



Logius
*Ministerie van Binnenlandse Zaken en
Koninkrijksrelaties*

Digipoort Service Description WUS 2.0 Companies Delivery

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1 Introduction

1.1 Objective and target group

This document describes the delivery of structured electronic messages through Digipoort to a recipient.

This document is intended for developers of web services that enable structured messages to be delivered from Digipoort to the recipient. This document describes how the Delivery Service is to be realised to this end.


Note: the specification of the message content to be delivered (the so-called payload) does not form part of this document. The specification of this payload differs for each message type.

Generic and specific

The services offered by Digipoort have a 'generic' interface. In other words, that they can be used to exchange different 'message types'. Other services can use these generic services. That is done, for example, through the services of DigiProcurement and its predecessor, E-invoicing.

This document only describes the generic aspects of the service. Additional requirements may be stipulated by other specific services, for example, for certain attributes and/or values to be awarded that have to be included in the generic message. In addition, specific services have their own 'substantive' message (for example, an invoice under DigiProcurement), for which separate requirements can be stipulated. More information about similar additional requirements can be found in the documentation relating to the specific service.

Differences with prior versions

 Number of (optional) elements added to the response and request;
"Error List" has been renamed "Findings List"; in addition to errors, the list can also include other findings from the handling process.

1.2 Outline of the document

This document forms part of a series of documents that provide an insight into the use of Digipoort. The document "Overview of Digipoort documentation" includes a description of how the various documents are interconnected.

The *Interface description WUS 2. Companies _v1.2* document outlines the general agreements with regard to communication, security and the standards of the interface to be used.

This service description is composed as follows:

- The first chapter contains general information such as version history and contact information;
- The second chapter broadly describes the delivery operation.
- The third chapter describes the structure and content of the SOAP message;
- The fourth chapter describes the web service in more detail.

All individual attachments are examples of SOAP requests, responses and the detail specification of the web service (the WSDL) that are available.

1.3 Status

This document describes the Digipoort Delivery Service. Expectations are that the open standards that are used will continue to develop in future years and that the communication need will also be subject to change.

The consequence of this is that, during future years, there will be new releases of Digipoort. That can have an effect on the interfaces. Logius is aiming to develop new releases in close consultation with the market.

To enable parties to quickly and easily use Digipoort, a decision has been made to use open standards and existing tools as far as possible.

Examples of that are the use of the SOAP protocol and the application of PKI-overheid certificates.

1.4 Assistance

Information relating to assistance with the use of Digipoort services is available on the website:

www.logius.nl/producten/gegevensuitwisseling/digipoort.

2 Delivery of electronic messages

2.1 Introduction

This chapter provides an overview of the delivery of electronic messages by Digipoort to a recipient (company). The message content is delivered to this party by means of the recipient's Delivery Service.

2.2 Course of the session

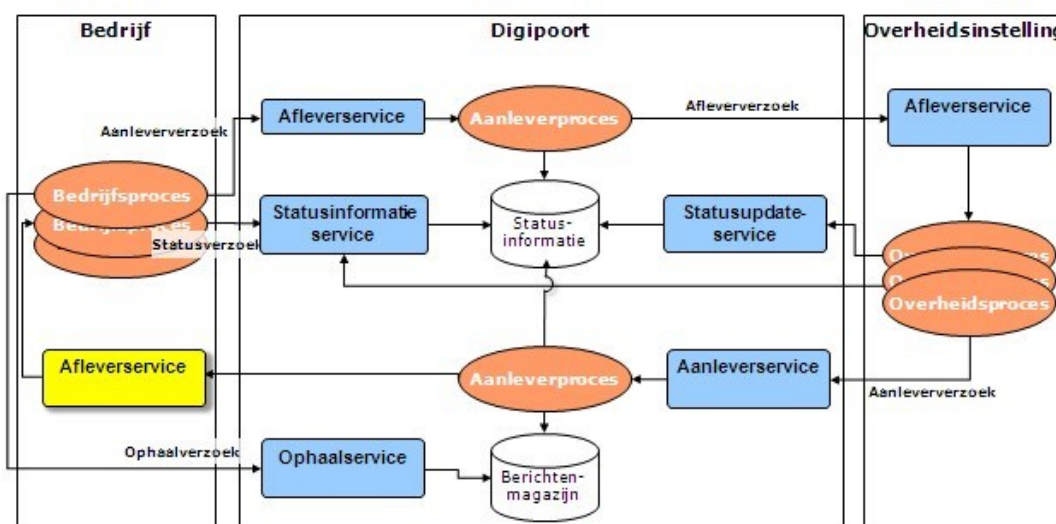


Figure 1 Position of the Delivery Service ('afleverservice') for companies marked in yellow.

