

Interface WWKS2

Interface between storage and retrieval systems
and pharmacy IT systems

Revision 1.0.5

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0 General Information

0.1 Revision history

Document Revision	Date	Changes	Author
1.0	26.06.2017	Neue Dokumentation, basierend auf BD Rowa WWKS2 Spezifikation 6.0 und 6.7 Entwurf	Tim Grothe Thomas Bagh
1.0.1	04.08.2017	Einführung von ProductCode als eigenständiges Element, Namensgebung für OutputInfo und StockDeliveryInfo, Neue Status Queued, InProcess, PartialDispense für OutputMessage, Entfernung des InitiateInput-Dialogs,	Andreas Kohlhof
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1.0.4	20.04.2018	Hinweis bezüglich der ScanCode-Kodierung bei Securpharm 2D-Codes hinzugefügt sowie Beispiel bei InputRequest entsprechend angepasst.	Tim Grothe
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Document Revision	Date	Changes	Author
		6.1.1 Hinweis auf reservierte Nummernbereiche entfernt; 6.2.2 „KeepAliveResponse“ in „KeepAliveRequest“ bei Attribut „Id“ korrigiert; 7.1.1 Wertebereich MaxSubItemQuantity angepasst; 8.1.2 Hinweis bei Attribut „State“ hinzugefügt; 8.2 Diagramm „Bestandsaktualisierung“ korrigiert; 8.4.1 Hinweis auf reservierte Nummernbereiche entfernt; 8.5.1 Hinweis auf Sonderstellung der Id „1“ bei manueller Auslagerung hinzugefügt; 8.6.1 P-Flag bei Element „Task“ ergänzt; 8.7 Diagramme angepasst	
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1.0.5	28.06.2018	Korrekturen: 8.3.1 Beschreibung Article Element ergänzt; 8.3.3/8.4.3 Beschreibung Pack.Id korrigiert; 8.4.1/8.4.2/8.4.3 Wertebereich InputSource und InputPoint angepasst 8.4.1 Id und FMDId dem Element Article hinzugefügt; 8.5.1 Beschreibung ArticleId sowie Datentyp des Attributs PackId korrigiert; Beschreibung Label-Element korrigiert; 8.5.2 Datentyp des Attributs SubItemQuantity korrigiert sowie die Datentypen für Label, TemplateId und Content ergänzt;	Andrej Dyck Andreas Kohlhof
1.0.5	03.07.2018	Korrekturen/Ergänzungen: 3 Formulierung: KS agiert stets als Server; 7.2.4 Box-Tag aus Elemente entfernt; 8.1.2 „RetrievalSystem“ bei Component.Type hinzugefügt; 8.2.2 Article.Quantity Wertebereich angepasst; 8.3.2 Hinweis bezüglich Article.Id hinzugefügt; 8.5.1 Auslagerungsprioritäten um „Lowest“ und „Highest“ ergänzt; 8.5.2 Datentyp von PackId angepasst; Übergreifend: StockInputResponse in InputResponse geändert;	Andrej Dyck Sebastian Hennig
1.0.5	30.12.2018	English Translation	

1 Introduction

What is this document about?

This document describes communication between a pharmacy IT system and an automated storage and retrieval system involved in the sales process, via the TCP/IP protocol. The exchanged messages are UTF-8 coded XML messages. The message content is embedded in tags based on the WWKS 2 standard.

Messages are exchanged in both directions, and are used to control sales transactions and inventory movements (stock input and output) in a pharmacy.

This manual sets out the available commands, their usage and syntax. This information enables programmers to ensure successful communication between their pharmacy IT system and a device involved in the sales process via WWKS 2.

Who should read this document?

This document is intended for:

- personnel involved in interfacing a device to a pharmacy IT system
- programmers developing software (such as parsers) to translate between WWKS 2 messages and the pharmacy IT system

Definition of terms

The systems are abbreviated as follows in places within the text:

Abbreviation	Definition
PIS	Pharmacy IT system
ASRS	Automated storage and retrieval system. In the context of this document, an automated storage and retrieval system also means a system comprising multiple interconnected automatic storage machines with or without a shared control computer

2 Pharmacy IT system and automated storage and retrieval system

Operators of automated storage and retrieval systems have a pharmacy IT system by which they build, manage and ship their drug inventories. The inventory management system generates the requests for the automated storage and retrieval system to process.

Typical application cases are:

- Recognition and inputting of medication packs
- Issue of drugs from stock to pharmacy staff when a customer presents a prescription
- Printing of pack labels for individual patients

This is just a small selection of the very many conceivable actions which require the assignment of current medication demand and physical pack transport.

In practice, data transfer for purely informational purposes is also common, e.g.:

- Querying of stock levels

3 Communication between the pharmacy IT system and devices

Depending on the application and device, some protocol elements marked as optional may be required for proper function. Which protocol elements they support is up to the pharmacy IT system and the device. Communication between the pharmacy IT system and the device is via the TCP/IP protocol. The ASRS acts as server and the pharmacy IT system as client.

The device waits for incoming requests from the pharmacy IT system. The data connection is established by the pharmacy IT system only and should remain active as long as the device and pharmacy IT system are in operation. The connection is not established and terminated for each individual action. UTF8-coded XML messages are exchanged in both directions via the link.

Both ASRS and PIS are obliged to minimize processing time of a message, between start of message receiving to final answer, to avoid the caller to block. In most cases, an end user is waiting of the result of a request.

4 Structure of the manual

Breakdown

In diesem Handbuch sind die WWKS 2-Nachrichten in folgende Funktionsgruppen eingeordnet:

This manual assigns WWKS 2 messages to the following function groups:

General messages:

- | | |
|------------------|--|
| ▪ Initialization | Prepare to exchange messages between the pharmacy IT system and device |
| ▪ Keepalive | Check data link |

Article data:

- | | |
|-----------------------|--|
| ▪ Master data | Provision of article information by the pharmacy IT system (optional instead of input dialogue) |
| ▪ Article information | Request for article information, prices and cross-selling data from a device |

Order picking:

- | | |
|---------------------------|--|
| ▪ System status | Poll automated storage and retrieval system readiness |
| ▪ Stock input | Store packs in automated storage and retrieval system |
| ▪ Stock input initiation | Trigger pack input into automated storage and retrieval system |
| ▪ Inventory checking | Check automated storage and retrieval system stock levels |
| ▪ Stock output | Output packs from automated storage and retrieval system |
| ▪ Task status | Poll task processing status |
| ▪ Cancellation | Cancel tasks |
| ▪ Configuration checking | Check configuration of automated storage and retrieval system |
| ▪ Stock location checking | Check stock location information |

Handling of unknown or malformed messages:

- | | |
|-------------------------------|---|
| ▪ Handling of protocol errors | Notification in case of invalid or unsupported messages |
|-------------------------------|---|

Flowcharts

Flowcharts are based on the UML2 standard and depict the flow of messages between the pharmacy IT system and device, and the decisions and actions triggered by these messages. Sequences which are condition-dependent are depicted by branching.

Element tables

The message element tables describe element syntax and permissible values.

The "M/O" column indicates whether the element is mandatory (M) or optional (O).

If an element can be used more than once per message, the fact is mentioned in the description. If this attribute is not mentioned, the element can be used only once.

Examples

An example is presented for each message described. The example messages have fictitious values.

5 Data structures

5.1 Data types

The following data types are used in the messages:

Data type	Description															
Tag	XML tag															
String	<p>Character string (corresponding to the data type <i>string</i> of the W3C specification for the XML scheme)</p> <p>The permissible value ranges are defined as follows: <i>#x9 #xA [#x20-#xD7FF] [#xE000-#xFFFD] [#x10000-#x10FFFF]</i> and each unicode character apart from the surrogate blocks <i>FFFE</i> and <i>FFFF</i>, as specified in the standard ISO/IEC 10646.</p> <p>All control characters (e.g. <i>#x1D</i>) not specified in the ISO standard must be coded with <i>\x00</i>. The zeros represent the respective HEX code. Example: <i>\x1D</i>.</p> <p>These characters must be substituted:</p> <table><tr><td><i>&</i></td><td>by</td><td><i>&amp;</i></td></tr><tr><td><i><</i></td><td>by</td><td><i>&lt;</i></td></tr><tr><td><i>></i></td><td>by</td><td><i>&gt;</i></td></tr><tr><td><i>"</i></td><td>by</td><td><i>&quot;</i></td></tr><tr><td><i>'</i></td><td>by</td><td><i>&apos;</i></td></tr></table>	<i>&</i>	by	<i>&amp;</i>	<i><</i>	by	<i>&lt;</i>	<i>></i>	by	<i>&gt;</i>	<i>"</i>	by	<i>&quot;</i>	<i>'</i>	by	<i>&apos;</i>
<i>&</i>	by	<i>&amp;</i>														
<i><</i>	by	<i>&lt;</i>														
<i>></i>	by	<i>&gt;</i>														
<i>"</i>	by	<i>&quot;</i>														
<i>'</i>	by	<i>&apos;</i>														
String64	<p>As data type String, but limited to 64 characters lengths.</p> <p>Used for ID attributes only.</p>															
Integer 32-bit	<p>32-bit integer (corresponding to the data type <i>int</i> of the W3C specification for the XML scheme)</p> <p>This data type has a syntax comprising a sequence of integers (<i>#x30-#x39</i>).</p>															

	Thousands separators and decimal points are not allowed. The permitted value range covers the numbers between -2147483648 and 2147483647.
Integer 64-bit	64-bit integer (corresponding to the data type <i>long</i> of the W3C specification for the XML scheme) This data type has a syntax comprising a sequence of integers (#x30-#x39). Thousands separators and decimal points are not allowed. The permitted value range covers the numbers between -9223372036854775808 and 9223372036854775807.
Boolean	One of the statements <i>True</i> or <i>False</i>

In some cases, the types described here are restricted if they are used in attributes (e.g. 32-bit integer > 0). This is noted at the relevant locations.

5.2 Message structure

Each message is embedded in the container element *WWKS*, which is constructed according to this scheme:

```
<WWKS Version="2.0" TimeStamp="2013-04-16T11:14:00Z">
</WWKS>
```

The element *WWKS* encloses each individual message. All other elements of a message are subelements of *WWKS*.

The attribute *Version* currently has the value "2.0".

The attribute *TimeStamp* is a time stamp in extended UTC format (coordinated universal time).

In each message, *WWKS* is followed by the "lead" element, which determines the message type.

Example message:

```
<WWKS Version="2.0" TimeStamp="2013-04-16T11:14:00Z">
  <InputRequest Id="1002" Source="999" Destination="100" IsNewDelivery="True">
    <Article>
      <Pack Index="0" DeliveryNumber="463526"
        ScanCode="010415012345678217151231101A234B5\x1D211234567890123456"/>
    </Article>
  </InputRequest>
</WWKS>
```

In the example, the lead element *InputRequest* determines the message type: stock input request for a pack.

InputRequest is followed by additional subelements further specifying the input request.

5.3 Protocol Extensibility

The protocol architecture of WWKS2 follows the open/closed principle. This means that all manufacturers who supports a communication according to a WWKS2 version, assures that

- (a) The behaviour, structure and interpretation of messages and their content will be persistent over time according to the protocol specification and that they may expect this as well from their communication partners (closed protocol).
On the other hand

- (b) Both partners are allowed to transmit any additional message or message attributes that are not part of the defined protocol version without further notice. The communication partner has to ignore this additional content without any system error or communication stop. (Open for protocol enhancements).
The key is that all communication partners assure that all protocol enhancements never change the structure or behaviour of existing implementations.

Example: It is allowed, if the ASRS transmits an additional attribute Pack.Color in the InputRequest. On the other hand, the PIS may transfer additional item master data (eg. Article.IsNarcotic) in the InputResponse.

Following this principle allows to roll out future protocol extensions asynchronously without having technicians of both parties on site in parallel. The new feature is available as soon as both parties have activated their updates independent from each other.

6 Message reference I – general messages

6.1 Initialization

Lead elements

HelloRequest

HelloResponse

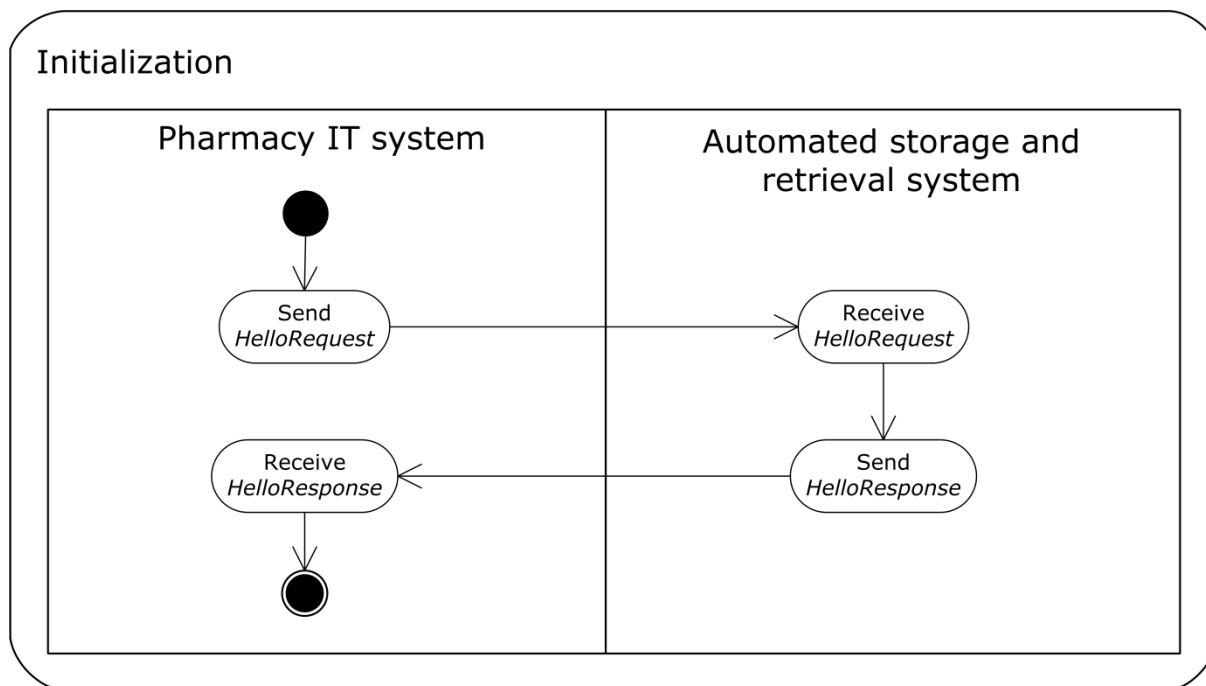
Usage

When the TCP/IP connection between the pharmacy IT system and the automated storage and retrieval system has been made, the pharmacy IT system sends the *HelloRequest* once to prepare for the further communications with the automated storage and retrieval system. The automated storage and retrieval system responds with *HelloResponse*. This initializes the connection, readying it for the exchange of further messages.

HelloRequest and *HelloResponse* can be supplemented by a list of supported WWKS functions. Both systems thereby indicate which WWKS functions they can process. If there is no listing of supported WWKS functions, the receiving system assumes that the sending system supports the full set of WWKS 2.0 messages.

Optionally, a tenant identifier can be sent in the *HelloRequest*. This identifier is used to distinguish between individual pharmacy IT systems if an automated storage and retrieval system is addressed by several pharmacy IT system at once. All subsequent *Request* messages are then processed in the context of this tenant.

Sequence



6.1.1 HelloRequest

Structure

```
<WWKS>
  <HelloRequest>
    <Subscriber>
      <Capability/>
    </Subscriber>
  </HelloRequest>
</WWKS>
```

Elements

Element	M/O	Data type	Description
HelloRequest	M	Tag	Message type
Attributes	M/O	Data type	Description and Values
Id	M	String64	Message ID. This is returned in <i>HelloResponse</i> .

Element	M/O	Data type	Description
Subscriber	M	Tag	Identification of sender (pharmacy IT system)
Attributes	M/O	Data type	Description and Values
Id	M	Integer 32-bit >0	ID of the message sender (here the pharmacy IT system). The ID is used in all further messages to identify their senders and recipients.
Type	M	String	Type of sending system. Possible values: "IMS" for the pharmacy IT system "Robot" for the automated storage and retrieval system
Manufacturer	M	String	Name of the manufacturer of the sending system
ProductInfo	M	String	Name of the software of the sending system
VersionInfo	M	String	Version of the software of the sending system
TenantId	O	String	Tenant identifier of the pharmacy IT system. Is only used if several pharmacy IT systems are connected with an automated storage and retrieval system.

