    - Not applicable

yesNoPartlyNotApplicable	String (enum)	No	enum:
			    - Yes
			    - No
			    - Partly
			    - Not applicable

feedbackBatch	Object	No	Container for the feedback data for a reference period. The REST API path related to this object should be used by Member States.
uniqueId	String	Yes	Unique ID for feedback submission for a specific reference period collected from the Unique ID web API call.
referencePeriod	Object	Yes	Container for start date and end date
startDate	String	Yes	Start Date of the reference period. Expressed in UTC time standard. The format must comply with ISO 8601 date-time profile. E.g.:2020-12-31T23:59:59.00Z (full-dateTfull-timeZ)
endDate	String	Yes	End Date of the reference period. Expressed in UTC time standard. The format must comply with ISO 8601 date-time profile. E.g.:2020-12-31T23:59:59.00Z (full-dateTfull-timeZ)
transferDate	String	Yes	Date Time when the web API is called. Expressed in UTC time standard. The format must comply with ISO 8601 date-time profile. E.g.:2020-12-31T23:59:59.00Z (full-dateTfull-timeZ)
transferType	String (enum)	yes	Enumeration as "API", "Manual". Transfer type should be always as 'API' to call this web service.
nbEntries	Intiger	Yes	No of total entries including all source URL for which the statistics are sent.
Feedbacks	Array of Objects	yes	An object representing the feedback for different source URLs. This object internally refers to the object 'feedback'.
Feedback	Object	No	Object holding all the information about a single feedback. The specific REST API path for this object should be used only for SDG Front Office tool.
Source	String	Yes	The URL of the webpage

Survey	Object	Yes	Container of the answers of different questions. It hold three mutually exclusive objects; - informationSurvey - assistanceSurvey - procedureSurvey
assistanceSurvey	Object	No	Object holding all the answers for the questions related to Assistance services
clearOffer	Object	Yes	$ref: '#/components/schemas/rating
Easiness	Object	Yes	$ref: '#/components/schemas/rating'
Responsiveness	Object	Yes	$ref: '#/components/schemas/rating'
Delays	Object	Yes	$ref:'#/components/schemas/yesNoNotApplicable'
onlinePayment	Object	Yes	$ref:'#/components/schemas/yesNoNotApplicable'
procedureSurvey	Object	No	Object holding all the answers for the questions related to Online Procedures
complianceEvidence	Object	Yes	$ref: '#/components/schemas/yesNoPartlyNotApplicable'
Easiness	Object	Yes	$ref: '#/components/schemas/rating'
englishAvailability	Object	Yes	$ref: '#/components/schemas/yesNoUnknown'
nationalAuthentication	Object	Yes	$ref: '#/components/schemas/YesNoNotApplicable'
onlinePayment	Object	Yes	$ref: '#/components/schemas/yesNoNotApplicable'
informationSurvey	Object	No	Object holding all the answers for the questions related to Information Services
Accuracy	Object	Yes	$ref: '#/components/schemas/rating'
Clarity	Object	Yes	$ref: '#/components/schemas/rating'
Comprehensiveness	Object	Yes	$ref: '#/components/schemas/rating'
easyFinding	Object	Yes	$ref: '#/components/schemas/rating'
englishAvailability	Object	Yes	$ref: '#/components/schemas/yesNoUnknown'
lastUpdate	Object	Yes	$ref: '#/components/schemas/yesNoUnknown'
legalActs	Object	Yes	$ref: '#/components/schemas/yesNoNotRelevant'

Ownership	Object	Yes	$ref: '#/components/schemas/yesNoUnknown'
Structure	Object	Yes	$ref: '#/components/schemas/rating'
UpToDate	Object	Yes	$ref: '#/components/schemas/rating'
userFriendliness	Object	Yes	$ref: '#/components/schemas/rating'
Category	String (enum)	No	Enumeration as "Information", "Procedure", "Assistance"

Response	
Code	**Message**
200	OK
400	Bad request

End-point URLs and example of payload.