The figure above shows an overview of the position of the Delivery Service ('Afleverservice') with respect to Digipoort. Using the Delivery Service, Digipoort can deliver messages supplied by a government party, to a company. To this end, the company has to set up the Delivery Service. The message can also be retrieved using the Retrieve Service ('ophaalservice').

Once the delivery has been completed successfully, Digipoort will receive a response from the Delivery Service (SOAP response).

If for a specific reason the delivery process cannot be completed in full, Digipoort will receive an error message from the Delivery Service (SOAP fault).

Delivery response and delivery errors are recorded in Digipoort as status information. The supplier can check the result of the delivery using the Status Information Service ('statusinformatieservice').

English – Dutch naming

Please note that the naming of the specific Digipoort services and their elements uses a combination of Dutch names in conjunction with the English naming convention for specific types of elements.

Example:

The Dutch name for delivering is 'afleveren(en)' and the English convention for naming services is that their names end with 'service'. So the delivery service is named 'afleverservice'. The same goes for the message that you can send to the afleverservice. This supply request is a combination of the Dutch 'aflever' and English 'request', which forms 'afleverRequest'.

The specific elements within an afleverRequest, afleverResponse use a Dutch naming convention.

2.3 Tasks of the Delivery Service

The Delivery Service ('afleverservice') performs the following tasks:

- Validate the Delivery Request ('afleverRequest');
- Process the Delivery Request;
- Send the Delivery Response ('afleverResponse').

2.3.1 Validate the Delivery Request

Digipoort sends a Delivery Request using a pre-defined structure. This structure is specified in an XML Diagram (XSD) that is incorporated in the WSDL that formally describes the Delivery Service. The Delivery Request is validated using the XSD.

The WSDL for the Delivery Service has been specified in a separate file, which is attached to this service description.

2.3.2 Process the Delivery Request

Once the Delivery Request has been tested against the specifications, the Delivery Service can record the message content and other information from the Delivery Request for further processing.

2.3.3 Send Delivery Response

When the Delivery Request fulfils all requirements and the necessary information has been processed, the Delivery Response is sent to Digipoort.

3 SOAP message

3.1 Structure of the SOAP Request

The SOAP request contains the Delivery Request ('aanleverRequest'). The figure below shows the compilation of the SOAP request. This depends on whether or not MTOM is used (message optimisation; for more information, see the document *2.0 Digipoort Interface Description Companies document*):