Element	M/O	Data type	Description
Capability	O	Tag	List of supported WWKS 2 functions. This element can be used multiple times.
Attributes	M/O	Data type	Description and Values
Name	M	String	Name of the supported WWKS 2 function. Possible values: "ArticleInfo" "ArticleMaster" "Configuration"

			"InitiateInput" "Input" "KeepAlive" "Output" "Status" "StockDelivery" "StockInfo" "StockLocationInfo" "TaskCancelOutput" "OutputInfo" "StockDeliveryInfo" These designations correspond to the first part of the name of the lead message elements. Example: "Input" means that <i>InputRequest</i> , <i>InputResponse</i> and <i>InputMessage</i> are supported.
--	--	--	---

Example

```

<WWKS Version="2.0" TimeStamp="2013-04-16T11:14:00Z">
  <HelloRequest Id="1001">
    <Subscriber Id="100" Type="IMS" Manufacturer="IT-SysProvider"
      ProductInfo="PharmaProg 2013" VersionInfo="1.4.0"
      TenantId="XAB12345">
      <Capability Name="KeepAlive"/>
      <Capability Name="Status"/>
      <Capability Name="Input"/>
      <Capability Name="InitiateInput"/>
      <Capability Name="ArticleMaster"/>
      <Capability Name="StockDelivery"/>
      <Capability Name="StockInfo"/>
      <Capability Name="Output"/>
      <Capability Name="TaskCancelOutput"/>
      <Capability Name="Configuration"/>
      <Capability Name="StockLocationInfo"/>
    </Subscriber>
  </HelloRequest>
</WWKS>

```

6.1.2 HelloResponse

Structure

```

<WWKS>
  <HelloResponse>
    <Subscriber>
      <Capability/>

```

```

</Subscriber>
</HelloResponse>
</WWKS>

```

Elements

Element	M/O	Data type	Description
HelloResponse	M	Tag	Message type
Attributes	M/O	Data type	Description and Values
Id	M	String64	ID sent in the <i>HelloRequest</i>

Element	M/O	Data type	Description
Subscriber	M	Tag	Identifier of the subscriber
Attributes	M/O	Data type	Description and Values
Id	M	Integer 32-bit >0	ID of the message sender (here the automated storage and retrieval system). The ID is used in all further messages to identify their senders and recipients.
Type	M	String	Type of sending system. Possible values: "IMS" for the pharmacy IT system "Robot" for the automated storage and retrieval system
Manufacturer	M	String	Name of the manufacturer of the sending system
ProductInfo	M	String	Name of the software of the sending system
VersionInfo	M	String	Version of the software of the sending system

Element	M/O	Data type	Description
Capability	O	Tag	List of supported WWKS 2 functions. This element can be used multiple times.
Attributes	M/O	Data type	Description and Values
Name	M	String	Name of the supported WWKS 2 function. Possible values: "ArticleInfo" "ArticleMaster" "Configuration" "InitiateInput" "Input" "KeepAlive" "Output" "Status" "StockDelivery" "StockInfo" "StockLocationInfo" "TaskCancelOutput" "OutputInfo" "StockDeliveryInfo"

			<p>These designations correspond to the first part of the name of the lead message elements.</p> <p>Example:</p> <p>"Input" means that <i>InputRequest</i>, <i>InputResponse</i> and <i>InputMessage</i> are supported.</p>
--	--	--	---

Example

```
<WWKS Version="2.0" TimeStamp="2013-04-16T11:14:00Z">
  <HelloResponse Id="1001">
    <Subscriber Id="999" Type="Robot" Manufacturer="Becton Dickinson Rowa
Germany GmbH" ProductInfo="Mosaic" VersionInfo="2.0.1">
      <Capability Name="KeepAlive"/>
      <Capability Name="Status"/>
      <Capability Name="Input"/>
      <Capability Name="InitiateInput"/>
      <Capability Name="ArticleMaster"/>
      <Capability Name="StockDelivery"/>
      <Capability Name="StockInfo"/>
      <Capability Name="Output"/>
      <Capability Name="TaskCancelOutput"/>
      <Capability Name="Configuration"/>
      <Capability Name="StockLocationInfo"/>
    </Subscriber>
  </HelloResponse>
</WWKS>
```

6.2 Keepalive

Lead elements

KeepAliveRequest

KeepAliveResponse

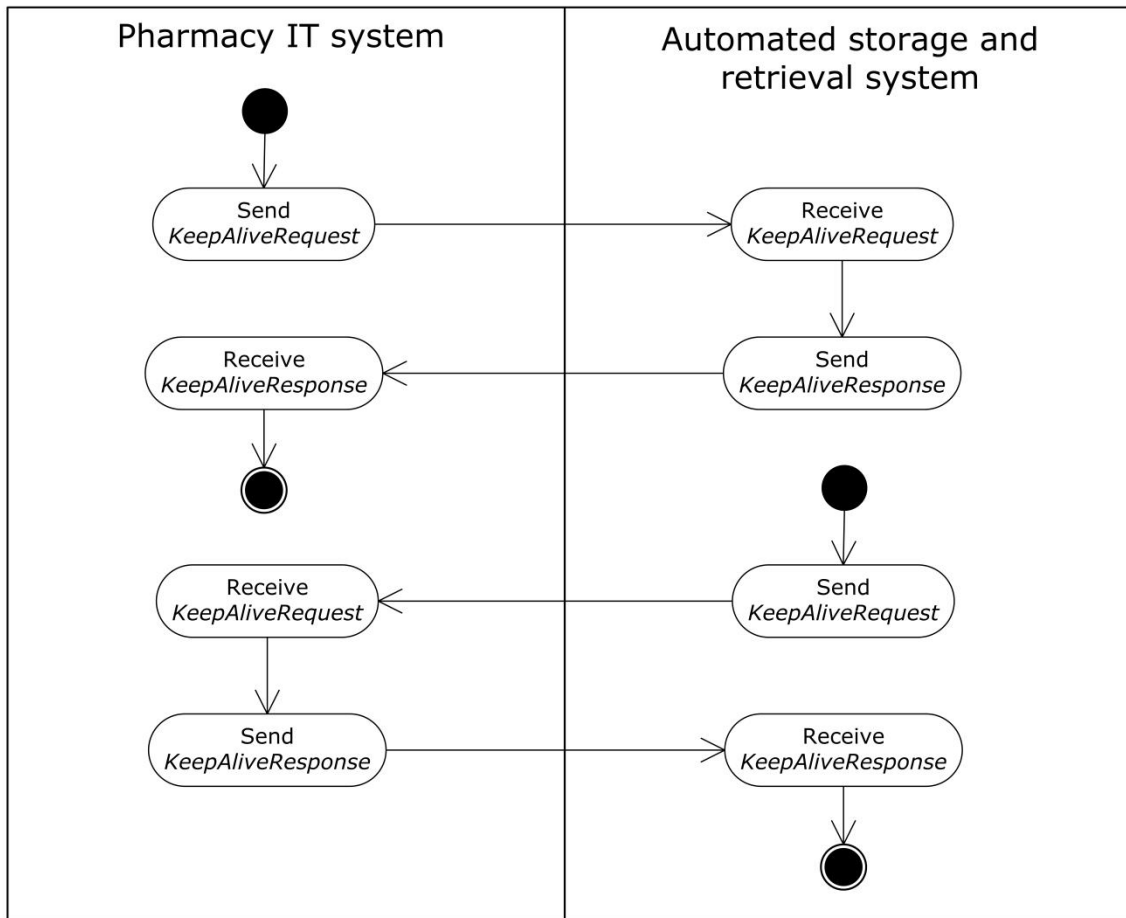
Usage

A Keepalive request can be sent at any time by both systems to check whether the transport channel underlying the connection is still active. This may be useful under the following conditions:

- When the transport channel is potentially unstable (such as with UMTS, GPRS).
- When the network infrastructure being used comprises many active components (e.g. managed switches, routers) and it may be that one of the components has cut the connection.

Sequence

Keepalive



6.2.1 KeepAliveRequest

Structure

```
<WWKS>
  <KeepAliveRequest/>
</WWKS>
```

Elements

Element	M/O	Data type	Description
KeepAliveRequest	M	Tag	Message type
Attributes	M/O	Data type	Description and Values
Id	M	String64	Message ID. This is returned in the <i>KeepAliveResponse</i> .
Source	M	Integer 32-bit >0	ID of the system sending the <i>KeepAliveRequest</i>
Destination	M	Integer 32-bit >0	ID of the system intended to receive the <i>KeepAliveRequest</i>

Example

```
<WWKS Version="2.0" TimeStamp="2013-04-16T11:14:00Z">
  <KeepAliveRequest Id="1003" Source="100" Destination="999"/>
</WWKS>
```

6.2.2 KeepAliveResponse

Structure

```
<WWKS>
  <KeepAliveResponse/>
</WWKS>
```

Elements

Element	M/O	Data type	Description
KeepAliveResponse	M	Tag	Message type
Attributes	M/O	Data type	Description and Values
Id	M	String64	Message ID. This is the same as the one sent in the <i>KeepAliveResponse</i> message.
Source	M	Integer 32-bit >0	ID of the system sending the <i>KeepAliveResponse</i>
Destination	M	Integer 32-bit >0	ID of the system intended to receive the <i>KeepAliveResponse</i>

Example

```
<WWKS Version="2.0" TimeStamp="2013-04-16T11:14:00Z">
  <KeepAliveResponse Id="1003" Source="999" Destination="100"/>
</WWKS>
```

7 Message reference II – Master data and stock deliveries

Lead elements

ArticleMasterSetRequest

ArticleMasterSetResponse

StockDeliverySetRequest

StockDeliverySetResponse

Usage

Technical restrictions (such as a slow data connection between the pharmacy IT system and automated storage and retrieval system or long response times) might mean that the pharmacy IT system cannot monitor the stock input process in real time. In such cases, the pharmacy IT can send the automated storage and retrieval system all the data relating to articles capable of being placed into stock in advance. The automated storage and retrieval system then executes the stock input without referring back to the pharmacy IT system.

The data needed for this is:

- **Article master**

The *ArticleMasterSetRequest* contains the descriptions of all articles which can be placed into stock without a stock delivery number. This is applicable primarily for stock returns which might possibly already have been stored in the system.

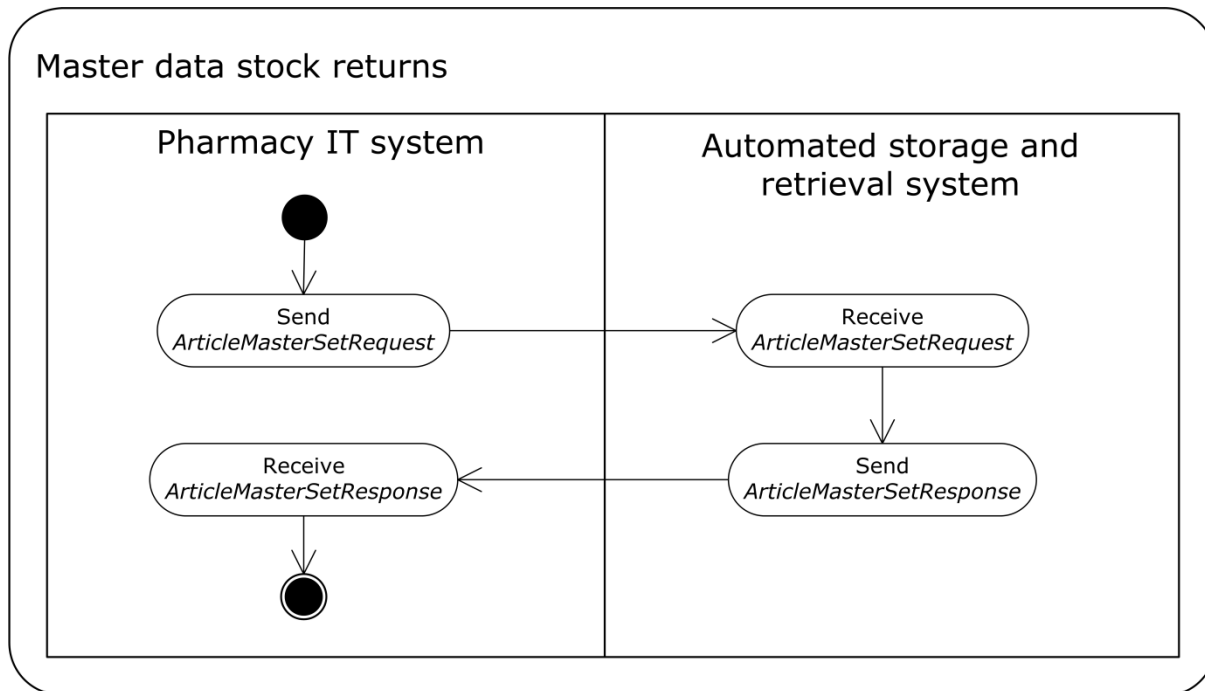
An article master already existing in the automated storage and retrieval system is completely overwritten. It is also possible to send the *ArticleMasterSetRequest* with a blank article list, so as to reset the automated storage and retrieval system's article master.

- **Stock delivery**

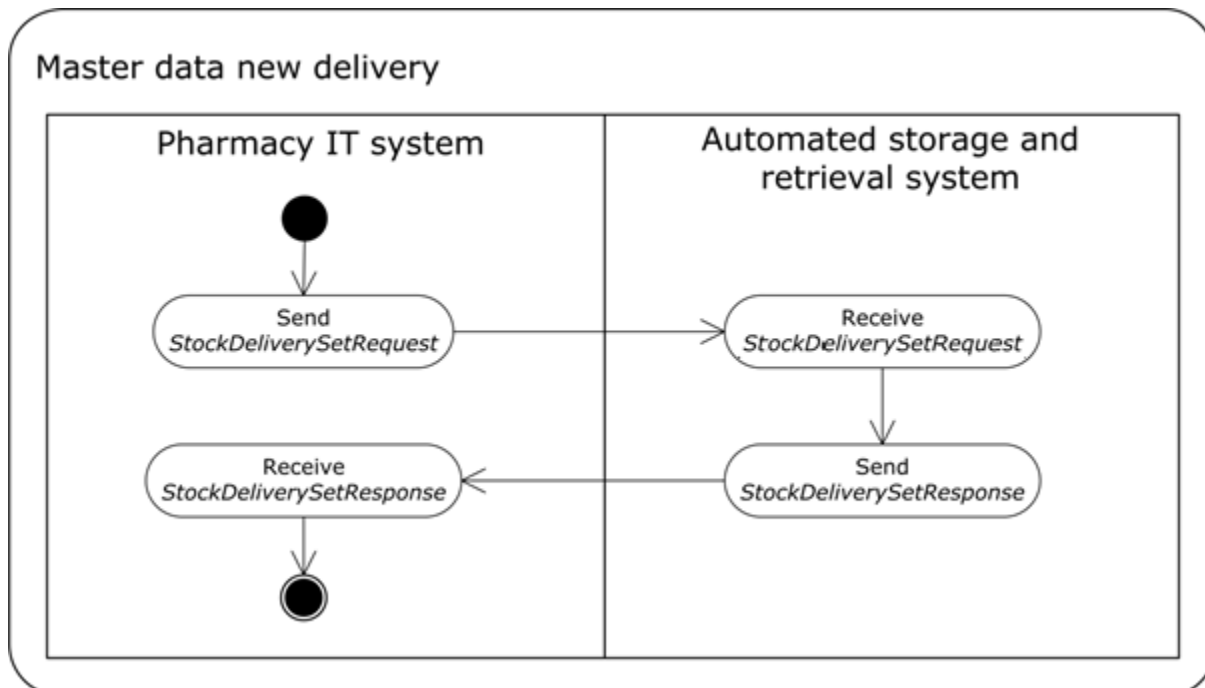
The *StockDeliverySetRequest* contains all the data relating to one or more stock deliveries – that is to say, descriptions of all the articles which may be placed into stock under a specific stock delivery number.

The stock deliveries predefined in the automated storage and retrieval system are not overwritten; the newly defined stock deliveries are added to them.

Sequence for article master data



Sequence for stock delivery



7.1 Master data

7.1.1 ArticleMasterSetRequest

Structure

```
<WWKS>
  <ArticleMasterSetRequest>
    <Article>
      <ProductCode/>
    </Article>
  </ArticleMasterSetRequest>
</WWKS>
```

Elements

Element	M/O	Data type	Description
ArticleMasterSetRequest	M	Tag	Message type
Attributes	M/O	Data type	Description and Values
Id	M	String64	ID of the master data process. This ID is returned in the <i>ArticleMasterSetResponse</i> .
Source	M	Integer 32-bit >0	ID of the system sending the <i>ArticleMasterSetRequest</i>
Destination	M	Integer 32-bit >0	ID of the system intended to receive the <i>ArticleMasterSetRequest</i>

Element	M/O	Data type	Description
Article	O	Tag	Article information follows. This element can be used multiple times.
Attributes	M/O	Data type	Description and Values
Id	M	String64	ID of the article. This may be the original barcode of the article or a derivative of it. The pharmacy IT system specifies how the article ID is composed. If the ID is a custom composition, the automated storage and retrieval system must be able to autonomously break the pack barcodes down into the relevant form.
Name	O	String	Name of the article
DosageForm	O	String	Dosage form of the article
PackingUnit	O	String	Packaging unit of the article
RequiresFridge	O	Boolean	Flag indicating whether the article has to be stored refrigerated ("True"). The default value is "False".
MaxSubItemQuantity	O	Integer 32-bit >0	Maximum number of units (e.g. pills or ampules) which might be contained in a full pack of the article. The value "0" means that the number of units is unknown.
Depth	O	Integer 32-bit	Pack depth in mm

		>=0	
Width	O	Integer 32-bit >=0	Pack width in mm
Height	O	Integer 32-bit >=0	Pack height in mm
Weight	O	Integer 32-bit >=0	Packung weight in gramm
SerialNumberSinceExpiryDate	O	Date	Expiry date in format JJJ-MM-TT, from which on the manufacturer puts datamatrix codes on packs of this item.

Element	M/O	Data type	Description
ProductCode	O	Tag	Information about product codes different to ArticleId follows. Each product code and the ArticleId may be used as scanned barcode when loading an item into the ASRS. This element can be used multiple times.
Attribute	M/O	Data type	Description and Values
Code	P	String64	Additional product code of the article which may occur as barcode or element of a barcode when loading an article into the ASRS. This code cannot be used to request dispensing of the article from the ASRS.

Example

```
<WWKS Version="2.0" TimeStamp="2013-04-16T11:14:00Z">
  <ArticleMasterSetRequest Id="1003" Source="100" Destination="999">
    <Article Id="0004-56-034-G00007T" Name="ACCU CHEK AVIVA"
      DosageForm="LOE" PackagingUnit="1X2.5 ML" RequiresFridge="False"/>
    <Article Id="06810645" Name="Elmex Sensitive Professional" DosageForm="ZPA"
      PackagingUnit="1">
      <ProductCode Code="4150068106452" />
      <ProductCode Code="8714789994055" />
    </Article>
  </ArticleMasterSetRequest>
</WWKS>
```

7.1.2 ArticleMasterSetResponse Structure

```
<WWKS>
  <ArticleMasterSetResponse>
    <SetResult/>
  </ArticleMasterSetResponse>
</WWKS>
```

Elements

Element	M/O	Data type	Description
ArticleMasterSetResponse	M	Tag	Message type
Attributes	M/O	Data type	Description and Values
Id	M	String64	ID of the master data process. This ID was sent in the <i>ArticleMasterSetRequest</i> .
Source	M	Integer 32-bit >0	ID of the system sending the <i>ArticleMasterSetResponse</i>
Destination	M	Integer 32-bit >0	ID of the system intended to receive the <i>ArticleMasterSetResponse</i>

Element	M/O	Data type	Description
SetResult	M	Tag	Result follows.
Attributes	M/O	Data type	Description and Values
Value	M	String	Displays the result of the master data process. Possible values: "Accepted" if the articles were accepted as a master article "Rejected" if the articles were not accepted as a master article.
Text	O	String	Any text for debugging and logging information. Can be used here for detailed error messages if the articles were not accepted.