Service	API endpoint URL
Information Services 2nd level survey PRODUCTION	https://collect.youreurope.europa.eu/v1/feedback/quality/survey/batch
Information Services 2nd level survey ACCEPTANCE	https://collect.sdgacceptance.eu/v1/feedback/quality/survey/batch
Method	POST
Example of payload	

```
{
    "uniqueId": "eb9566db-a7f8-4da5-a66f-6a07c2bc31ed-1706025088956",
    "referencePeriod": {
        "startDate": "2012-09-27T00:00:00.00Z",
        "endDate": "2016-09-27T00:00:00.00Z"
    },
    "transferDate": "2024-01-24T00:00:00.00Z",
```

```
        "transferType": "API",
    "nbEntries": 2,
    "feedbacks": [            {
                "source": "http://referrerdomain.org/information-services/survey-long",
                "category": "Information",
                "survey": {
                    "userFriendliness": 1,
                    "accuracy": 1,
                    "comprehensiveness": 1,
                    "clarity": 1,
                    "easyFinding": 1,
                    "structure": 1,
                    "upToDate": 1,
                    "lastUpdate": "Yes",
                    "ownership": "Yes",
                    "legalActs": "Yes",
                    "englishAvailability": "Yes"
                }
        },
        {
                "source": "http://referrerdomain.org/information-services/survey-long",
                "category": "Information",
                "survey": {
                    "userFriendliness": 1,
                    "accuracy": 1,
                    "comprehensiveness": 1,
                    "clarity": 1,
                    "easyFinding": 1,
                    "structure": 1,
                    "upToDate": 1,
                    "lastUpdate": "Yes",
                    "ownership": "Yes",
                    "legalActs": "Yes",
                    "englishAvailability": "Yes"
                }
        }
    ]
}
```

Service	API endpoint URL
Online Procedure 2nd level survey PRODUCTION	https://collect.youreurope.europa.eu/v1/feedback/quality/survey/batch
Online Procedure 2nd level survey ACCEPTANCE	https://collect.sdgacceptance.eu/v1/feedback/quality/survey/batch
Method	POST

Example of payload

```
{
    "uniqueId": "eb9566db-a7f8-4da5-a66f-6a07c2bc31ed-1706025088956",
    "referencePeriod": {
        "startDate": "2012-09-27T00:00:00.00Z",
        "endDate": "2016-09-27T00:00:00.00Z"
    },
    "transferDate": "2024-01-24T00:00:00.00Z",
    "transferType": "API",
    "nbEntries": 2,
    "feedbacks": [        {
            "source": "http://referrerdomain.org/online-procedures/survey-long",
            "category": "Procedure",
            "survey": {
                "englishAvailability": "Yes",
                "easiness": 1,
                "nationalAuthentication": "Yes",
                "complianceEvidence": "Yes",
                "onlinePayment": "Yes"
            }
        },
        {
```

```
            "source": "http://referrerdomain.org/online-procedures/survey-long",
            "category": "Procedure",
            "survey": {
                "englishAvailability": "Yes",
                "easiness": 1,
                "nationalAuthentication": "Yes",
                "complianceEvidence": "Yes",
                "onlinePayment": "Yes"
            }
        }
    ]
}
```

Service	API endpoint URL
Assistance Services 2nd level survey PRODUCTION	https://collect.youreurope.europa.eu/v1/feedback/quality/survey/batch
Assistance Services 2nd level survey ACCEPTANCE	https://collect.sdgacceptance.eu/v1/feedback/quality/survey/batch
Method	POST
Example of payload	

```
{
    "uniqueId": "eb9566db-a7f8-4da5-a66f-6a07c2bc31ed-1706025088956",
    "referencePeriod": {
        "startDate": "2012-09-27T00:00:00.00Z",
        "endDate": "2016-09-27T00:00:00.00Z"
    },
    "transferDate": "2024-01-24T00:00:00.00Z",
    "transferType": "API",
```

```json
    "nbEntries": 2,
    "feedbacks": [          {
            "source": "http://referrerdomain.org/assistance-services/survey-
long?id=123",
            "category": "Assistance",
            "survey": {
                "clearOffer": 1,
                "easiness": 1,
                "responsiveness": 1,
                "delays": "Yes",
                "onlinePayment": "Yes"
            }
        },
        {
            "source": "http://referrerdomain.org/assistance-services/survey-
long?id=123",
            "category": "Assistance",
            "survey": {
                "clearOffer": 1,
                "easiness": 1,
                "responsiveness": 1,
                "delays": "Yes",
                "onlinePayment": "Yes"
            }
        }
    ]
}
```