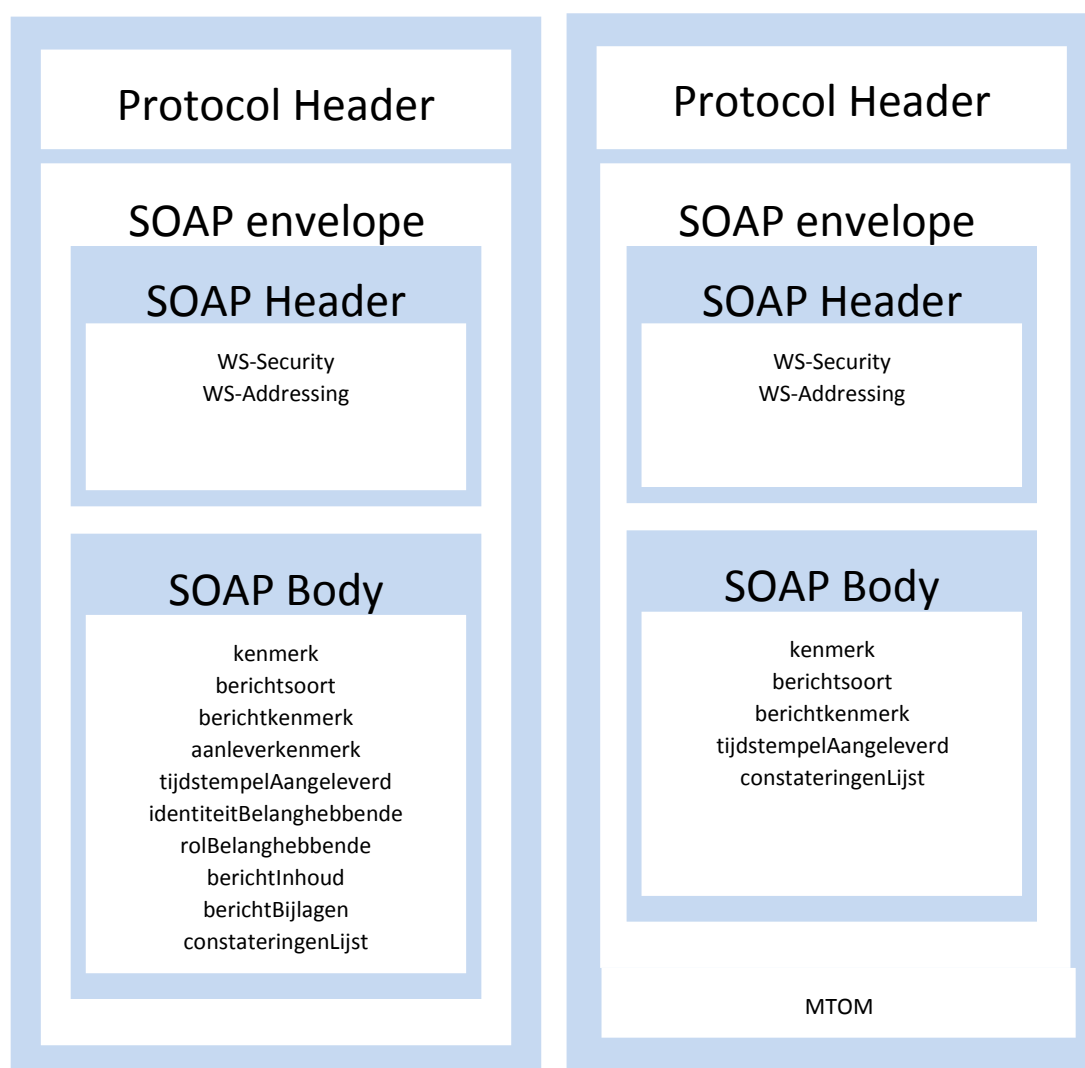


Figure 2 SOAP requests for the Delivery Service

The SOAP message comprises:

- The transport protocol header.
- The SOAP envelope in which there is:
 - the SOAP header;
 - the SOAP body.
- the message content (this can be sent in-line or through MTOM).

3.2 Header elements

The WS Security and WS Addressing elements are detailed in the *Interface Description Companies document: WUS 2.0*

3.3 Structure of the delivery request (*SOAP request*)

The SOAP body contains the Delivery Request. The functional data (also called the business document) can form part of this. If MTOM is used, the substantive data is included in a separate "MIME part" of the message.

A Delivery Request contains the following elements:

3.3.1 *kenmerk (reference number)*

The reference that uniquely identifies the Digipoort handling process for receiving, processing en ultimately delivering a message.

3.3.2 *berichtsoort (message type)*

The message type element describes the type of handling process that has been performed based on the original Supply Request.

3.3.3 *aanleverkenmerk (supplier reference number)*

The supplier reference number is given by the supplier of the original Supply Request. This reference is maintained throughout the Digipoort process and enables the supplier to ling return messages to the Supply Request.

3.3.4 *tijdstempelAangeleverd (time stamp supplied)*

The date and time at which Digipoort successfully received the Supply Request.

3.3.5 *identiteitBelanghebbende (identity stakeholder)*

The stakeholder's identity is a number by means of which the person to whom the content of the notification relates (or who is responsible for taking cognisance hereof) can be identified. This identity can be used to

make a match with an identity which may appear in the business document. The stakeholder can therefore also be a party other than the supplier or inquirer of messages.

3.3.6 *rolBelanghebbende (role stakeholder)*

A clarification of the role of the stakeholder in the handling process. In this case, a distinction can be made between the various roles that a stakeholder can have in the process.

3.3.7 *berichtInhoud (message content)*

The message content is that part of the message that contains the actual business process information.

The business document contains the (structured) information that is intended for the recipient. The specification in this document does not form part of this service description. The specification differs in each message type and is made available by the person responsible for the handling process. The maximum size of the message content is 20 MB (base64 coded). This is the total size of the messages including possible attachments. For each handling process, a smaller maximum size can be stipulated.

3.3.8 *(berichtBijlagen) message attachments)*

One or more attachments to the business document. Whether or not attachments can actually be added depends on the handling process.

3.3.9 *constateringLijst (findings list)*

The findings list contains an overview of aspects that were found during the handling process. For example, errors that have not resulted in interruption of the process, but that may be of importance in the further processing. Each finding consists of a code and a description. These are described in a separate document.