Example

```
<WWKS Version="2.0" TimeStamp="2013-04-16T11:14:00Z">
  <ArticleMasterSetResponse Id="1003" Source="999" Destination="100">
    <SetResult Value="Accepted" Text="Master Articles accepted."/>
  </ArticleMasterSetResponse>
</WWKS>
```

7.2 Stock Deliveries

7.2.1 StockDeliverySetRequest

Structure

```
<WWKS>
  <StockDeliverySetRequest>
    <StockDelivery>
      <Line/>
    </StockDelivery>
  </StockDeliverySetRequest>
</WWKS>
```

Elements

Element	P/O	Datentyp	Beschreibung
StockDeliverySetRequest	P	Tag	Nachrichtentyp
Attribute	P/O	Datentyp	Beschreibung und Werte
Id	P	String64	ID des Wareneingangsprozesses. Diese ID wird in der Nachricht <i>StockDeliverySetResponse</i> zurückgesendet.
Source	P	Integer 32-bit >0	ID des Systems, das die Nachricht <i>StockDeliverySetRequest</i> sendet
Destination	P	Integer 32-bit >0	ID des Systems, das die Nachricht <i>StockDeliverySetRequest</i> empfangen soll

Element	P/O	Datentyp	Beschreibung
StockDelivery	P	Tag	Wareneingangsinformation folgt. Dieses Element kann mehrmals verwendet werden.
DeliveryNumber	P	String	ID des Wareneingangs. Diese muss eine einmalige Nummer innerhalb aller aktiven oder anstehenden Wareneingänge ein. Diese Nummer wird vom KS genutzt, um eingelagerte Packungen einem Wareneingang zuzuordnen.

Element	M/O	Data type	Description
Line	M	Tag	Stock delivery line follows. This element can be used multiple times.
Attributes	M/O	Data type	Description and Values
Id	M	String64	ID of the article. This may be the original barcode of the article or a derivative of it. The pharmacy IT system specifies how the article ID is composed. If the ID is a custom composition, the automated storage and retrieval system must be able to autonomously break the pack barcodes down into the relevant form.
BatchNumber	O	String	Batch number which must be assigned to the packs of the article in this stock delivery
ExternalId	O	String	External ID which must be assigned to the packs of the article in this stock delivery
SerialNumber	O	String	Serial number that has to be on the pack to accept this pack in this stock delivery
ExpiryDate	O	String	Expiry date in format YYYY-MM-DD which must be assigned to the packs of the article in this stock delivery
Quantity	O	Integer 32-bit >=0	Maximum number of packs of this article which may be placed into stock in this stock delivery. The value "0" means there is no limitation. The default value is "0".
StockLocationId	O	String	ID of the stock location in the automated storage and retrieval system that has to be used

			for packs of this article. Is only used when an automated storage and retrieval system is divided into several virtual stock locations.
MachineLocation	O	String	Identification of the machine that has to store packs of this article. Only relevant if the automated storage and retrieval system consists of several physical stand-alone machines.

Example

```
<WWKS Version="2.0" TimeStamp="2013-04-16T11:14:00Z">
  <StockDeliverySetRequest Id="1003" Source="100" Destination="999">
    <StockDelivery DeliveryNumber="1234">
      <Line Id="0004-56-034-G00007T" Quantity="15"/>
      <Line Id="56473627" BatchNumber="BAT918271" ExternalId="XT11725"
ExpiryDate="2014-04-05" Quantity="5"/>
    </StockDelivery>
  </StockDeliverySetRequest>
</WWKS>
```

7.2.2 StockDeliverySetResponse

Structure

```
<WWKS>
  <StockDeliverySetResponse>
    <SetResult/>
  </StockDeliverySetResponse>
</WWKS>
```

Elements

Element	M/O	Data type	Description
StockDeliverySetResponse	M	Tag	Message type
Attributes	M/O	Data type	Description and Values
Id	M	String64	ID of the stock delivery process. This ID was sent in the <i>StockDeliverySetRequest</i> .
Source	M	Integer 32-bit >0	ID of the system sending the <i>StockDeliverySetResponse</i>
Destination	M	Integer 32-bit >0	ID of the system intended to receive the <i>StockDeliverySetResponse</i>

Element	M/O	Data type	Description
SetResult	M	Tag	Result follows.
Attributes	M/O	Data type	Description and Values
Value	M	String	Displays the result of the stock delivery process. Possible values: "Accepted" if the predefined stock deliveries

			were accepted "Rejected" if the predefined stock deliveries were not accepted
Text	O	String	Any text for debugging and logging information. Can be used here for detailed error messages if the stock deliveries were not accepted.

Example

```
<WWKS Version="2.0" TimeStamp="2013-04-16T11:14:00Z">
  <StockDeliverySetResponse Id="1003" Source="999" Destination="100">
    <SetResult Value="Accepted" Text="Stock Delivery accepted."/>
  </StockDeliverySetResponse>
</WWKS>
```

7.2.3 StockDeliveryInfoRequest

Structure

```
<WWKS>
  < StockDeliveryInfoRequest>
    <Task/>
  </StockDeliveryInfoRequest>
</WWKS>
```

Elemente

Element	M/O	Data type	Description
StockDeliveryInfoRequest	M	Tag	Message type
Attributes	M/O	Data type	Description and Values
Id	M	String64	ID of the information process. This ID is returned in the <i>StockDeliveryInfoResponse</i> .
Source	M	Integer 32-bit >0	ID of the system sending the <i>StockDeliveryInfoResponse</i>
Destination	M	Integer 32-bit >0	ID of the system intended to receive the <i>StockDeliveryInfoResponse</i>
IncludeTaskDetails	O	Boolean	This flag specifies whether detailed task information like outputted packs, etc. are to be returned. Possible values: "True" if details of the tasks are to be sent "False" if no task data is to be sent The default value is "False".

Element	M/O	Data type	Description
Task		Tag	Task information follows.
Attributes	M/O	Data type	Description and Values
Id	M	String64	ID of the task. This is the DeliveryNumber specified in the <i>StockDeliverySetRequest</i> .

Example

```
<WWKS Version="2.0" TimeStamp="2013-04-16T11:14:00Z">
  <StockDeliveryInfoRequest Id="3330" Source="100" Destination="999">
    <Task Id="1004"/>
  </StockDeliveryInfoRequest>
</WWKS>
```

7.2.4 StockDeliveryInfoResponse

Struktur

```
<WWKS>
  <StockDeliveryInfoResponse>
    <Task>
      <Article>
        <Pack/>
      </Article>
    </Task>
  </StockDeliveryInfoResponse>
</WWKS>
```

Elemente

Element	M/O	Data type	Description
StockDeliveryInfoResponse	M	Tag	Message type
Attributes	M/O	Data type	Description and Values
Id	M	String64	ID of the information process. This ID was sent in the <i>StockDeliveryInfoRequest</i> .
Source	M	Integer 32-bit >0	ID of the system sending the <i>StockDeliveryInfoRequest</i> .
Destination	M	Integer 32-bit >0	ID of the system intended to receive the <i>StockDeliveryInfoRequest</i> .

Element	M/O	Data type	Description
Task	M	Tag	Task information follows.
Attributes	M/O	Data type	Description and Values
Id	M	String	ID of the task. This is the DeliveryNumber specified in the <i>StockDeliverySetRequest</i> .
Status	M	String	Status of the task. Possible values: "Unknown" if the task was not found "Completed" if the task is complete "Incomplete" if the task was not completed fully

Element	M/O	Data type	Description
Article	O	Tag	Article information follows.
Attributes	M/O	Data type	Description and Values
Id	O	String64	Article ID of the affected pack
Quantity	O	Integer 32-bit ≥0	This data is only used for the "StockDelivery" task type. Maximum number of packs of this article which may be placed into stock in this stock delivery. The value "0" means there is no limitation. The default value is "0".

Element	M/O	Data type	Description
Pack	O	Tag	Pack information follows. This element may occur multiply.
Attributes	M/O	Data type	Description and Values
Id	M	String64	Picking system internal ID of the affected pack
DeliveryNumber	O	String	Stock delivery number of the affected pack
BatchNumber	O	String	Batch number of the affected pack
ExternalId	O	String	External ID of the affected pack
SerialNumber	O	String	Serial number of the affected pack
ExpiryDate	O	String	Expiration date of the affected pack in format YYYY-MM-DD.
StockInDate	O	String	Input date of the output pack in format YYYY-MM-DD
ScanCode	O	String	Barcode of the output pack
SubItemQuantity	O	Integer 32-bit ≥0	Number of units (e.g. tablets or ampules) in the affected pack. The value "0" means that the pack is full.
Depth	O	Integer 32-bit ≥0	Depth of the pack in mm
Width	O	Integer 32-bit ≥0	Width of the pack in mm
Height	O	Integer 32-bit ≥0	Height of the pack in mm
Weight	O	Integer 32-bit ≥0	Weight of the pack in gramm
Shape	O	String	Form factor of the pack. Possible values: "Cuboid" "Cylinder" The default value is "Cuboid".
IsInFridge	O	Boolean	Flag indicating whether the pack has been or is being stored refrigerated. The default value is "False".
StockLocationId	O	String	ID of the stock location in the automated storage and retrieval system. Is only used when

			an automated storage and retrieval system is divided into several virtual stock locations.
MachineLocation	O	String	Identification of the machine that was or will be used to store packs of this article. Only relevant if the automated storage and retrieval system consists of several physical stand-alone machines.

Example without details

```
<WWKS Version="2.0" TimeStamp="2013-04-16T11:14:00Z">
  <StockDeliveryInfoResponse Id="3330" Source="999" Destination="100">
    <Task Id="1234" Status="Incomplete"/>
  </StockDeliveryInfoResponse >
</WWKS>
```

Example with details

```
<WWKS Version="2.0" TimeStamp="2013-04-16T11:14:00Z">
  <StockDeliveryInfoResponse Id="3330" Source="999" Destination="100">
    <Task Id="1234" Status="Completed">
      <Article Id="0004-56-034-G00025T" Quantity="1">
        <Pack Id="5637" DeliveryNumber="1234" BatchNumber="Omepra0004"
          ExternalId="PalH09051200001" ExpiryDate="2015-11-05"
          Depth="50" Width="50" Height="50" Shape="Cuboid" />
      </Article>
    </Task>
  </StockDeliveryInfoResponse >
</WWKS>
```

7.3 Article information

Lead elements

ArticleInfoRequest

ArticleInfoResponse

Verwendung

ArticleInfoRequest can be used to request basic information on any article from the pharmacy IT system at any time. The pharmacy IT system responds with a corresponding *ArticleInfoResponse*.

7.3.1 ArticleInfoRequest

Structure

```
<WWKS>
  <ArticleInfoRequest>
    <Article/>
  </ArticleInfoRequest>
</WWKS>
```

Elemente

Element	M/O	Data type	Description
ArticleInfoRequest	M	Tag	Message type
Attributes	M/O	Data type	Description and Values
Id	M	String64	ID of the article information request. This ID is returned in the <i>ArticleInfoResponse</i> message.
Source	M	Integer 32-bit >0	ID of the system sending the <i>ArticleInfoRequest</i>
Destination	M	Integer 32-bit >0	ID of the system intended to receive the <i>ArticleInfoRequest</i>

Element	M/O	Data type	Description
Article	M	Tag	Article information follows. This element can be used multiple times.
Attributes	M/O	Data type	Description and Values
Id	M	String64	ID of the article.
Depth	O	Integer 32-bit >=0	Depth of the pack in mm
Width	O	Integer 32-bit >=0	Width of the pack in mm
Height	O	Integer 32-bit >=0	Height of the pack in mm
Weight	O	Integer 32-bit >=0	Weight of the pack in gramm

Example

```
<WWKS Version="2.0" TimeStamp="2013-04-16T11:14:00Z">
  <ArticleInfoRequest Id="1100" Source="100" Destination="999">
    <Article Id="1234"/>
  </ArticleInfoRequest>
</WWKS>
```

7.3.2 ArticleInfoResponse

Structure

```
<WWKS>
  <ArticleInfoResponse>
    <Article>
      <ProductCode/>
    </Article>
  </ArticleInfoResponse>
</WWKS>
```

Elemente

Element	M/O	Data type	Description
ArticleInfoResponse	M	Tag	Message type
Attributes	M/O	Data type	Description and Values
Id	M	String64	ID of the article information request. This ID was sent in the <i>ArticleInfoRequest</i> message.
Source	M	Integer 32-bit >0	ID of the system sending the <i>ArticleInfoResponse</i> .
Destination	M	Integer 32-bit >0	ID of the system intended to receive the <i>ArticleInfoResponse</i> message.

Element	M/O	Data type	Description
Article	M	Tag	Article information follows. This element may occur multiply.
Attributes	M/O	Data type	Description and Values
Id	M	String64	ID of the article.
Name	O	String	Name of article.
DosageForm	O	String	Dosage form of the article.
PackingUnit	O	String	Packaging unit of the article.
RequiresFridge	O	Boolean	Flag indicating if the article requires cooling ("True"). Default value is "False".
MaxSubItemQuantity	O	Integer 32-bit >=0	Maximum number of units (e.g. pills or ampules) which might be contained in a full pack of the article. The value "0" means that the number of units is unknown.
SerialNumberSinceExpiry Date	O	Date	Expiry date in format JJJ-MM-TT, from which on the manufacturer puts datamatrix codes on packs of this item.

Element	M/O	Data type	Description
ProductCode	O	Tag	Information about product codes different to ArticleId follows. Each product code and the ArticleId may be used as scanned barcode when loading an item into the ASRS. This element can be used multiple times.
Attribute	M/O	Data type	Description and Values
Code	P	String64	Additional product code of the article which may occur as barcode or element of a barcode when loading an article into the ASRS. This code cannot be used to request dispensing of the article from the ASRS.

Example

```
<WWKS Version="2.0" TimeStamp="2013-04-16T11:14:00Z">  
  <ArticleInfoResponse Id="1100" Source="999" Destination="100">  
    <Article Id="1234" Name="Article 1" />  
  </ArticleInfoResponse>  
</WWKS>
```

8 Message reference III - automated storage and retrieval system

8.1 System status

Lead elements

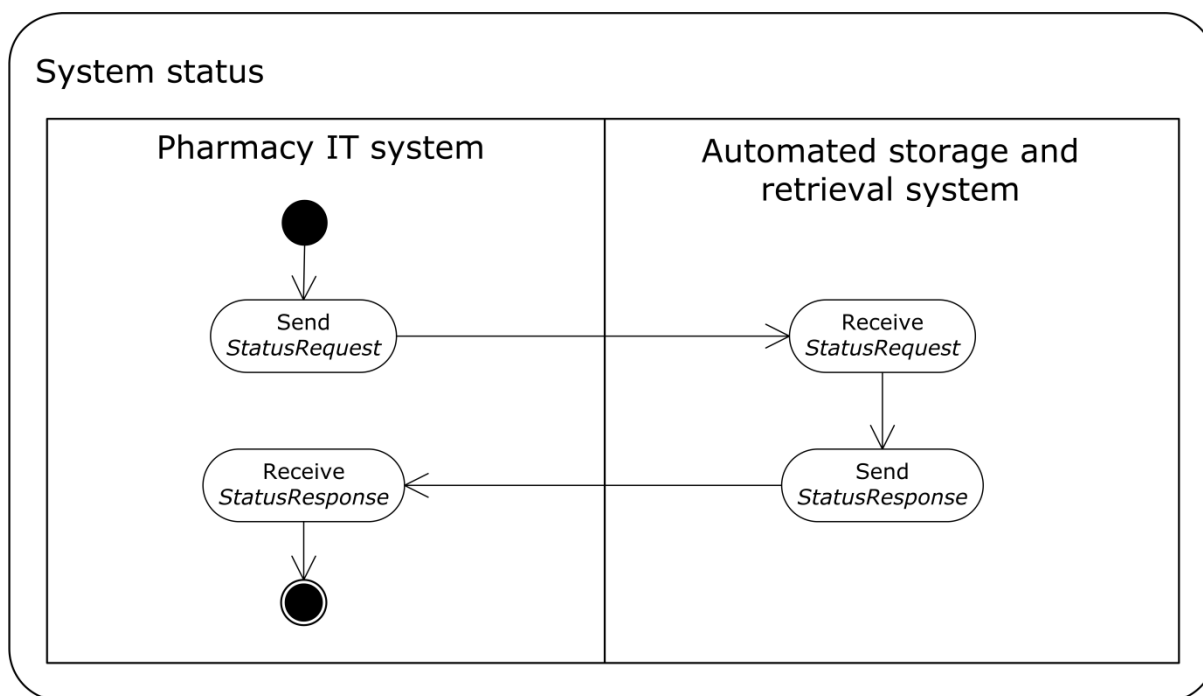
StatusRequest

StatusResponse

Usage

StatusRequest is used to identify the status of the automated storage and retrieval system. In its response, the automated storage and retrieval system indicates whether it is ready for operation and able to execute tasks. This message can be sent as often as desired.

Sequence



8.1.1 StatusRequest

Structure

```

<WWS>
  <StatusRequest/>
</WWS>
  
```

Elements

Element	M/O	Data type	Description
StatusRequest	M	Tag	Message type
Attributes	M/O	Data type	Description and Values
Id	M	String64	Message ID. This is returned in the <i>StatusResponse</i> .

Source	M	Integer 32-bit >0	ID of the system sending the <i>StatusRequest</i>
Destination	M	Integer 32-bit >0	ID of the system intended to receive the <i>StatusRequest</i>
IncludeDetails	O	Boolean	Optional data, indicates whether the StatusResponse is intended to contain component information. The default value is "False".