7. JSON FILES NAMING CONVENTION

It is strongly recommended to assign JSON files a name equal to the value of the unique ID used to transmit the files through the API. This would make easier searching for a given file in the history log.

Example:

UniqueID used to send the file: ab87622f-81f5-44e1-8e36-8c819d360509-1622434496526

File name: ab87622f-81f5-44e1-8e36-8c819d360509-1622434496526.json

8. SDG APIs ERROR CODES

Error codes common for all APIs:

Status code	Error message	Action
403	Forbidden	Check if URL is valid
403	Missing Authentication Token	Check if URL is valid
403	User is not authorized to access this resource with an explicit deny	Check APIkey provided in headers
401	Unauthorized	Please provide x-api-key in headers

Error codes common for statistic APIs

Status code	Error message	Action
400	Bad request: invalid request, you are missing the parameter body	Request is missing body
400	Bad request: uniqueId is required	Request body needs to have uniqueId parameter
400	Bad request: referencePeriod is required	Request body needs to have referencePeriod parameter
400	Bad request: transferDate is required	Request body needs to have transferDate parameter
400	Bad request: nbEntries is required	Request body needs to have nbEntries parameter
400	Bad request: sources is required	Request body needs to have sources parameter
400	Bad request: transferType is required	Request body needs to have transferType parameter
400	Bad request: uniqueId is not string	uniqueId parameter needs to be string e.g. "ab2c"
400	Bad request: transferDate is not a valid ISO date time	transferDate needs to be in valid iso format e.g. "2020-08-06T14:10:50Z"
400	Bad request: nbEntries is not integer	nbEntries needs to be a number e.g. 7
400	Bad request: startDate is required	Reference period needs to be an object and have startDate parameter
400	Bad request: startDate is not a valid ISO date time	startDate needs to be in valid iso format e.g. "2020-08-06T14:10:50Z"
400	Bad request: endDate is required	Reference period needs to be an object and have endDate parameter

400	Bad request: endDate is not a valid ISO date time	endDate needs to be in valid iso format e.g. "2020-08-06T14:10:50Z"
400	Bad request: sources is not an array	sources parameter needs to be an array
400	Bad request: received x sources instead of expected y	Number of elements in sources array and number in nbEntries do not match. Modyfing nbEntries to match expected number will fix error.
400	Bad request: sourceURL is required	At least one of the sources does not have parameter sourceURL
400	Bad request: statistics is required	At least one of the sources does not have parameter statistics
400	Bad request: statistics is not an array	statistics parameter needs to be an array
400	Bad request: transferType (x) is outside of allowed range (API,Manual)	transferType parameter needs to be set to "API" or "Manual"
400	Bad request: Unexpected fields found:x	Request has parameter x not included in specification, remove parameter x
400	Bad request: transferDate is in the future	transferDate cannot be set to future date
400	Bad request: startDate is in the future	startDate cannot be set to future date
400	Bad request: endDate is in the future	endDate cannot be set to future date
400	Bad request: Start-date must be the first day of the month	Start-date must be the first day of the month Start Date: "2023-02-01T18:00:00.000Z"
400	Bad request: End-date must be the last day of the same month as start-date	End-date must be the last day of the same month as start-date End Date: "2023-02-28T18:00:00.000Z"

Assistant Service Statistic API specific errors

Status code	Error message	Action
400	Bad request: nbRequests is required	At least one statistic object does not have nbRequests parameter
400	Bad request: categoryOfUser is required	At least one statistic object does not have categoryOfUser parameter
400	Bad request: subjectMatter is required	At least one statistic object does not have subjectMatter parameter