3.4 Structure of the SOAP Response

The SOAP response contains the Delivery Response ('afleverResponse'). This consists of the following elements:

Element	Clarification
kenmerk (reference number)	The unique identification of an instance of the handling process. For each supply request for which there is not yet a unique reference, a new handling process is started. The reference can be used when requesting statuses.

berichtsoort (message type)	The message type element describes the type of handling process that is initiated with a supply request. The message type element that is given has to be a type that is known within Digipoort.
berichtkenmerk (message attribute)	The unique reference (message ID) of the supply request that has resulted in the handling process being initiated.
tijdstempelAfgeleverd (time stamp delivered)	The date and time at which the delivery request is delivered to the recipient.
constateringenLijst (findings list)	The finding list contains an overview of aspects that were found during the handling process.

Most elements in the Delivery Response ('afleverResponse') have been copied directly from the Delivery Request. This improves the traceability of request and response messages which belong together, for example, in archives.

3.5 Signing a message (WS-Security)

Digipoort will sign the body and the header elements of a Delivery Request.

Upon receipt, a recipient has to sign the body and header elements of the Delivery Response. These have to be signed using an electronic signature and using a PKIoverheid certificate issued by a Certificate Service Provider CSP (for the *pre-production* version of this service, *test certificates* can be used). The certificate, the signature and the algorithms that are used have to be included as WS Security elements in the header. This is described in more detail in the *Interface Description WUS 2.0 Companies document*.

3.6 Signing the message content (enveloping signature)

Depending on the message type, the message content can also be signed using a PKIoverheid certificate. The signature can be checked by the company to which the message is delivered. Digipoort does not check this signature.

The signature is placed as described in the XML-DSig standard (<http://www.w3.org/TR/xmldsig-core/>). The signature is placed around the content as a so-called "Enveloping signature".

3.7 MTOM

The content data are recorded in the "message content" element. It is also possible to include additional attachments. Attachments can be included in the message in two ways: as Base64 coded binary data, or based on MTOM. When using MTOM, this is also sometimes referred to as an optimised message. MTOM is described in WS-I Basic Profile 1.2 (see <http://www.w3.org/TR/soap12-mtom/>). For more information, see the document *2.0 Digipoort Interface Description Companies*.

4 Details WUS 2.0 Companies - Delivery Service

4.1 Type of messages

The Delivery Service has three types of messages:

Division	Clarification
afleverRequest (SOAP request)	a request message to the recipient's Delivery Service with which structured messages from Digipoort can be delivered to the recipient.
afleverResponse (SOAP response)	a response message that is sent back to Digipoort when the structured message has been processed successfully by the Delivery Service.
SOAP fault	an error message that is sent back to Digipoort when an error is found by the Delivery Service.

The structure of the messages is described in the WSDL that is attached as a separate file to this Service description.

4.2 SOAP Request

For an example see document:

- *voorbeeldRequest_Digipoort_WUS 2.0 Bedrijven_Afleveren_v1.2.xml*

4.3 SOAP Response

For an example see document:

- *voorbeeldResponse_Digipoort_WUS 2.0 Bedrijven_Afleveren_1.2.xml*

4.4 SOAP Fault

The following elements are included in the SOAP fault message:

Element	Clarification
Faultcode	Field that indicates the type of error. There are two options for Digipoort, which are: Client: Digipoort caused the error. Server: The customer caused the error.
Faultstring	Shows the nature of the error in a language which people can understand.
Faultactor	A description of what caused the error.
detail/foutcode (error code)	A unique code with which an error can be identified.
detail/foutomschrijving (error description)	A description of the error.

If errors are present in the message, for example when the signature is missing or when information is missing, a SOAP fault is generated.

The following error codes can be included by the buyer's Delivery Service in the "SOAP fault" message:

Error code	Elements	
AFO100	Faultcode	Client
	Faultstring	General error
	Faultactor	Digipoort
	Detail	
	foutcode	AFO100
	foutomschrijving	<p>The message cannot be processed.</p> <p><contact information if any of the government participant></p> <p>(Optional) Additional information: <exception message></p>
AFO400	Faultcode	Server
	Faultstring	Technical error
	Faultactor	Customer
	Detail	
	foutcode	AFO400
	foutomschrijving	<p>A technical error occurred. Try again later or contact us.</p> <p><contact information, if any, of the government participant></p>

NB:when Digipoort fault AFO100 is found in a SOAP fault, this specific fault code is translated into process status 410. As a result of that, Digipoort does not try to redeliver the message (to which the fault has been returned as a response). Other error codes in a SOAP fault are translated into a process status 420, where the 'retry mechanism' is activated.

For an example see the attached document:

- *voorbeeldSOAPFault_Digipoort_WUS 2.0 Bedrijven-Afleveren_v1.2.xml*

The possible error messages are described in the attached documents *Error messages and status notifications Digipoort v1.2*.