Example

```
<WWKS Version="2.0" TimeStamp="2013-04-16T11:14:00Z">
  <StatusRequest Id="1003" Source="100" Destination="999"/>
</WWKS>
```

8.1.2 StatusResponse

Structure

```
<WWKS>
  <StatusResponse>
    <Component/>
  </StatusResponse>
</WWKS>
```

Elements

Element	M/O	Data type	Description
StatusResponse	M	Tag	Message type
Attributes	M/O	Data type	Description and Values
Id	M	String64	ID of the status request sent in <i>StatusRequest</i>
Source	M	Integer 32-bit >0	ID of the system sending the <i>StatusResponse</i>
Destination	M	Integer 32-bit >0	Corresponds to the value of Source in the <i>StatusRequest</i> .
State	M	String	Designates the current status of the automated storage and retrieval system. Possible values: "Ready" "NotReady"
StateText	O	String	Any text for debugging and logging information

Element	M/O	Data type	Description
Component	O	Tag	Component information follows. This element may occur multiple times.
Attributes	M/O	Data type	Description and Values
Type	M	String	Type of component. Possible values: "StorageSystem"

			"RetrievalSystem" "BoxSystem"
Description	M	String	Component description. This text can be displayed on program interfaces.
State	M	String	Designates the current status of the component. Possible values: "Ready" "NotReady"
State Text	O	String	Any text for debugging and logging information

Example

```
<WWKS Version="2.0" TimeStamp="2013-04-16T11:14:00Z">
  <StatusResponse Id="1003" Source="999" Destination="100" State="NotReady">
    <Component Type="StorageSystem" Description="Vmax 1" State="Ready"/>
    <Component Type="StorageSystem" Description="Vmax 2" State="Ready"/>
    <Component Type="BoxSystem" Description="Box System" State="NotReady"
      StateText="Box system plc is turned off."/>
  </StatusResponse>
</WWKS>
```

8.2 Stock enquiry and stock change

Lead elements

StockInfoRequest

StockInfoResponse

StockInfoMessage

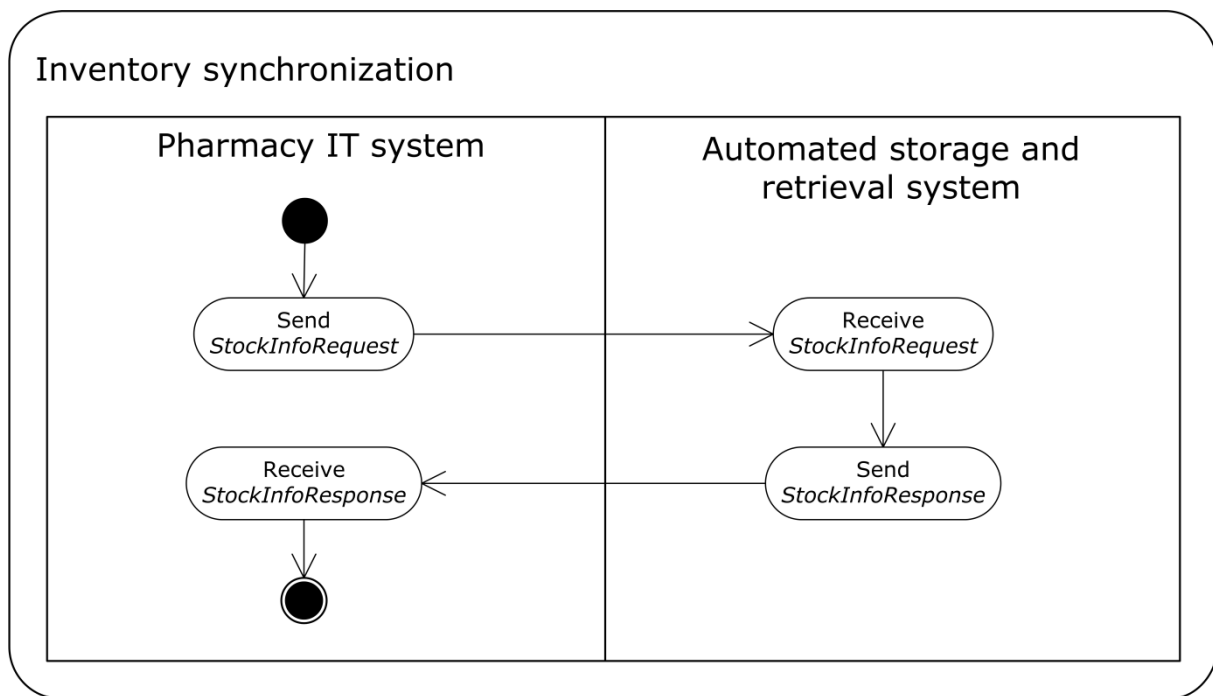
Usage

To poll the current stock level in the automated storage and retrieval system, the pharmacy IT system can send the *StockInfoRequest*. The automated storage and retrieval system will respond with *StockInfoResponse*.

The prompt can be constrained by filters. If filters are set, the automated storage and retrieval system's response only contains articles and packs matching the set criteria. If no filters are defined, the full inventory is listed.

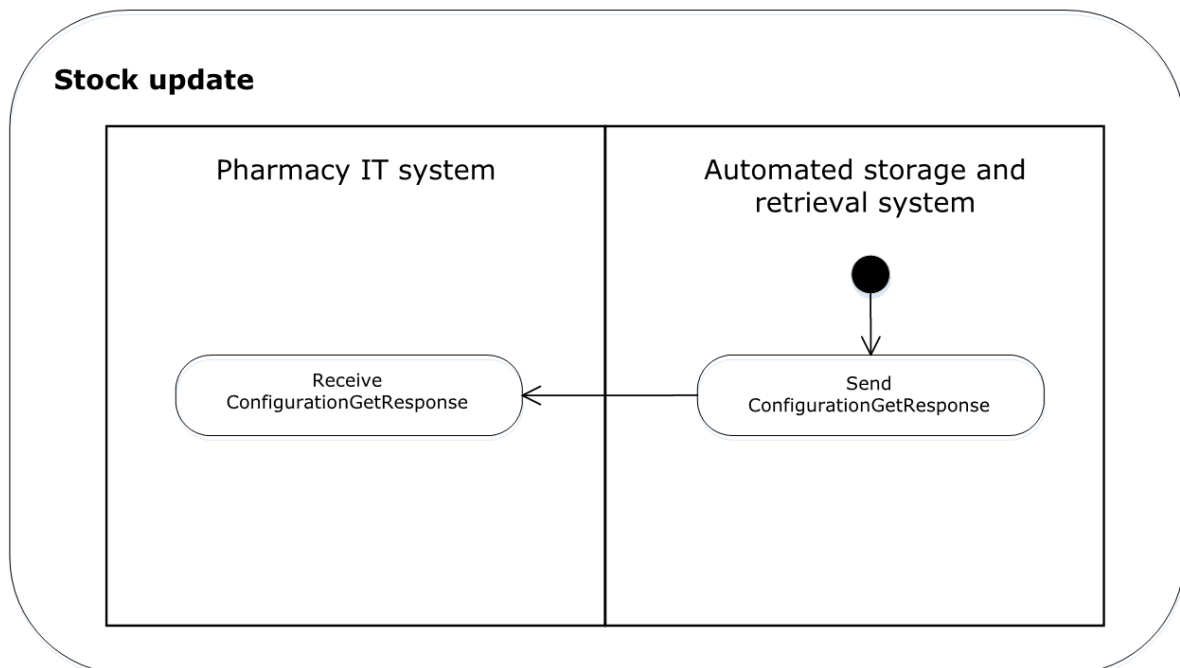
If there is no stock in the automated storage in retrieval system or if there are no articles corresponding to the filters defined in the search, the content of the *StockInfoResponse* message is empty (contains no *Article* elements).

Sequence



A stock update is a change of stock-related data (e.g. expiration date or status of a package). The number of stored items or packages does not change in the event of a stock update. The automated storage and retrieval system sends a message in the form of a *StockInfoMessage* to the pharmacy IT system.

Sequence



8.2.1 StockInfoRequest

Structure

```
<WWKS>
  <StockInfoRequest>
    <Criteria/>
  </StockInfoRequest>
</WWKS>
```

Elements

Element	M/O	Data type	Description
StockInfoRequest	M	Tag	Message type
Attributes	M/O	Data type	Description and Values
Id	M	String64	ID of the inventory request. This ID is returned in the <i>StockInfoResponse</i> .
Source	M	Integer 32-bit >0	ID of the system sending the <i>StockInfoRequest</i> .
Destination	M	Integer 32-bit >0	ID of the system to which the <i>StockInfoRequest</i> is sent.
IncludePacks	O	Boolean	This flag specifies whether details of the existing packs are to be returned. Possible values: "True" if details of the packs are to be included "False" if only article data is to be sent The default value is "True".
IncludeArticleDetails	O	Boolean	This flag specifies whether detailed article information like name, dosage form, etc. are to be returned. Possible values: "True" if details of the articles are to be sent "False" if only minimal article data is to be sent The default value is "False".

Element	M/O	Data type	Description
Criteria	O	Tag	Request filter follows. Multiple criteria can be defined.
Attributes	M/O	Data type	Description and Values
ArticleId	O	String64	By setting this filter, only articles with the specified article ID are included. The ID of the article must correspond to the one assigned by the pharmacy IT system when placing the article into stock in the <i>StockInputResponse</i> .
BatchNumber	O	String	By setting this filter, only packs with the specified batch number are included.
ExternalId	O	String	By setting this filter, only packs with the specified external ID are included.

SerialNumber	O	String	By setting this filter, only packs with the specified serial number are included.
StockLocationId	O	String	By setting this filter, only packs with the specified stock location ID within the automated storage and retrieval system are included. Is only used when an automated storage and retrieval system is divided into several virtual stock locations.
MachineLocation	O	String	By setting this filter, only packs are with the specified identification of the machine used for storing the pack are included. Only relevant if the automated storage and retrieval system consists of several physical stand-alone machines.

Example without filter criteria

```
<WWKS Version="2.0" TimeStamp="2013-04-16T11:14:00Z">
  <StockInfoRequest Id="1003" Source="100" Destination="999" />
</WWKS>
```

Example with filter criteria

```
<WWKS Version="2.0" TimeStamp="2013-04-16T11:14:00Z">
  <StockInfoRequest Id="1003" Source="100" Destination="999"
IncludePacks="True">
    <Criteria ArticleId="0004-56-034-G00007T"/>
    <Criteria BatchNumber="Omepra0004"/>
  </StockInfoRequest>
</WWKS>
```

8.2.2 StockInfoResponse

Structure

```
<WWKS>
  <StockInfoResponse>
    <Article>
      <ProductCode/>
      <Pack/>
    </Article>
  </StockInfoResponse>
</WWKS>
```

Elements

Element	M/O	Data type	Description
StockInfoResponse	M	Tag	Message type
Attributes	M/O	Data type	Description and Values
Id	M	String64	ID of the inventory request. This ID was sent in the <i>StockInfoRequest</i> .

Source	M	Integer 32-bit >0	ID of the system sending the <i>StockInfoResponse</i> .
Destination	M	Integer 32-bit >0	ID of the system intended to receive the <i>StockInfoResponse</i> .

Element	M/O	Data type	Description
Article	M	Tag	Article information follows. This element may occur multiply.
Attributes	M/O	Data type	Description and Values
Id	M	String64	ID of the article. This ID corresponds to the one assigned by the pharmacy IT system when placing the article into stock in the <i>InputResponse</i> .
Name	O	String	Name of the article
DosageForm	O	String	Dosage form of the article
PackingUnit	O	String	Packaging unit of the article
MaxSubItemQuantity	O	Integer 32-bit ≥0	Maximum number of units (e.g. pills or ampules) which might be contained in a full pack of the article. The value "0" means that the number of units is unknown.
Quantity	M	Integer 32-bit >0	Number of existing packs of this article

Element	M/O	Data type	Description
ProductCode	O	Tag	Information about product codes different to ArticleId follows. Each product code and the ArticleId may be used as scanned barcode when loading an item into the ASRS. This element can be used multiple times.
Attribute	M/O	Data type	Description and Values
Code	P	String64	Additional product code of the article which may occur as barcode or element of a barcode when loading an article into the ASRS. This code cannot be used to request dispensing of the article from the ASRS.

Element	M/O	Data type	Description
Pack	O	Tag	Pack information follows. This element may occur multiply.
Attributes	M/O	Data type	Description and Values
Id	M	String64	Internal pack ID in the automated storage and retrieval system for a specific pack
DeliveryNumber	O	String	Stock delivery number specified on stock input

BatchNumber	O	String	Batch number. This was sent in the <i>InputResponse</i> during stock input.
ExternalId	O	String	External ID, an additional ID of the pack as sent in the <i>InputResponse</i> on stock input.
SerialNumber	O	String	Serial number of the pack.
ExpiryDate	O	String	Expiration date of the pack in format YYYY-MM-DD
StockInDate	O	String	Input date of the pack in format YYYY-MM-DD
ScanCode	O	String	Barcode of the pack
SubItemQuantity	O	Integer 32-bit >=0	Number of units (e.g. tablets or ampules) currently inside the pack. The value "0" means that the pack is full (not opened).
Depth	O	Integer 32-bit >=0	Depth of the pack in mm
Width	O	Integer 32-bit >=0	Width of the pack in mm
Height	O	Integer 32-bit >=0	Height of the pack in mm
Weight	O	Integer 32-bit >=0	Weight of the pack in gramme
Shape	O	String	Form factor of the pack. Possible values: "Cuboid" "Cylinder" The default value is "Cuboid".
State	O	String	Status of the pack. This data is required when multiple automatic storage machines are connected. Possible values: "Available" means that the pack is currently available for output. "NotAvailable" means that the pack is currently not available for output. The default value is "Available".
IsInFridge	O	Boolean	Flag indicating whether the pack is stored in a refrigeration unit ("True"). The default value is "False".
StockLocationId	O	String	ID of the stock location in the automated storage and retrieval system. Is only used when an automated storage and retrieval system is divided into several virtual stock locations.
MachineLocation	O	String	Identification of the machine used for storing the pack. Only relevant if the automated storage and retrieval system consists of several physical stand-alone machines.

Example

```
<WWKS Version="2.0" TimeStamp="2013-04-16T11:14:00Z">
  <StockInfoResponse Id="1003" Source="999" Destination="100">
    <Article Id="0004-56-034-G00007T" Quantity="3">
      <Pack Id="4536" BatchNumber="Omepra0004" ExternalId="PalH09051200001"
        ExpiryDate="2015-11-05" Depth="50" Width="50" Height="50"
        Shape="Cuboid" State="Available">
      <Pack Id="7664" BatchNumber="Omepra0004" ExternalId="PalH09051200001"
        ExpiryDate="2012-11-05" Depth="50" Width="50" Height="50"
        Shape="Cuboid" State="Available">
      <Pack Id="7857" BatchNumber="Omepra0004" ExternalId="PalH09051200001"
        ExpiryDate="2012-11-05" Depth="50" Width="50" Height="50"
        Shape="Cuboid" State="Available">
    </Article>
  </StockInfoResponse>
</WWKS>
```

8.2.3 StockInfoMessage

Structure

```
<WWKS>
  <StockInfoMessage>
    <Article>
      <ProductCode/>
      <Pack/>
    </Article>
  </StockInfoMessage>
</WWKS>
```

Elements

Element	M/O	Data type	Description
StockInfoMessage	M	Tag	Message type
Attributes	M/O	Data type	Description and Values
Id	M	String64	ID of the stock update.
Source	M	Integer 32-bit >0	ID of the system sending the <i>StockInfoMessage</i> .
Destination	M	Integer 32-bit >0	ID of the system intended to receive the <i>StockInfoMessage</i> .

Element	M/O	Data type	Description
Article	M	Tag	Article information follows. This element may occur multiply.
Attributes	M/O	Data type	Description and Values

Id	M	String64	ID of the article. This ID corresponds to the one assigned by the pharmacy IT system when placing the article into stock in the <i>StockInputResponse</i> .
Name	O	String	Name of the article
DosageForm	O	String	Dosage form of the article
PackingUnit	O	String	Packaging unit of the article
MaxSubItemQuantity	O	Integer 32-bit ≥0	Maximum number of units (e.g. pills or ampules) which might be contained in a full pack of the article. The value "0" means that the number of units is unknown.
Quantity	O	Integer 32-bit >0	Number of existing packs of this article

Element	M/O	Data type	Description
ProductCode	O	Tag	Information about product codes different to ArticleId follows. Each product code and the ArticleId may be used as scanned barcode when loading an item into the ASRS. This element can be used multiple times.
Attribute	M/O	Data type	Description and Values
Code	P	String64	Additional product code of the article which may occur as barcode or element of a barcode when loading an article into the ASRS. This code cannot be used to request dispensing of the article from the ASRS.

Element	M/O	Data type	Description
Pack	O	Tag	Pack information follows. This element may occur multiply.
Attributes	M/O	Data type	Description and Values
Id	M	String64	Internal pack ID in the automated storage and retrieval system for a specific pack
DeliveryNumber	O	String	Stock delivery number specified on stock input
BatchNumber	O	String	Batch number. This was sent in the <i>InputResponse</i> during stock input.
ExternalId	O	String	External ID, an additional ID of the pack as sent in the <i>InputResponse</i> on stock input.
SerialNumber	O	String	Serial number of the pack.
ExpiryDate	O	String	Expiration date of the pack in format YYYY-MM-DD
StockInDate	O	String	Input date of the pack in format YYYY-MM-DD
ScanCode	O	String	Barcode of the pack

SubItemQuantity	O	Integer 32-bit >=0	Number of units (e.g. tablets or ampules) currently inside the pack. The value "0" means that the pack is full (not opened).
Depth	O	Integer 32-bit >=0	Depth of the pack in mm
Width	O	Integer 32-bit >=0	Width of the pack in mm
Height	O	Integer 32-bit >=0	Height of the pack in mm
Weight	O	Integer 32-bit >=0	Weight of the pack in gramme
Shape	O	String	Form factor of the pack. Possible values: "Cuboid" "Cylinder" The default value is "Cuboid".
State	O	String	Status of the pack. This data is required when multiple automatic storage machines are connected. Possible values: "Available" means that the pack is currently available for output. "NotAvailable" means that the pack is currently not available for output. The default value is "Available".
IsInFridge	O	Boolean	Flag indicating whether the pack is stored in a refrigeration unit ("True"). The default value is "False".
StockLocationId	O	String	ID of the stock location in the automated storage and retrieval system. Is only used when an automated storage and retrieval system is divided into several virtual stock locations.
MachineLocation	O	String	Identification of the machine used for storing the pack. Only relevant if the automated storage and retrieval system consists of several physical stand-alone machines.