400	Bad request: situationOfUser is required	At least one statistic object does not have situationOfUser parameter
400	Bad request: avgResponseTime is required	At least one statistic object does not have avgResponseTime parameter
400	Bad request: nbRequests is not integer	nbRequests needs to be a number e.g. 7
400	Bad request: categoryOfUser (x) is outside of allowed range (citizen,business)	categoryOfUser was set to x instead of allowed "citizen" or "business"
400	Bad request: situationOfUser (x) is outside of allowed range (cross-border,national)	situationOfUser was set to x instead of allowed "cross-border" or "national"
400	Bad request: subjectMatter (x) is outside of allowed range (Filling in online form/application or follow-up of the application,Start up a business (including company) registration),Business operation (permits, authorisations, notifications),Social security, relations employer/employee,Taxation,Business termination/liquidation,Regulated professions,Functioning of e-services)	subjectMatter was set to x instead of allowed values stated in message e.g. "Functioning of e-services"
400	Bad request: avgResponseTime is not integer	avgResponseTime needs to be a number e.g. 7
400	Bad request: sub-subjectMatter is required	For stated subjectMatter sub-subjectMatter is required
400	Bad request: sub-subjectMatter (x) is outside of allowed range (Business services,Construction,Culture,Sport,Tourism, Hotel, restaurant, cafes,Training and education,Retail and wholesale,Customs services,Rental services,Real estate)	sub-subjectMatter was set to x instead of allowed values stated in message e.g. "Real estate"

Information services statistic specific API

Status code	Error message	Action
400	Bad request: nbVisits is required	At least one statistic object does not have nbVisits parameter
400	Bad request: originatingCountry is required	At least one statistic object does not have originatingCountry parameter
400	Bad request: deviceType is required	At least one statistic object does not have deviceType parameter
400	Bad request: deviceType (x) is outside of allowed range (PC,Tablet,Smartphone,Others)	deviceType was set to x instead of allowed "PC", "Tablet", "Smartphone", "Others"

400	Bad request: nbVisits is not integer	nbVisits needs to be a number e.g. 7

Errors for Feedback on quality API

Status code	Error message	Action
400	Bad request: invalid request, you are missing the parameter body	Request is missing body
400	Bad request: source is required	Request body needs to have source parameter
400	Bad request: source is not a valid URL	Source should be a valid URL
400	Bad request: category is required	Request body needs to have category parameter
400	Bad request: category (x) is outside of allowed range (Information,Procedure,Assistance)	category was set to x instead of allowed "Information", "Procedure" or "Assistance"
400	Bad request: rating is required	Request body needs to have rating parameter
400	Bad request: rating is not integer	rating needs to be a number e.g. 7
400	Bad request: foundInformation is required	Request body needs to have foundInformation parameter
400	Bad request: foundInformation (x) is outside of allowed range (,Yes,No,Partly)	foundInformation was set to x instead of allowed values stated in message e.g. "Yes"
400	Bad request: helpUsImprove is not string	helpUsImprove parameter needs to be string e.g. "ab2c"

Errors for Feedback on quality in bulk API

Status code	Error message	Action
400	Bad request: invalid request, you are missing the parameter body	Request is missing body
400	Bad request: uniqueId is required	Request body needs to have uniqueId parameter
400	Bad request: uniqueId is not string	uniqueId parameter needs to be string e.g. "ab2c"
400	Bad request: referencePeriod is required	Request body needs to have referencePeriod parameter
400	Bad request: referencePeriod.startDate is required	Reference period needs to be an object and have startDate parameter