Example

```
<WWKS Version="2.0" TimeStamp="2013-04-16T11:14:00Z">
  <StockInfoMessage Id="1003" Source="999" Destination="100">
    <Article Id="0004-56-034-G00007T" Quantity="3">
      <Pack Id="4536" BatchNumber="Omepra0004" ExternalId="PalH09051200001"
        ExpiryDate="2015-11-05" Depth="50" Width="50" Height="50"
        Shape="Cuboid" State="Available">
      <Pack Id="7664" BatchNumber="Omepra0004" ExternalId="PalH09051200001"
        ExpiryDate="2012-11-05" Depth="50" Width="50" Height="50"
        Shape="Cuboid" State="Available">
      <Pack Id="7857" BatchNumber="Omepra0004" ExternalId="PalH09051200001"
```

```
    ExpiryDate="2012-11-05" Depth="50" Width="50" Height="50"  
    Shape="Cuboid" State="Available">  
</Article>  
</StockInfoMessage>  
</WWKS>
```

8.3 Stock Input

Lead elements

InputRequest

InputResponse

InputMessage

Usage

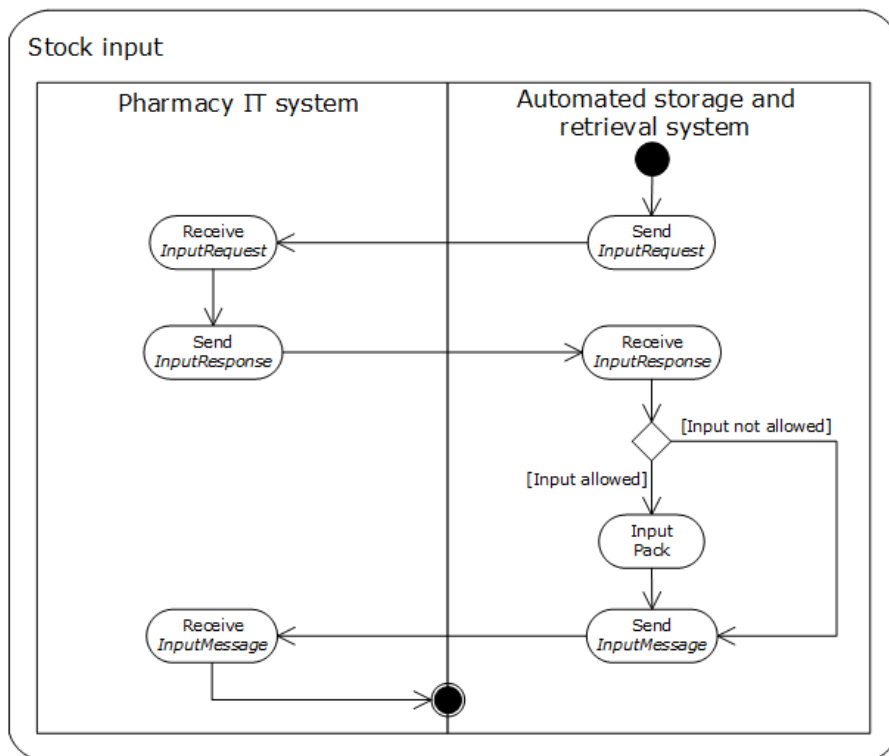
When a user or an automatic stock input system is wanting to store a pack in the automated storage and retrieval system, the *InputRequest* is sent from the automated storage and retrieval system to the pharmacy IT system. The pharmacy IT system must respond to the stock input request with the *InputResponse*. The response from the pharmacy IT system may also send additional article data to the automated storage and retrieval system and may overwrite the values transmitted by the ASRS in the *InputRequest*. The ASRS may ignore transferred values for Depth, Width, Height and Weight if it has measured these values itself.

If stock input is allowed, it is executed. The automated storage and retrieval system then sends the *InputMessage* to the pharmacy IT system, informing it of the changed inventory level.

If stock input is not allowed or fails for technical reasons, the automated storage and retrieval system sends the *InputMessage* with the attribute *Input*="Aborted" to the pharmacy IT system.

If the stock input is rejected with the reasons "RejectedNoExpiryDate", "RejectedNoBatchNumber" or „RejectNoSerialNumber“, the automated storage and retrieval system can resend an *InputRequest* message with the same ID and the missing information.

Sequence



8.3.1 InputRequest

Structure

```

<WWKS>
  <InputRequest>
    <Article>
      <Pack/>
    </Article>
  </InputRequest>
</WWKS>

```

Elements

Element	M/O	Data type	Description
InputRequest	M	Tag	Message type
Attributes	M/O	Data type	Description and Values
Id	M	String64	ID of the stock input process. This ID is returned in the <i>InputResponse</i> and is used in the associated <i>InputMessage</i> .
Source	M	Integer 32-bit >0	ID of the system sending the <i>InputRequest</i>
Destination	M	Integer 32-bit >0	ID of the system receiving this message
IsNewDelivery	O	Boolean	This flag identifies the stock input request as part of a stock delivery.

			<p>"True" means that a stock delivery is taking place. The attribute <i>DeliveryNumber</i> in the element <i>Pack</i> should then contain the stock delivery number.</p> <p>Blank stock delivery numbers (e.g. "") are possible in some customer-specific scenarios.</p> <p>"False" means that the stock input relates to a stock return.</p> <p>The default value is "False".</p>
SetPickingIndicator	O	Boolean	<p>This flag forces definition of the article as capable of automated handling after the pharmacy IT system has initially rejected stock input with the reason "RejectedNoPickingIndicator".</p> <p>This case occurs primarily on initial stocking of the automated storage and retrieval system.</p> <p>The default value is "False".</p>

Element	M/O	Data type	Description
Article	M	Tag	Article information follows.
Id	O	String64	ASRS proposal for the article id, e.g. due to extraction from a datamatrix code.
FMDId	O	String	Main article id in a datamatrixcode that has to be used for the decommissioning of a pack's serial number.

Element	M/O	Data type	Description
Pack	M	Tag	Pack information follows. This element can be used multiple times.
Attributes	M/O	Data type	Description and Values
Index	O	Integer 32-bit ≥0	If the stock input request comprises multiple packs, a pack index is sent here.
ScanCode	M	String	<p>Barcode of the pack being placed into stock. This code is checked by the pharmacy IT system and compared against internal data. Based on the information contained in the code, the pharmacy IT system can decide whether the pack can be placed into stock.</p> <p>Hint: In case the scancode contains unprintable characters (eg. Field separator in GS1 datamatrix code), these are encoded by a corresponding hex code as described in chapter 5.1)</p>
DeliveryNumber	O	String	Stock delivery number for this pack. This data is only required if the attribute <i>IsNewDelivery</i> of the element <i>InputRequest</i> has the value "True".
BatchNumber	O	String	Batch number of the pack. This attribute is used when the picker has entered a batch number.

ExternalId	O	String	External ID. Additional identifying attribute. This can be used, for example, to store additional information about a pack (e.g. the serial number).
SerialNumber	O	String	Serial number of the pack.
ExpiryDate	O	String	Expiration date of the pack in format YYYY-MM-DD. This attribute is used when the picker has entered an expiration date.
SubItemQuantity	O	Integer 32-bit ≥0	Number of units (e.g. tablets or ampules) currently inside the pack. The value "0" means that the pack is full (not opened). This attribute is used for the stock input of opened packs.
StockLocationId	O	String	ID of the selected stock location in the automated storage and retrieval system. Is only used when an automated storage and retrieval system is divided into several virtual stock locations.
MachineLocation	O	String	Identification of the requesting machine intended to be used for storing the pack. Only relevant if the automated storage and retrieval system consists of several physical stand-alone machines.

Example

```
<WWKS Version="2.0" TimeStamp="2018-04-16T11:11:00Z">
  <InputRequest Id="1002" Source="999" Destination="100" IsNewDelivery="True">
    <Article>
      <Pack Index="0" DeliveryNumber="363529"
ScanCode="010415012345678217151231101A234B5\x1D211234567890123456"/>
    </Article>
  </InputRequest>
</WWKS>
```

8.3.2 InputResponse

Structure

```
<WWKS>
  <InputResponse>
    <Article>
      <ProductCode/>
      <Pack>
        <Handling/>
      </Pack>
    </Article>
  </InputResponse>
</WWKS>
```

Elements

Element	M/O	Data type	Description
InputResponse	M	Tag	Message type
Attributes	M/O	Data type	Description and Values
Id	M	String64	ID of the stock input process. This ID was sent in the <i>InputRequest</i> .
Source	M	Integer 32-bit >0	ID of the system sending the <i>InputResponse</i>
Destination	M	Integer 32-bit >0	Corresponds to the value of Source in the associated <i>InputRequest</i> .
IsNewDelivery	O	Boolean	This flag identifies the stock input request as part of a stock delivery. The same value as in the associated <i>InputRequest</i> is used here.

Element	M/O	Data type	Description
Article	M	Tag	Article information follows. This element may occur multiply.
Attributes	M/O	Data type	Description and Values
Id	O	String64	The article ID to be used on stock input into the automated storage and retrieval system. In the code examples below the ID is composed from data taken from the transmitted barcode. It is up to the pharmacy IT system how the article ID is composed.
Name	O	String	Name of article. The automated storage and retrieval system displays the name in its own inventory view (GUI).
DosageForm	O	String	Dosage form of the article.

			The automated storage and retrieval system displays the name in its own inventory view (GUI).
PackagingUnit	O	String	Packaging unit of the article. The automated storage and retrieval system displays the name in its own inventory view (GUI).
MaxSubItemQuantity	O	Integer 32-bit ≥0	Maximum number of units (e.g. pills or ampules) which are contained in a full pack of the article. The value "0" means that the number of units is unknown.
RequiresFridge	O	Boolean	Flag indicating whether the article has to be stored refrigerated ("True"). The default value is "False".
SerialNumberSinceExpiryDate	O	Date	Expiry date in format JJJ-MM-TT, from which on the manufacturer puts datamatrix codes on packs of this item.

Element	M/O	Data type	Description
ProductCode	O	Tag	Information about product codes different to ArticleId follows. Each product code and the ArticleId may be used as scanned barcode when loading an item into the ASRS. This element can be used multiple times.
Attribute	M/O	Data type	Description and Values
Code	P	String64	Additional product code of the article which may occur as barcode or element of a barcode when loading an article into the ASRS. This code cannot be used to request dispensing of the article from the ASRS.

Element	M/O	Data type	Description
Pack	M	Tag	Pack information follows. This element may occur multiply.
Attributes	M/O	Data type	Description and Values
Index	O	Integer 32-bit ≥0	Index number of the pack. Used only if the <i>InputResponse</i> covers multiple packs. The index number corresponds to the one in the <i>InputRequest</i> .
DeliveryNumber	O	String	Stock delivery number specified in the <i>InputRequest</i>
BatchNumber	O	String	Batch number to be saved for this pack
ExternalId	O	String	External ID. Additional identifying attribute. This can be used, for example, to store additional information about a pack (e.g. the serial number).

SerialNumber	O	String	Serial number of the pack
ExpiryDate	O	String	Expiration date in format YYYY-MM-DD
SubItemQuantity	O	Integer 32-bit ≥0	Number of units (e.g. tablets or ampules) currently inside the pack. The pharmacy IT system can overwrite the original value from the <i>InputRequest</i> with this. The value "0" means that the pack is full (not opened).
Depth	O	Integer 32-bit ≥0	Depth of the pack in mm
Width	O	Integer 32-bit ≥0	Width of the pack in mm
Height	O	Integer 32-bit ≥0	Height of the pack in mm
Weight	O	Integer 32-bit ≥0	Weight of the pack in gramme
StockLocationId	O	String	ID of the stock location in the automated storage and retrieval system to be used. Is only used when an automated storage and retrieval system is divided into several virtual stock locations.

Element	M/O	Data type	Description
Handling	M	Tag	Instructions for handling of the pack follow. This element can occur once per pack.
Attributes	M/O	Data type	Description and Values
Input	M	String	Handling instructions for the pack. Possible values: "Allowed" if stock input is allowed "AllowedForFridge" if the article needs to be refrigerated "Rejected" if stock input is not allowed "RejectedNoExpiryDate" if stock input is not allowed because the expiration date was not specified "RejectedNoPickingIndicator" if stock input is not allowed because the article is not declared as capable of automated handling "RejectedNoBatchNumber" if stock input is not allowed because the batch number was not specified in the automated storage and retrieval system „RejectedNoSerialNumber“, if stock input is not allowed because the serial number was not specified in the automated storage and retrieval system "RejectedNoStockLocation" if stock input is not allowed because the stock location ID was not

			specified in the automated storage and retrieval system "RejectedInvalidStockLocation" if stock input is not allowed because the stock location ID specified in the automated storage and retrieval system is not authorized for this article
Text	O	String	Any text detailing additional instructions for handling of the pack. The text is normally used to detail the reasons for rejection of packs. The text might be displayed on the automated storage and retrieval system, and so should be capable of being localized.

Example of allowing stock input of a pack

```
<WWKS Version="2.0" Timestamp="2013-04-16T11:14:00Z">
  <InputResponse Id="1002" Source="100" Destination="999">
    <Article Id="0004-56-034-G00007T" Name="ACCU CHEK AVIVA"
      DosageForm="LOE" PackagingUnit="1X2.5 ML">
      <ProductCode Code="4150068106452" />
      <ProductCode Code="8714789994055" />
      <Pack Index="0" BatchNumber="Omepra0004" ExternalId="PalH09051200001"
        ExpiryDate="2012-11-05">
        <Handling Input="Allowed" Text="Pack input allowed."/>
      </Pack>
    </Article>
  </InputResponse>
</WWKS>
```

Example of refusing stock input of a pack

```
<WWKS Version="2.0" Timestamp="2013-04-16T11:14:00Z">
  <InputResponse Id="1002" Source="100" Destination="999">
    <Article>
      <Pack Index="0">
        <Handling Input="Rejected" Text="Pack input forbidden."/>
      </Pack>
    </Article>
  </InputResponse>
</WWKS>
```

8.3.3 InputMessage

Structure

```
<WWKS>
  <InputMessage>
    <Article>
      <ProductCode/>
      <Pack>
        <Handling/>
      </Pack>
    </Article>
  </InputMessage>
</WWKS>
```

Elements

Element	M/O	Data type	Description
InputMessage	M	Tag	Message type
Attributes	M/O	Data type	Description and Values
Id	M	String64	ID of the stock input process. This ID was sent in the <i>InputRequest</i> .
Source	M	Integer 32-bit >0	ID of the system sending the <i>InputMessage</i>
Destination	M	Integer 32-bit >0	ID of the system intended to receive the <i>InputMessage</i>
IsNewDelivery	O	Boolean	This flag identifies the stock input as part of a stock delivery. The same value as in the associated <i>InputRequest</i> is used here.

Element	M/O	Data type	Description
Article	M	Tag	Article information follows. This element may occur multiply.
Attributes	M/O	Data type	Description and Values
Id	M	String64	The article ID sent in the <i>InputResponse</i>
Name	O	String	Name of the article sent in the <i>InputResponse</i>
DosageForm	O	String	The dosage form sent in the <i>InputResponse</i>
PackagingUnit	O	String	The packaging unit sent in the <i>InputResponse</i>
MaxSubItemQuantity	O	Integer 32-bit ≥0	Maximum number of units (e.g. pills or ampules) which are contained in a full pack of the article. The value "0" means that the number of units is unknown. The value corresponds to the one sent in the <i>InputResponse</i> .

Element	M/O	Data type	Description
ProductCode	O	Tag	Information about product codes different to ArticleId follows. Each product code and the ArticleId may be used as scanned barcode when loading an item into the ASRS. This element can be used multiple times.
Attribute	M/O	Data type	Description and Values
Code	P	String64	Additional product code of the article which may occur as barcode or element of a barcode when loading an article into the ASRS. This code cannot be used to request dispensing of the article from the ASRS.

Element	M/O	Data type	Description
Pack	M	Tag	Pack information follows. This element may occur multiply.
Attributes	M/O	Data type	Description and Values
Index	O	Integer 32-bit ≥0	Index number of the pack. Used only if the <i>InputMessage</i> covers multiple packs. The index number corresponds to the one in the <i>InputRequest</i> .
Id	M	String64	Internal pack ID of the ASRS.
DeliveryNumber	O	String	Stock delivery number specified in the <i>InputRequest</i>
BatchNumber	O	String	Batch number saved for this pack
ExternalId	O	String	External ID specified in the <i>InputResponse</i> and saved for this pack
SerialNumber	O	String	Serial number of the pack
ExpiryDate	O	String	Expiration date in format YYYY-MM-DD
StockInDate	O	String	Input date in the format YYYY-MM-DD
ScanCode	O	String	Barcode of the input pack
SubItemQuantity	O	Integer 32-bit ≥0	Number of units (e.g. tablets or ampules) currently inside the pack. The value "0" means that the pack is full (not opened).
Depth	O	Integer 32-bit ≥0	Depth of the pack in mm
Width	O	Integer 32-bit ≥0	Width of the pack in mm
Height	O	Integer 32-bit ≥0	Height of the pack in mm
Weight	O	Integer 32-bit ≥0	Weight of the pack in gramme
Shape	O	String	Form factor of the pack. The default value is "Cuboid". "Cylinder" is also supported.
State	O	String	Status of the pack. This data is required when multiple automatic storage machines are

			connected. The default value "Available" means that the pack is currently available for output. "NotAvailable" is also supported.
StockLocationId	O	String	ID of the stock location in the automated storage and retrieval system. Is only used when an automated storage and retrieval system is divided into several virtual stock locations.
MachineLocation	O	String	Identification of the machine used for storing the pack. Only relevant if the automated storage and retrieval system consists of several physical stand-alone machines.
IsInFridge	O	Boolean	Flag indicating if the pack has been stored in a cooled environment ("True"). Default value is "False".

Element	M/O	Data type	Description
Handling	M	Tag	Input result follows. This element can occur once per pack.
Attributes	M/O	Data type	Description and Values
Input	M	String	Outcome of the stock input. Possible values: "Completed" if the pack was placed into stock "Aborted" if an error occurred or the stock input was aborted
Text	O	String	Any text for debugging and logging information

Example of successful stock input

```
<WWKS Version="2.0" TimeStamp="2013-04-16T11:14:00Z">
  <InputMessage Id="1002" Source="999" Destination="100">
    <Article Id="0004-56-034-G00007T" Name="ACCU CHEK AVIVA"
      DosageForm="LOE" PackagingUnit="1X2.5 ML">
      <ProductCode Code="4150068106452" />
      <ProductCode Code="8714789994055" />
      <Pack Index="0" Id="565362" BatchNumber="Omepra0004"
        ExternalId="PalH09051200001" ExpiryDate="2012-11-05"
        Depth="50" Width="50" Height="50" Shape="Cuboid"
        State="Available">
        <Handling Input="Completed" Text="Pack input completed."/>
      </Pack>
    </Article>
  </InputMessage>
</WWKS>
```

Example of stock input aborted because of rejection by pharmacy IT system

```
<WWKS Version="2.0" TimeStamp="2013-04-16T11:14:00Z">
  <InputMessage Id="1002" Source="999" Destination="100">
    <Article>
      <Pack Index="0" Id="0">
```

```
<Handling Input="Aborted" Text="Pack input aborted."/>
</Pack>
</Article>
</InputMessage>
</WWKS>
```

Example of stock input aborted by user

```
<WWKS Version="2.0" TimeStamp="2013-04-16T11:14:00Z">
  <InputMessage Id="1002" Source="999" Destination="100">
    <Article Id="0004-56-034-G00007T" Name="ACCU CHEK AVIVA"
      DosageForm="LOE" PackagingUnit="1X2.5 ML">
      <Pack Index="0" Id="0" BatchNumber="Omepra0004"
        ExternalId="PalH09051200001" ExpiryDate="2012-11-05">
        <Handling Input="Aborted" Text="Pack input aborted."/>
      </Pack>
    </Article>
  </InputMessage>
</WWKS>
```

8.4 Stock input initiation

Lead elements

InitiateInputRequest

InitiateInputResponse

InitiateInputMessage

Usage

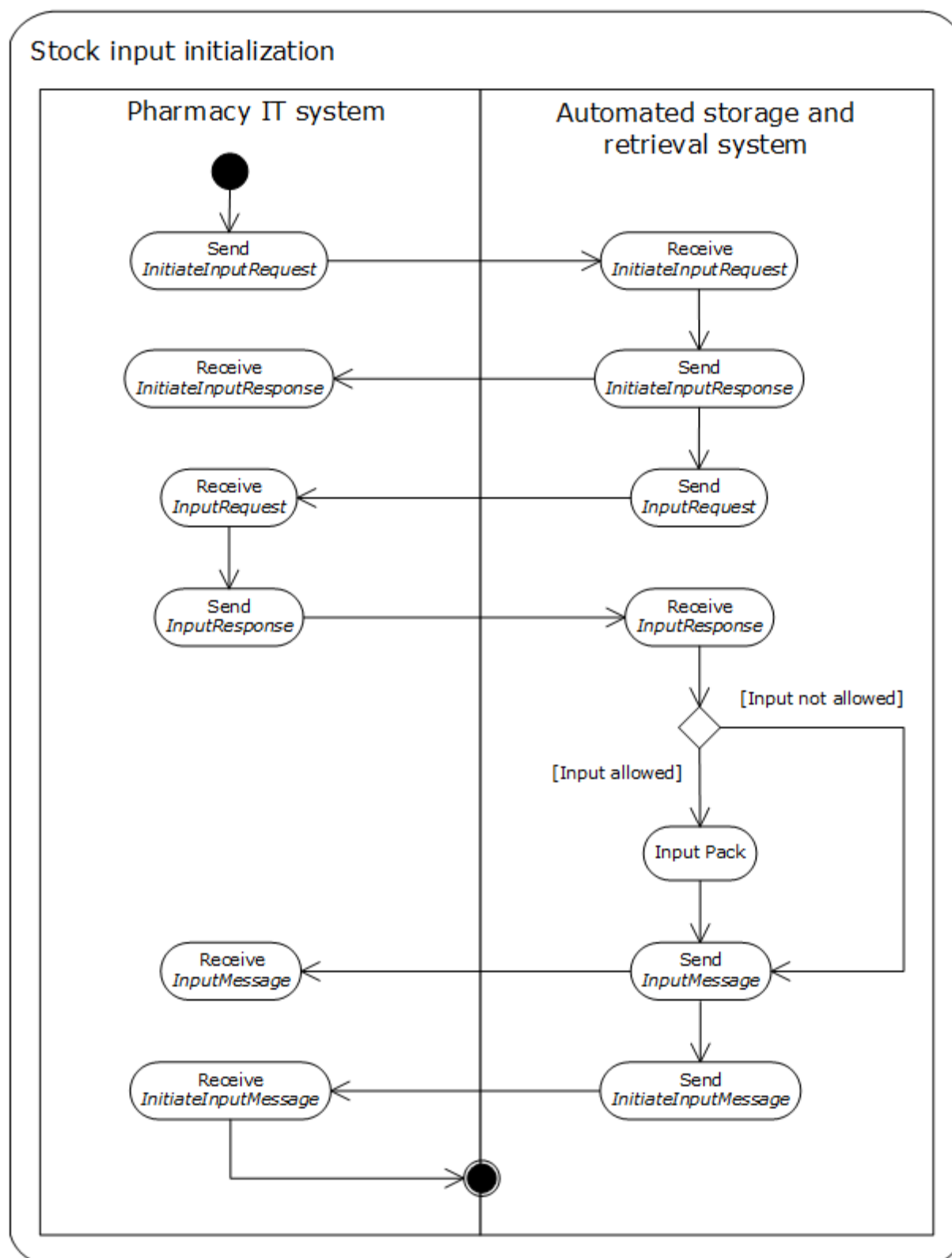
The pharmacy IT system can explicitly trigger an input process by sending an *InitiateInputRequest*. This message and the appertaining messages *InitiateInputResponse* and *InitiateInputMessage* are used when the automated storage and retrieval system is connected to a third party automated input system or a specific input behaviour is requested for other reasons.

It is the scope of pharmacy IT system the to make sure that the packs have been positioned correctly at a defined transfer point to the automated storage and retrieval system and are thus ready to be input by the automated storage and retrieval system. This can be, for example, realized through instructions in the user interface of the pharmacy IT system.

The triggered input process corresponds to the regular input process as described in the section *Stock input*. The entire process is completed as soon as the triggered input process is completed.

The automated storage and retrieval system can either return the *InitiateInputResponse* immediately or wait for the response to the corresponding input request of the pharmacy IT system. The process demonstrated in the flowchart corresponds to the first case.

Sequence



8.4.1 InitiateInputRequest

Structure

```
<WWKS>
  <InitiateInputRequest>
    <Details/>
    <Article>
      <Pack/>
    </Article>
  </InitiateInputRequest>
</WWKS>
```

Elements

Element	M/O	Data type	Description
InitiateInputRequest	M	Tag	Message type
Attributes	M/O	Data type	Description and Values
Id	M	String64	ID of the stock input initiation process. This ID is returned in the <i>InitiateInputResponse</i> and used in the corresponding <i>InitiateInputMessage</i> .
Source	M	Integer 32-bit >0	ID of the system sending <i>InitiateInputRequest</i>
Destination	M	Integer 32-bit >0	ID of the system intended to start the stock input. Example: 999 = Rowa Vmax 1 998 = Rowa Vmax 2 The values between 899 and 1000 are reserved for Rowa.
IsNewDelivery	O	Boolean	This flag specifies whether the triggered stock input is part of a new delivery. "True" means that a stock delivery is taking place. The attribute <i>DeliveryNumber</i> in the element <i>Pack</i> should then contain the stock delivery number. Blank stock delivery numbers (e.g. "") are possible in some customer-specific scenarios. "False" means that the triggered stock input relates to a stock return. The default value is "False".
SetPickingIndicator	O	Boolean	This flag forces definition of the article as capable of automated handling after the pharmacy IT system has initially rejected stock input with the reason "RejectedNoPickingIndicator". This case occurs primarily on initial stocking of the automated storage and retrieval system. The default value is "False".

Element	M/O	Data type	Description
Details	M	Tag	Stock input information follows.
Attributes	M/O	Data type	Description and Values
InputSource	M	Integer 32-bit	Identifies the handover point to the automated storage and retrieval system intended to be used for the stock input.
InputPoint	O	Integer 32-bit	Detailed information on the handover point used (e.g. belt number)

Element	M/O	Data type	Description
Article	M	Tag	Article information follows.
Id	O	String64	ASRS proposal for the article id, e.g. due to extraction from a datamatrix code.
FMDId	O	String	Main article id in a datamatrixcode that has to be used for the decommissioning of a pack's serial number.

Element	M/O	Data type	Description
Pack	M	Tag	Pack information follows. This element can be used multiple times.
Attributes	M/O	Data type	Description and Values
Index	O	Integer 32-bit >=0	If the stock input request comprises multiple packs of an article, a pack index is sent here.
ScanCode	M	String	Barcode of the pack being placed into stock. This code is checked by the pharmacy IT system and compared against internal data. Based on the information contained in the code, the pharmacy IT system can decide whether the pack can be placed into stock. Hint: In case the scancode contains unprintable characters (eg. Field separator in GS1 datamatrix code), these are encoded by a corresponding hex code as described in chapter 5.1)
DeliveryNumber	O	String	Stock delivery number for this pack. This information is only necessary when the attribute <i>IsNewDelivery</i> of the element <i>InitiateInputRequest</i> has the value "True".
BatchNumber	O	String	Batch number of the pack. This attribute is used when a batch number is to be sent along with the stock input request.
ExternalId	O	String	External ID. Additional identifying attribute. This attribute is used when an external ID is to be sent along with the input request.
SerialNumber	O	String	Serial number of the pack.
ExpiryDate	O	String	Expiration date of the pack in format YYYY-MM-DD. This attribute is used when an expiration

			date is to be sent along with the stock input request.
SubItemQuantity	0	Integer 32-bit ≥0	Number of units (e.g. tablets or ampules) currently inside the pack. The value "0" means that the pack is full (not opened). This attribute is used for the stock input of opened packs.
Depth	0	Integer 32-bit ≥0	Depth of the pack in mm
Width	0	Integer 32-bit ≥0	Width of the pack in mm
Height	0	Integer 32-bit ≥0	Height of the pack in mm
Weight	0	Integer 32-bit ≥0	Weight of the pack in gramme
Shape	0	String	Form factor of the pack. The default value is "Cuboid". "Cylinder" is also supported.
StockLocationId	0	String	ID of the stock location in the automated storage and retrieval system that is intended to be used for storing the pack. Is only used when an automated storage and retrieval system is divided into several virtual stock locations.
MachineLocation	0	String	Identification of the requesting machine intended to be used for storing the pack. Only relevant if the automated storage and retrieval system consists of several physical stand-alone machines.

Example

```
<WWKS Version="2.0" TimeStamp="2013-04-16T11:14:00Z">
  <InitiateInputRequest Id="1003" Source="100" Destination="999">
    <Details InputSource="3" InputPoint="1"/>
    <Article>
      <Pack Index="0"
ScanCode="010415012345678217151231101A234B5\x1D211234567890123456"
      Depth="50" Width="50" Height="50" Shape="Cuboid"/>
    </Article>
  </InitiateInputRequest>
</WWKS>
```

8.4.2 InitiateInputResponse

Structure

```
<WWKS>
  <InitiateInputResponse>
    <Details/>
    <Article>
      <ProductCode/>
      <Pack/>
    </Article>
  </InitiateInputResponse>
</WWKS>
```

Elements

Element	M/O	Data type	Description
InitiateInputResponse	M	Tag	Message type
Attributes	M/O	Data type	Description and Values
Id	M	String64	ID of the stock input initiation process
Source	M	Integer 32-bit >0	ID of the system sending <i>InitiateInputResponse</i>
Destination	M	Integer 32-bit >0	ID of the system that sent the original <i>InitiateInputRequest</i> .
IsNewDelivery	O	Boolean	<p>This flag specifies whether the triggered stock input is part of a new delivery.</p> <p>"True" means that a stock delivery is taking place. The attribute <i>DeliveryNumber</i> in the element <i>Pack</i> should then contain the stock delivery number. Blank stock delivery numbers (e.g. "") are possible in some customer-specific scenarios.</p> <p>"False" means that the triggered stock input relates to a stock return.</p> <p>The default value is "False".</p> <p>Here the same value is to be seen as in the associated <i>InitiateInputRequest</i>.</p>
SetPickingIndicator	O	Boolean	<p>This flag forces definition of the article as capable of automated handling after the pharmacy IT system has initially rejected stock input with the reason "RejectedNoPickingIndicator". This case occurs primarily on initial stocking of the automated storage and retrieval system.</p> <p>The default value is "False".</p> <p>Here the same value is to be seen as in the associated <i>InitiateInputRequest</i>.</p>

Element	M/O	Data type	Description
Details	M	Tag	Stock input information follows.
Attributes	M/O	Data type	Description and Values
InputSource	M	Integer 32-bit ≥0	Identifies the handover point to the automated storage and retrieval system intended to be used for the stock input.
InputPoint	O	Integer 32-bit ≥0	Detailed information on the handover point used (e.g. belt number). If this property was not defined in the associated <i>InitiateInputRequest</i> , the automated storage and retrieval system can here return the detailed handover point that was automatically determined.
Status	M	String	Status of the triggered stock input process. Within the <i>InitiateInputResponse</i> , only the values "Accepted" and "Rejected" are permitted. If the process was canceled with the "Rejected" status, the process is completed and no further messages are sent.

Element	M/O	Data type	Description
Article	M	Tag	Article information follows.
Attributes	M/O	Data type	Description and Values
Id	O	String64	Article ID of the pack that was initiated for stock input.
Name	O	String	Name of the article for the pack that was initiated for stock input.
DosageForm	O	String	Dosage form of the article for the pack that was initiated for stock input.
PackagingUnit	O	String	Packaging unit form of the article for the pack that was initiated for stock input.
MaxSubItemQuantity	O	Integer 32-bit ≥0	Maximum number of units (e.g. pills or ampules) which are contained in a full pack of the article. The value "0" means that the number of units is unknown.
SerialNumberSinceExpiryDate	O	Date	Expiry date in format JJJ-MM-TT, from which on the manufacturer puts datamatrix codes on packs of this item.

Element	M/O	Data type	Description
ProductCode	O	Tag	Information about product codes different to ArticleId follows. Each product code and the ArticleId may be used as scanned barcode when loading an item into the ASRS. This element can be used multiple times.

Attribute	M/O	Data type	Description and Values
Code	P	String64	Additional product code of the article which may occur as barcode or element of a barcode when loading an article into the ASRS. This code cannot be used to request dispensing of the article from the ASRS.

Element	M/O	Data type	Description
Pack	M	Tag	Pack information follows. This element can be used multiple times.
Attributes	M/O	Data type	Description and Values
Index	O	Integer 32-bit ≥0	If the stock input initiation request comprises multiple packs of an article, a pack index is sent here. Here the same value is to be seen as in the associated <i>InitiateInputRequest</i> .
ScanCode	M	String	Barcode of the pack being placed into stock. This code is checked by the pharmacy IT system and compared against internal data. Based on the information contained in the code, the pharmacy IT system can decide whether the pack can be placed into stock. Here the same value is to be seen as in the associated <i>InitiateInputRequest</i> .
DeliveryNumber	O	String	Stock delivery number for this pack. Here the same value is to be seen as in the associated <i>InitiateInputRequest</i> .
BatchNumber	O	String	Batch number of the pack. Here the same value is to be seen as in the associated <i>InitiateInputRequest</i> .
ExternalId	O	String	External ID. Additional identifying attribute. Here the same value is to be seen as in the associated <i>InitiateInputRequest</i> .
SerialNumber	O	String	Serial number of the pack
ExpiryDate	O	String	Expiration date of the pack in format YYYY-MM-DD. Here the same value is to be seen as in the associated <i>InitiateInputRequest</i> .
SubItemQuantity	O	Integer 32-bit ≥0	Number of units (e.g. tablets or ampules) currently inside the pack. The value "0" means that the pack is full (not opened). This attribute is used for the stock input of opened packs. Here the same value is to be seen as in the associated <i>InitiateInputRequest</i> .
Depth	O	Integer 32-bit ≥0	Depth of the pack in mm.

			Here the same value is to be seen as in the associated <i>InitiateInputRequest</i> . Alternatively, the automated storage and retrieval system can return pack dimensions that it has determined itself (e.g. if there are no dimensions specified in the <i>InitiateInputRequest</i>).
Width	O	Integer 32-bit ≥0	Width of the pack in mm. Here the same value is to be seen as in the associated <i>InitiateInputRequest</i> . Alternatively, the automated storage and retrieval system can return pack dimensions that it has determined itself (e.g. if there are no dimensions specified in the <i>InitiateInputRequest</i>).
Height	O	Integer 32-bit ≥0	Height of the pack in mm. Here the same value is to be seen as in the associated <i>InitiateInputRequest</i> . Alternatively, the automated storage and retrieval system can return pack dimensions that it has determined itself (e.g. if there are no dimensions specified in the <i>InitiateInputRequest</i>).
Weight	O	Integer 32-bit ≥0	Weight of the pack in gramme. Here the same value is to be seen as in the associated <i>InitiateInputRequest</i> . Alternatively, the automated storage and retrieval system can return pack weight that it has determined itself (e.g. if there are no dimensions specified in the <i>InitiateInputRequest</i>).
Shape	O	String	Form factor of the pack. The default value is "Cuboid". "Cylinder" is also supported. Here the same value is to be seen as in the associated <i>InitiateInputRequest</i> .
StockLocationId	O	String	ID of the stock location in the automated storage and retrieval system that is intended to be used for storing the pack. Is only used when an automated storage and retrieval system is divided into several virtual stock locations. Here the same value is to be seen as in the associated <i>InitiateInputRequest</i> .