400	Bad request: referencePeriod.startDate is not a valid ISO date time	startDate needs to be in valid iso format e.g. "2020-08-06T14:10:50Z"
400	Bad request: referencePeriod.endDate is required	Reference period needs to be an object and have endDate parameter
400	Bad request: referencePeriod.endDate is not a valid ISO date time	endDate needs to be in valid iso format e.g. "2020-08-06T14:10:50Z"
400	Bad request: transferDate is required	Request body needs to have transferDate parameter
400	Bad request: transferDate is not a valid ISO date time	transferDate needs to be in valid iso format e.g. "2020-08-06T14:10:50Z"
400	Bad request: transferType is required	Request body needs to have transferType parameter
400	Bad request: transferType (x) is outside of allowed range (API,Manual)	transferType parameter needs to be set to "API" or "Manual"
400	Bad request: nbEntries is required	Request body needs to have nbEntries parameter
400	Bad request: nbEntries is not integer	nbEntries needs to be a number e.g. 7
400	Bad request: feedbacks is required	Request body needs to have feedbacks parameter
400	Bad request: feedbacks is not an array	feedbacks parameter needs to be an array
400	Bad request: received x sources instead of expected y	Number of elements in sources array and number in nbEntries do not match. Modyfing nbEntries to match expected number will fix error.
400	Bad request: feedbacks[x].source is required	Feedback number x needs to have source parameter
400	Bad request: feedbacks[x].source is not a valid URL	Feedback number x has source that should be a valid URL
400	Bad request: feedbacks[x].category is required	Feedback number x needs to have category parameter
400	Bad request: feedbacks[x].category (y) is outside of allowed range (Information,Procedure,Assistance)	In feedback number x category was set to y instead of allowed "Information", "Procedure" or "Assistance"
400	Bad request: feedbacks[x].rating is required	Feedback number x needs to have rating parameter
400	Bad request: feedbacks[x].rating is not integer	In feedback number x rating needs to be a number e.g. 7

Errors for Feedback survey API

Status code	Error message	Action
400	Bad request: invalid request, you are missing the parameter body	Request is missing body
400	Bad request: source is required	Request body needs to have source parameter
400	Bad request: source is not a valid URL	Source should be a valid URL
400	Bad request: category is required	Request body needs to have category parameter
400	Bad request: category (x) is outside of allowed range (Information,Procedure,Assistance)	category was set to x instead of allowed "Information", "Procedure" or "Assistance"
400	Bad request: survey is required	Request body needs to have survey parameter
400	Bad request: survey.englishAvailability is required	survey needs to be an object and have englishAvailability parameter
400	Bad request: englishAvailability (x) is outside of allowed range (,Yes,No,Partly)	englishAvailability was set to x instead of allowed values stated in message e.g. "Yes"
400	Bad request: survey.easiness is required	survey needs to be an object and have easiness parameter
400	Bad request: survey.easiness (x) is outside of allowed range (,1,2,3,4,5)	englishAvailability was set to x instead of allowed values stated in message e.g. 1
400	Bad request: survey.nationalAuthentication is required	survey needs to be an object and have nationalAuthentication parameter
400	Bad request: survey.nationalAuthentication (x) is outside of allowed range (,Yes,No,Not applicable)	nationalAuthentication was set to x instead of allowed values stated in message e.g. "Yes"
400	Bad request: survey.complianceEvidence is required	survey needs to be an object and have complianceEvidence parameter
400	Bad request: survey.complianceEvidence (x) is outside of allowed range (,Yes,No,Partly,Not applicable)	complianceEvidence was set to x instead of allowed values stated in message e.g. "Yes"
400	Bad request: survey.onlinePayment is required	survey needs to be an object and have onlinePayment parameter
400	Bad request: survey.onlinePayment (x) is outside of allowed range (,Yes,No,Not applicable)	onlinePayment was set to x instead of allowed values stated in message e.g. "Yes

Errors for Feedback on quality survey in bulk API

Status code	Error message	Action
400	Bad request: invalid request, you are missing the parameter body	Request is missing body
400	Bad request: uniqueId is required	Request body needs to have uniqueId parameter
400	Bad request: uniqueId is not string	uniqueId parameter needs to be string e.g. "ab2c"
400	Bad request: referencePeriod is required	Request body needs to have referencePeriod parameter
400	Bad request: referencePeriod.startDate is required	Reference period needs to be an object and have startDate parameter
400	Bad request: referencePeriod.startDate is not a valid ISO date time	startDate needs to be in valid iso format e.g. "2020-08-06T14:10:50Z"
400	Bad request: referencePeriod.endDate is required	Reference period needs to be an object and have endDate parameter
400	Bad request: referencePeriod.endDate is not a valid ISO date time	endDate needs to be in valid iso format e.g. "2020-08-06T14:10:50Z"
400	Bad request: transferDate is required	Request body needs to have transferDate parameter
400	Bad request: transferDate is not a valid ISO date time	transferDate needs to be in valid iso format e.g. "2020-08-06T14:10:50Z"
400	Bad request: transferType is required	Request body needs to have transferType parameter
400	Bad request: transferType (x) is outside of allowed range (API,Manual)	transferType parameter needs to be set to "API" or "Manual"
400	Bad request: nbEntries is required	Request body needs to have nbEntries parameter
400	Bad request: nbEntries is not integer	nbEntries needs to be a number e.g. 7
400	Bad request: feedbacks is required	Request body needs to have feedbacks parameter
400	Bad request: feedbacks is not an array	feedbacks parameter needs to be an array
400	Bad request: received x sources instead of expected y	Number of elements in sources array and number in nbEntries do not match. Modyfing nbEntries to match expected number will fix error.
400	Bad request: feedbacks[x].source is required	Feedback number x needs to have source parameter
400	Bad request: feedbacks[x].source is not a valid URL	Feedback number x has source that should be a valid URL

400	Bad request: feedbacks[x].category is required	Feedback number x needs to have category parameter
400	Bad request: feedbacks[x].category (y) is outside of allowed range (Information,Procedure,Assistance)	In feedback number x category was set to y instead of allowed "Information", "Procedure" or "Assistance"
400	Bad request: feedbacks[x].survey is required	Feedback number x needs to have survey parameter
400	Bad request: feedbacks[x].survey.englishAvailability is required	Feedback number x survey needs to be an object and have englishAvailability parameter
400	Bad request: feedbacks[x].survey.englishAvailability (y) is outside of allowed range (,Yes,No,Partly)	Feedback number x survey's englishAvailability was set to y instead of allowed values stated in message e.g. "Yes"
400	Bad request: feedbacks[x].survey.easiness is required	Feedback number x survey needs to be an object and have easiness parameter
400	Bad request: feedbacks[x].survey.easiness (y) is outside of allowed range (,1,2,3,4,5)	Feedback number x survey's englishAvailability was set to y instead of allowed values stated in message e.g. 1
400	Bad request: feedbacks[x].survey.nationalAuthentication is required	Feedback number x survey needs to be an object and have nationalAuthentication parameter
400	Bad request: feedbacks[x].survey.nationalAuthentication (y) is outside of allowed range (,Yes,No,Not applicable)	Feedback number x survey's nationalAuthentication was set to y instead of allowed values stated in message e.g. "Yes"
400	Bad request: feedbacks[x].survey.complianceEvidence is required	Feedback number x survey needs to be an object and have complianceEvidence parameter
400	Bad request: feedbacks[x].survey.complianceEvidence (y) is outside of allowed range (,Yes,No,Partly,Not applicable)	Feedback number x survey's complianceEvidence was set to y instead of allowed values stated in message e.g. "Yes"
400	Bad request: feedbacks[x].survey.onlinePayment is required	Feedback number x survey needs to be an object and have onlinePayment parameter
400	Bad request: feedbacks[x].survey.onlinePayment (y) is outside of allowed range (,Yes,No,Not applicable)	Feedback number x survey's onlinePayment was set to y instead of allowed values stated in message e.g. "Yes

9. SWAGGER FILES

In the zip file you can find :

Unique ID swagger	unique-id.yml
Statistics on Information Services swagger v2	statistics-information-v2.yml
Statistics on Assistance Services swagger v2	statistics-assistance-v2.yml
Feedback on Quality – 1st level swagger	feedback-quality.yml
Feedback on Quality – 2nd level swagger	feedback-quality-survey.yml
Assistance Services – Subject matters	subjects-matters.json