Example

```
<WWKS Version="2.0" TimeStamp="2013-04-16T11:14:00Z">
  <InitiateInputResponse Id="1003" Source="999" Destination="100">
    <Details InputSource="3" InputPoint="1" Status="Accepted"/>
    <Article Id="0004-56-034-G00007T" Name="ACCU CHEK AVIVA"
      DosageForm="LOE" PackagingUnit="1X2.5 ML">
      <Pack Index="0"
ScanCode="010415012345678217151231101A234B5\x1D211234567890123456"
        Depth="50" Width="50" Height="50" Shape="Cuboid"/>
      </Article>
    </InitiateInputResponse>
  </WWKS>
```

8.4.3 InitiateInputMessage

Structure

```

<WWKS>
  <InitiateInputMessage>
    <Details/>
    <Article>
      <Pack>
        <Error/>
      </Pack>
    </Article>
  </InitiateInputMessage>
</WWKS>
  
```

Elements

Element	M/O	Data type	Description
InitiateInputMessage	M	Tag	Message type
Attributes	M/O	Data type	Description and Values
Id	M	String64	ID of the stock input initiation process. This ID was sent in the <i>InitiateInputRequest</i> .
Source	M	Integer 32-bit >0	ID of the system sending <i>InitiateInputMessage</i>
Destination	M	Integer 32-bit >0	ID of the system intended to receive the <i>InitiateInputMessage</i>

Element	M/O	Data type	Description
Details	M	Tag	Stock input information follows.
Attributes	M/O	Data type	Description and Values
InputSource	M	Integer 32-bit ≥0	Identifies the handover point to the automated storage and retrieval system used for the stock input.
InputPoint	O	Integer 32-bit	Detailed information on the handover point used (e.g. belt number). If this property was not defined in the associated <i>InitiateInputRequest</i> , the automated storage and retrieval system can here return the detailed handover point that was automatically determined.
Status	M	String	Final status of the triggered stock input process. Within the <i>InitiateInputMessage</i> , only the values "Completed" and "Incomplete" are permitted. If the process was completed with the "Incomplete" status, at least one of the defined packs could not be input.

Element	M/O	Data type	Description
Article	M	Tag	Article information follows. This element may occur multiply.
Attributes	M/O	Data type	Description and Values
Id	M	String64	Article ID of the pack that was initiated for stock input
Name	O	String	Name of the article for the pack that was initiated for stock input
DosageForm	O	String	Dosage form of the article for the pack that was initiated for stock input
PackagingUnit	O	String	Packaging unit of the article for the pack that was initiated for stock input
MaxSubItemQuantity	O	Integer 32-bit ≥0	Maximum number of units (e.g. pills or ampules) which are contained in a full pack of the article. The value "0" means that the number of units is unknown.

Element	M/O	Data type	Description
Pack	M	Tag	Pack information follows. This element may occur multiply.
Attributes	M/O	Data type	Description and Values
Index	O	Integer 32-bit ≥0	Index number of the pack. Used only if the <i>InitiateInputMessage</i> covers multiple packs. The index number corresponds to the one in the <i>InitiateInputRequest</i> .
Id	M	String64	Internal pack ID in the automated storage and retrieval system.
DeliveryNumber	O	String	Stock delivery number specified in the <i>InitiateInputRequest</i>
BatchNumber	O	String	Batch number saved for this pack
ExternalId	O	String	External ID specified in the <i>InitiateInputRequest</i>
SerialNumber	O	String	Serial number of the pack
ExpiryDate	O	String	Expiration date in format YYYY-MM-DD
StockInDate	O	String	Input date in the format YYYY-MM-DD
ScanCode	O	String	Barcode of the input pack
SubItemQuantity	O	Integer 32-bit ≥0	Number of units (e.g. tablets or ampules) currently inside the pack. The value "0" means that the pack is full (not opened).
Depth	O	Integer 32-bit ≥0	Depth of the pack in mm
Width	O	Integer 32-bit ≥0	Width of the pack in mm
Height	O	Integer 32-bit ≥0	Height of the pack in mm
Weight	O	Integer 32-bit ≥0	Weight of the pack in gramme

Shape	O	String	Form factor of the pack. The default value is "Cuboid". "Cylinder" is also supported.
State	O	String	Status of the pack. This data is required when multiple automatic storage machines are connected. The default value "Available" means that the pack is currently available for output. "NotAvailable" is also supported.
StockLocationId	O	String	ID of the stock location in the automated storage and retrieval system. Is only used when an automated storage and retrieval system is divided into several virtual stock locations.
MachineLocation	O	String	Identification of the machine used for storing the pack. Only relevant if the automated storage and retrieval system consists of several physical stand-alone machines.
IsInFridge	O	Boolean	Flag indicating if the pack has been stored in a cooled environment ("True"). Default value is "False".

Element	M/O	Data type	Description
Error	O	Tag	Detailed error information follows. This element can occur once per pack.
Attributes	M/O	Data type	Description and Values
Type	M	String	Detailed error that occurred during stock input. Possible values: "Rejected", "RejectedNoExpiryDate", "RejectedInvalidExpiryDate", "RejectedNoPickingIndicator", "RejectedNoBatchNumber", "RejectedNoSerialNumber", "RejectedNoStockLocation", "RejectedInvalidStockLocation", "QueueFull", "FridgeMissing", "UnknownPackDimensions", "MeasurementError", "PackAcknowledged", "InputBroken", "NoSpaceInMachine", "NoPackDetected"
Text	O	String	Any text for detailed error information

Example of successful stock input

```
<WWKS Version="2.0" TimeStamp="2013-04-16T11:14:00Z">
  <InitiateInputMessage Id="1002" Source="999" Destination="100">
    <Details InputSource="3" InputPoint="1" Status="Completed"/>
    <Article Id="0004-56-034-G00007T" Name="ACCU CHEK AVIVA"
      DosageForm="LOE" PackagingUnit="1X2.5 ML">
      <Pack Index="0" Id="565362" BatchNumber="Omepra0004"
        ExternalId="PalH09051200001" ExpiryDate="2012-11-05"
```

```
        Depth="50" Width="50" Height="50" Shape="Cuboid"  
        State="Available"/>  
    </Article>  
</InitiateInputMessage>  
</WWKS>
```

Example for an aborted stock input

```
<WWKS Version="2.0" TimeStamp="2013-04-16T11:14:00Z">  
    <InitiateInputMessage Id="1003" Source="999" Destination="100">  
        <Details InputSource="3" InputPoint="1" Status="Incomplete"/>  
        <Article>  
            <Pack Index="0">  
                <Error Type="Rejected" Text="Pack input forbidden."/>  
            </Pack>  
        </Article>  
    </InitiateInputMessage>  
</WWKS>
```

8.5 Stock output

Lead elements

OutputRequest

OutputResponse

OutputMessage

Usage

When the pharmacy IT system wants packs withdrawn from stock, it sends the *OutputRequest* to the automated storage and retrieval system. The automated storage and retrieval system responds in the *OutputResponse* indicating whether it is able to execute the output or not. The automated storage and retrieval system may refuse an output request if, for example, the system is not ready due to maintenance procedures or because the query contains invalid data. If the automated storage and retrieval system accepts the output request, the output is executed as quickly as possible. After output (but also if the output fails) the automated storage and retrieval system sends the *OutputMessage*.

The pharmacy IT system can send multiple output requests in sequence. The automated storage and retrieval system will process them in the order in which they are received or according to priority, as appropriate.

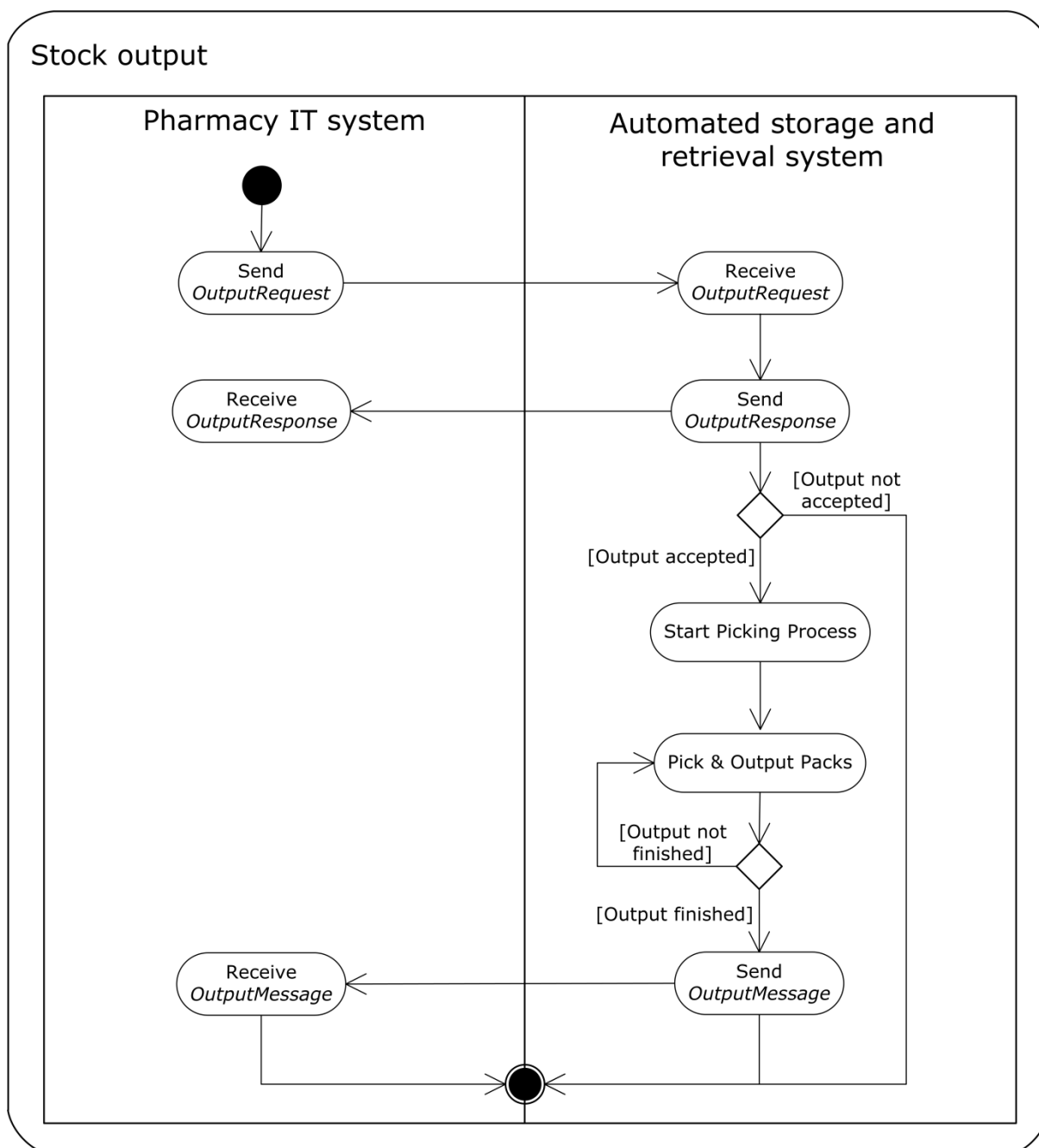
Some automated storage and retrieval systems offer the facility to request packs directly on the automated storage and retrieval system without going through the pharmacy IT system. This is done by an operative on the automated storage and retrieval system's user interface. This procedure requires a returned *OutputMessage* from the automated storage and retrieval system to the pharmacy IT system. You will find an example of this so-called manual output at the end of this section.

Some automated storage and retrieval systems support labeling of packs during the stock output process. A special printer is connected to the automated storage and retrieval system for the purpose. The pharmacy IT system can define the content of the printed label in the *OutputRequest*. The label print is configured in detail both by the

pharmacy IT system and on the label printer. Templates are used to specify how the data is presented. The data sent to the label printer may be in a variety of formats, such as XML, HTML or SVG, depending on what the printer is able to process. The label content is therefore embedded in the *OutputRequest* and *OutputResponse* as a CDATA element.

In combination with automated container filling systems, it is possible that the automated storage and retrieval system sends a so-called empty-order to the pharmacy IT system. An empty-order does not contain any *Criteria* elements and does not therefore prompt a pack output. Consequently the affected container is forwarded by the automated storage and retrieval system as soon as it reaches the container filling point of the automated storage and retrieval system. If no container number is specified in an empty-order, the next container reaching the container filling point of the automated storage and retrieval system is forwarded and the corresponding container number is returned to the pharmacy IT system in an *OutputMessage*.

Sequence



8.5.1 OutputRequest

Structure

```

<WWKS>
  <OutputRequest>
    <Details/>
    <Criteria>
      <Label>
        <Content>
          </Content>
        </Label>
      </Criteria>
    </OutputRequest>
  </WWKS>

```

Elements

Element	M/O	Data type	Description
OutputRequest	M	Tag	Message type
Attributes	M/O	Data type	Description and Values
Id	M	String64	ID of the stock output process. This ID is returned in the <i>OutputResponse</i> and is also used in the associated <i>OutputMessage</i> .
Source	M	Integer 32-bit >0	ID of the system sending the output order
Destination	M	Integer 32-bit >0	ID of the system receiving the output order
BoxNumber	O	String	Number of the box to be used for this task. The data is only required if an automatic box filler is being used and the pharmacy IT system predefines the box numbers for an output order.

Element	M/O	Data type	Description
Details	M	Tag	Output details follow.
Attributes	M/O	Data type	Description and Values
Priority	O	String	Priority of the stock output. Possible values: "Low" "Normal" "High" The default value is "Normal".
OutputDestination	M	Integer 32-bit	Number of the output location to which the packs are to be sent
OutputPoint	O	Integer 32-bit	Detailed information on the requested output location (e.g. belt number).

Element	M/O	Data type	Description
Criteria	O	Tag	Output filters follow. This element can be used multiple times.
Attributes	M/O	Data type	Description and Values
ArticleId	O	String64	The article ID serving as a filter for the packs. The ID must exactly match the one in the <i>StockInputResponse</i> .
Quantity	M	Integer 32-bit ≥0	Number of full packs to be outputted
SubItemQuantity	O	Integer 32-bit ≥0	Number of units (e.g. tablets, ampules) to be outputted. The automated storage and retrieval system calculates the resultant number of packs and outputs them. If this attribute is used, the <i>Quantity</i> attribute is ignored. It should nevertheless be set to "0".
MinimumExpiryDate	O	String	Filter for packs having the specified expiration date as a minimum. Format YYYY-MM-DD.
BatchNumber	O	String	Filter for packs having the specified batch number
SingleBatchNumber	O	Boolean	Alternative to BatchNumber. Defines that all requested packs should have the same BatchNumber. The default value is False.
ExternalId	O	String	Filter for packs having the specified external ID
SerialNumber	O	String	Filter for packs having the specified serial number
PackId	O	Integer 64-bit >0	Filter for packs having the specified automated storage and retrieval system internal pack ID. This filter can be used to output a specific pack.
StockLocationId	O	String	Filter for packs having the specified ID of the stock location in the automated storage and retrieval system. Is only used when an automated storage and retrieval system is divided into several virtual stock locations.
MachineLocation	O	String	Filter for packs having the specified identification of the machine used for storing the pack. Only relevant if the automated storage and retrieval system consists of several physical stand-alone machines.

Element	M/O	Data type	Description
Label	O	Tag	Label information follows. This element can be used multiple times.
Attributes	M/O	Data type	Description and Values
TemplateId	M	String	ID of the label template to be used by the label printer for correct output of the label content

Element	M/O	Data type	Description
---------	-----	-----------	-------------

Content	M	Tag	Label content to be printed. This data is embedded in the message as a CDATA XML block.
---------	---	-----	---

Example of an empty output request

```
<WWKS Version="2.0" TimeStamp="2013-04-16T11:14:00Z">
  <OutputRequest Id="1004" Source="100" Destination="999">
    <Details Priority="Normal" OutputDestination="3"/>
  </OutputRequest>
</WWKS>
```

Example of an output request with article ID

```
<WWKS Version="2.0" TimeStamp="2013-04-16T11:14:00Z">
  <OutputRequest Id="1004" Source="100" Destination="999">
    <Details Priority="Normal" OutputDestination="3"/>
    <Criteria ArticleId="0004-56-034-G00025T" Quantity="1"/>
    <Criteria ArticleId="0004-56-034-G00007T" Quantity="1"
      MinimumExpiryDate="2015-11-01"/>
  </OutputRequest>
</WWKS>
```

Example of an output request with article ID and external ID

```
<WWKS Version="2.0" TimeStamp="2013-04-16T11:14:00Z">
  <OutputRequest Id="1004" Source="100" Destination="999">
    <Details Priority="Normal" OutputDestination="3"/>
    <Criteria ArticleId="0004-56-034-G00007T"
      ExternalId="PalH09051200001" Quantity="1"/>
  </OutputRequest>
</WWKS>
```

Example of an output request with article ID and label data

```
<WWKS Version="2.0" TimeStamp="2013-04-16T11:14:00Z">
  <OutputRequest Id="1004" Source="100" Destination="999">
    <Details Priority="Normal" OutputDestination="3"/>
    <Criteria ArticleId="0004-56-034-G00007T" Quantity="1">
      <Label TemplateId="3413">
        <Content>
          <![CDATA[
            <article>
              <name>NIFEDIPIN 20 retard 1A Pharma Tabl.</name>
              <quantity>30</quantity>
            </article>
            <dosagelines>
              <labeldosageline>
                <synonym>on an empty stomach</synonym>
                <amount>1</amount>
                <quantityunit>pcs</quantityunit>
              </labeldosageline>
            </dosagelines>
          ]]>
        </Content>
      </Label>
    </Criteria>
  </OutputRequest>
</WWKS>
```

```

        </labeldosageline>
    </dosagelines>
  ]]>
</Content>
</Label>
</Criteria>
</OutputRequest>
</WWKS>

```

8.5.2 OutputResponse

Structure

```

<WWKS>
  <OutputResponse>
    <Details/>
    <Criteria>
      <Label>
        <Content>
        </Content>
      </Label>
    </Criteria>
  </OutputResponse>
</WWKS>

```

Elements

Element	M/O	Data type	Description
OutputResponse	M	Tag	Message type
Attributes	M/O	Data type	Description and Values
Id	M	String64	ID of the stock output process. This ID was sent in the <i>OutputRequest</i> .
Source	M	Integer 32-bit >0	ID of the system sending the <i>OutputResponse</i>
Destination	M	Integer 32-bit >0	ID of the system receiving the <i>OutputResponse</i>
BoxNumber	O	String	Number of the box specified in the <i>OutputRequest</i> . The data is required if an automatic box filler is being used.

Element	M/O	Data type	Description
Details	M	Tag	Output details follow.
Attributes	M/O	Data type	Description and Values
Priority	O	String	Priority of this stock output process. Here the same value is to be seen as in the <i>OutputRequest</i> .

OutputDestination	M	Integer 32-bit	Number of the output location to which the packs are sent. Here the same value is to be seen as in the <i>OutputRequest</i> .
OutputPoint	O	Integer 32-bit	Detailed information on the requested output location (e.g. belt number). Here the same value is to be seen as in the <i>OutputRequest</i> .
Status	M	String	Status of the stock output process. Possible values: "Queued" if the output is pending "Rejected" if the output is rejected

Element	M/O	Data type	Description
Criteria	O	Tag	Output filters follow. This element may occur multiply. The attributes and values correspond to those in the <i>OutputRequest</i> .
Attributes	M/O	Data type	Description and Values
ArticleId	O	String64	The article ID serving as a filter for the packs. The ID must exactly match the one in the <i>StockInputResponse</i> .
Quantity	M	Integer 32-bit ≥0	Number of full packs to output. Here the same value is to be seen as in the <i>OutputRequest</i> .
SubItemQuantity	O	String	Number of units (e.g. tablets, ampules) to be outputted. If this attribute is used, the <i>Quantity</i> attribute is ignored. It should nevertheless be set to "0". Here the same value is to be seen as in the <i>OutputRequest</i> .
MinimumExpiryDate	O	Integer 32-bit ≥0	Filter for packs having the specified expiration date as a minimum. Format YYYY-MM-DD. Here the same value is to be seen as in the <i>OutputRequest</i> .
BatchNumber	O	String	Filter for packs having the specified batch number. Here the same value is to be seen as in the <i>OutputRequest</i> .
SingleBatchNumber	O	Boolean	Alternative to BatchNumber. Defines that all requested packs should have the same BatchNumber. The default value is False. Here the same value is to be seen as in the <i>OutputRequest</i> .
ExternalId	O	String	Filter for packs having the specified external ID. Here the same value is to be seen as in the <i>OutputRequest</i> .
SerialNumber	O	String	Filter for packs having the specified serial number. Here the same value is to be seen as in the <i>OutputRequest</i> .
PackId	O	Integer 64-bit >0	Filter for packs having the specified automated storage and retrieval system internal pack ID. This filter can be used to

			output a specific pack. Here the same value is to be seen as in the <i>OutputRequest</i> .
StockLocationId	O	String	Filter for packs having the specified ID of the stock location in the automated storage and retrieval system. Is only used when an automated storage and retrieval system is divided into several virtual stock locations. Here the same value is to be seen as in the <i>OutputRequest</i> .
MachineLocation	O	String	Filter for packs having the specified identification of the machine used for storing the pack. Only relevant if the automated storage and retrieval system consists of several physical stand-alone machines. Here the same value is to be seen as in the <i>OutputRequest</i> .

Element	M/O	Data type	Description
Label	O		Label information follows. This element may occur multiply. The data corresponds to that in the <i>OutputRequest</i> .
Attributes	M/O	Data type	Description and Values
TemplateId	M		ID of the label template to be used by the label printer for correct output of the label content. The data corresponds to that in the <i>OutputRequest</i> .

Element	M/O	Data type	Description
Content	M		Label content to be printed. This data is embedded in the message as a CDATA XML block. The data corresponds to that in the <i>OutputRequest</i> .

Example of an accepted output request

```
<WWKS Version="2.0" TimeStamp="2013-04-16T11:14:00Z">
  <OutputResponse Id="1004" Source="999" Destination="100">
    <Details Priority="Normal" OutputDestination="3" Status="Queued"/>
    <Criteria ArticleId="0004-56-034-G00025T" Quantity="1"/>
    <Criteria ArticleId="0004-56-034-G00007T" Quantity="1"
      MinimumExpiryDate="2015-11-01"/>
  </OutputResponse>
</WWKS>
```

Example of a rejected output request

```
<WWKS Version="2.0" TimeStamp="2013-04-16T11:14:00Z">
  <OutputResponse Id="1004" Source="999" Destination="100">
    <Details Priority="Normal" OutputDestination="3" Status="Rejected"/>
  </OutputResponse>
</WWKS>
```

```
<Criteria ArticleId="0004-56-034-G00025T" Quantity="1"/>
<Criteria ArticleId="0004-56-034-G00007T" Quantity="1"
  MinimumExpiryDate="2015-11-01"/>
</OutputResponse>
</WWKS>
```

Example of an accepted output request with label data

```
<WWKS Version="2.0" TimeStamp="2013-04-16T11:14:00Z">
  <OutputResponse Id="1004" Source="999" Destination="100">
    <Details Priority="Normal" OutputDestination="3" Status="Queued"/>
    <Criteria ArticleId="0004-56-034-G00007T" Quantity="1">
      <Label TemplateId="3413">
        <Content>
          <![CDATA[
            <article>
              <name>NIFEDIPIN 20 retard 1A Pharma Tabl.</name>
              <quantity>30</quantity>
            </article>
            <dosagelines>
              <labeldosageline>
                <synonym>on an empty stomach</synonym>
                <amount>1</amount>
                <quantityunit>pcs</quantityunit>
              </labeldosageline>
            </dosagelines>
          ]]>
        </Content>
      </Label>
    </Criteria>
  </OutputResponse>
</WWKS>
```

8.5.3 OutputMessage

Structure

```
<WWKS>
  <OutputMessage>
    <Details/>
    <Article>
      <Pack/>
    </Article>
    <Box/>
  </OutputMessage>
</WWKS>
```

Elements

Element	M/O	Data type	Description
OutputMessage	M	Tag	Message type
Attributes	M/O	Data type	Description and Values
Id	M	String64	ID of the stock output process. This ID was sent in the <i>OutputRequest</i> .
Source	M	Integer 32-bit >0	ID of the system sending the <i>OutputMessage</i>
Destination	M	Integer 32-bit >0	ID of the system receiving the <i>OutputMessage</i>

Element	M/O	Data type	Description
Details	M	Tag	Output details follow.
Attributes	M/O	Data type	Description and Values
Priority	O	String	Priority of this stock output process. Here the same value is to be seen as in the <i>OutputRequest</i> .
OutputDestination	M	Integer 32-bit	Number of the output location to which the packs were sent. Here the same value is to be seen as in the <i>OutputRequest</i> .
OutputPoint	O	Integer 32-bit	Detailed information on the requested output location (e.g. belt number). Here the same value is to be seen as in the <i>OutputRequest</i> .
Status	M	String	Status of the stock output process. Possible values: "Queued", if output hasn't started yet "InProcess", if output has started "Aborting", if output is cancelled "PartialDispense", if a part of the order has been dispensed already. The message contains a list of packs dispensed in this step. Packs already announced with a PartialDispensed are not listed again. "Completed" if the output was completed successfully "Incomplete" if the output was not completed fully "Aborted" if the output was aborted "BoxReleased" if a tote was successfully released

Element	M/O	Data type	Description
Article	O	Tag	Article information follows. This element may occur multiply.
Attributes	M/O	Data type	Description and Values
Id	O	String64	Article ID of the outputted pack

Element	M/O	Data type	Description
Pack	O	Tag	Pack information follows. This element may occur multiply.
Attributes	M/O	Data type	Description and Values
Id	M	String64	Picking system internal ID of the outputted pack
DeliveryNumber	O	String	Stock delivery number of the outputted pack
BatchNumber	O	String	Batch number of the outputted pack
ExternalId	O	String	External ID of the outputted pack
SerialNumber	O	String	Serial number of the outputted pack
ExpiryDate	O	String	Expiration date of the outputted pack in format YYYY-MM-DD.
StockInDate	O	String	Input date of the output pack in format YYYY-MM-DD
ScanCode	O	String	Barcode of the output pack Hint: In case the scancode contains unprintable characters (eg. Field separator in GS1 datamatrix code), these are encoded by a corresponding hex code as described in chapter 5.1)
SubItemQuantity	O	Integer 32-bit ≥0	Number of units (e.g. tablets or ampules) in the outputted pack. The value "0" means that the pack is full.
Depth	O	Integer 32-bit ≥0	Depth of the pack in mm
Width	O	Integer 32-bit ≥0	Width of the pack in mm
Height	O	Integer 32-bit ≥0	Height of the pack in mm
Weight	O	Integer 32-bit ≥0	Weight of the pack in gramme,
Shape	O	String	Form factor of the pack. Possible values: "Cuboid" "Cylinder" The default value is "Cuboid".
IsInFridge	O	Boolean	Flag indicating whether the pack has been stored refrigerated. The default value is "False".
BoxNumber	O	String	Number of the box to which the pack was outputted. The data is only required if an automatic box filler is being used.

OutputDestination	M	Integer 32-bit	Number of the output location to which the pack was sent. A possible error case is output to a point other than the one requested, for example because the requested output point was not operational.
OutputPoint	O	Integer 32-bit	Detailed information on the output location (e.g. belt number) used for pack output.
LabelStatus	O	String	Status of the labeling of the outputted pack. This is only relevant in conjunction with labeling. Possible values: "Labelled" if the pack was labeled correctly with the data predefined by the pharmacy IT system "NotLabelled" if the pack was not labeled (e.g. because no printer was available) "LabelError" if an error occurred during labeling
StockLocationId	O	String	ID of the stock location in the automated storage and retrieval system. Is only used when an automated storage and retrieval system is divided into several virtual stock locations.
MachineLocation	O	String	Identification of the machine that was used to store packs of this article. Only relevant if the automated storage and retrieval system consists of several physical stand-alone machines.

Element	M/O	Data type	Description
Box	O	Tag	Detailed information on the containers used follows. This element may occur multiply.
Attributes	M/O	Data type	Description and Values
Number	M	String	Number of the container either defined in the <i>OutputRequest</i> or automatically determined during filling.

Example of a successfully completed stock output

```
<WWKS Version="2.0" TimeStamp="2013-04-16T11:14:00Z">
  <OutputMessage Id="1004" Source="999" Destination="100">
    <Details Priority="Normal" OutputDestination="3" Status="Completed"/>
    <Article Id="0004-56-034-G00025T">
      <Pack Id="5637" BatchNumber="Omepra0004" ExternalId="PalH09051200001"
        ExpiryDate="2015-11-05" Depth="50" Width="50" Height="50"
        Shape="Cuboid" OutputDestination="3" LabelStatus="Labelled"/>
    </Article>
    <Article Id="0004-56-034-G00007T">
      <Pack Id="8563" BatchNumber="Omepra0004" ExternalId="PalH09051200001"
        ExpiryDate="2015-11-05" Depth="70" Width="70" Height="70"
        Shape="Cuboid" IsInFridge="True" OutputDestination="3"
        LabelStatus="Labelled"/>
    </Article>
  </OutputMessage>
</WWKS>
```

```
</OutputMessage>
</WWKS>
```

Example of a partially completed stock output (not enough packs available)

```
<WWKS Version="2.0" TimeStamp="2013-04-16T11:14:00Z">
  <OutputMessage Id="1004" Source="999" Destination="100">
    <Details Priority="Normal" OutputDestination="3" Status="Incomplete"/>
    <Article Id="0004-56-034-G00025T">
      <Pack Id="5637" BatchNumber="Omepra0004" ExternalId="PalH09051200001"
        ExpiryDate="2015-11-05" Depth="50" Width="50" Height="50"
        Shape="Cuboid" OutputDestination="3"/>
    </Article>
  </OutputMessage>
</WWKS>
```

Example of a stock output canceled before output began

```
<WWKS Version="2.0" TimeStamp="2013-04-16T11:14:00Z">
  <OutputMessage Id="1004" Source="999" Destination="100">
    <Details Priority="Normal" OutputDestination="3" Status="Aborted"/>
  </OutputMessage>
</WWKS>
```

Example of a stock output aborted after output began

```
<WWKS Version="2.0" TimeStamp="2013-04-16T11:14:00Z">
  <OutputMessage Id="1004" Source="999" Destination="100">
    <Details Priority="Normal" OutputDestination="3" Status="Aborted"/>
    <Article Id="0004-56-034-G00025T">
      <Pack Id="5637" BatchNumber="Omepra0004" ExternalId="PalH09051200001"
        ExpiryDate="2015-11-05" Depth="50" Width="50" Height="50"
        Shape="Cuboid" OutputDestination="3"/>
    </Article>
  </OutputMessage>
</WWKS>
```

Example of a successfully completed stock output with tote filling

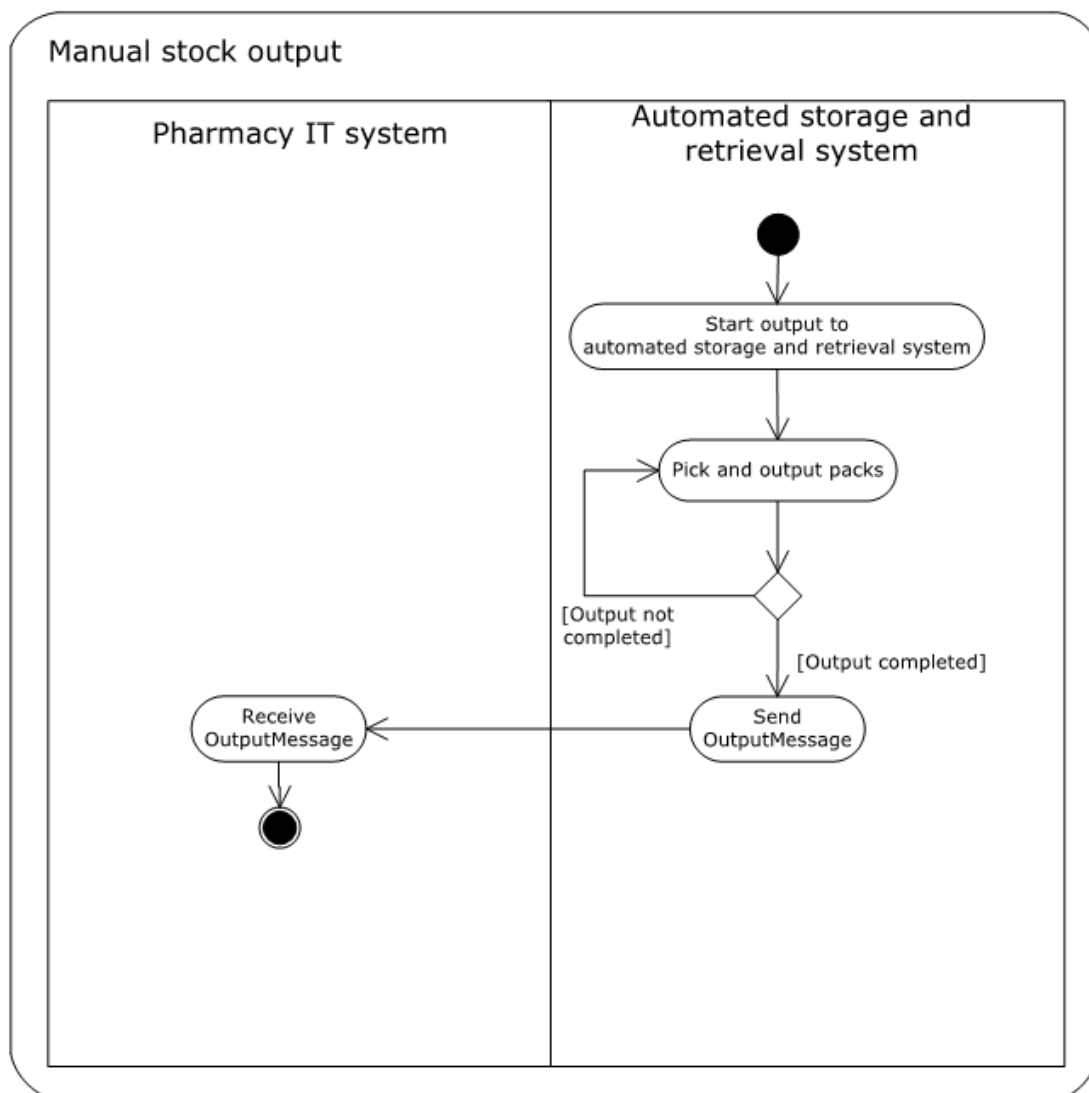
```
<WWKS Version="2.0" TimeStamp="2013-04-16T11:14:00Z">
  <OutputMessage Id="1004" Source="999" Destination="100">
    <Details Priority="Normal" OutputDestination="3" Status="Completed"/>
    <Article Id="0004-56-034-G00025T">
      <Pack Id="5637" BatchNumber="Omepra0004" ExternalId="PalH09051200001"
        ExpiryDate="2015-11-05" Depth="50" Width="50" Height="50"
        Shape="Cuboid" OutputDestination="3" LabelStatus="Labelled"
        BoxNumber="123" />
    </Article>
  </OutputMessage>
</WWKS>
```

```
<Article Id="0004-56-034-G00007T">
  <Pack Id="8563" BatchNumber="Omepra0004" ExternalId="PalH09051200001"
    ExpiryDate="2015-11-05" Depth="70" Width="70" Height="70"
    Shape="Cuboid" IsInFridge="True" OutputDestination="3"
    LabelStatus="Labelled" BoxNumber="456" />
</Article>
<Box Number="123" />
<Box Number="456" />
</OutputMessage>
</WWKS>
```

Manual stock output

Some automated storage and retrieval systems offer the facility to request packs directly on the automated storage and retrieval system without going through the pharmacy IT system. This is done by an operative on the automated storage and retrieval system's user interface. After output, an asynchronous *OutputMessage* is returned from the automated storage and retrieval system to the pharmacy IT system. The ID of this "manual" output process is always "1".

Sequence



Example of a successfully completed manual stock output

```

<WWKS Version="2.0" TimeStamp="2013-04-16T11:14:00Z">
  <OutputMessage Id="1" Source="999" Destination="100">
    <Details Priority="Normal" OutputDestination="3" Status="Completed"/>
    <Article Id="0004-56-034-G00025T">
      <Pack Id="5637" BatchNumber="Omepra0004" ExternalId="PalH09051200001"
        ExpiryDate="2015-11-05" Depth="50" Width="50" Height="50"
        Shape="Cuboid" OutputDestination="3"/>
    </Article>
  </OutputMessage>
</WWKS>
  
```

8.6 Output task status

Lead elements

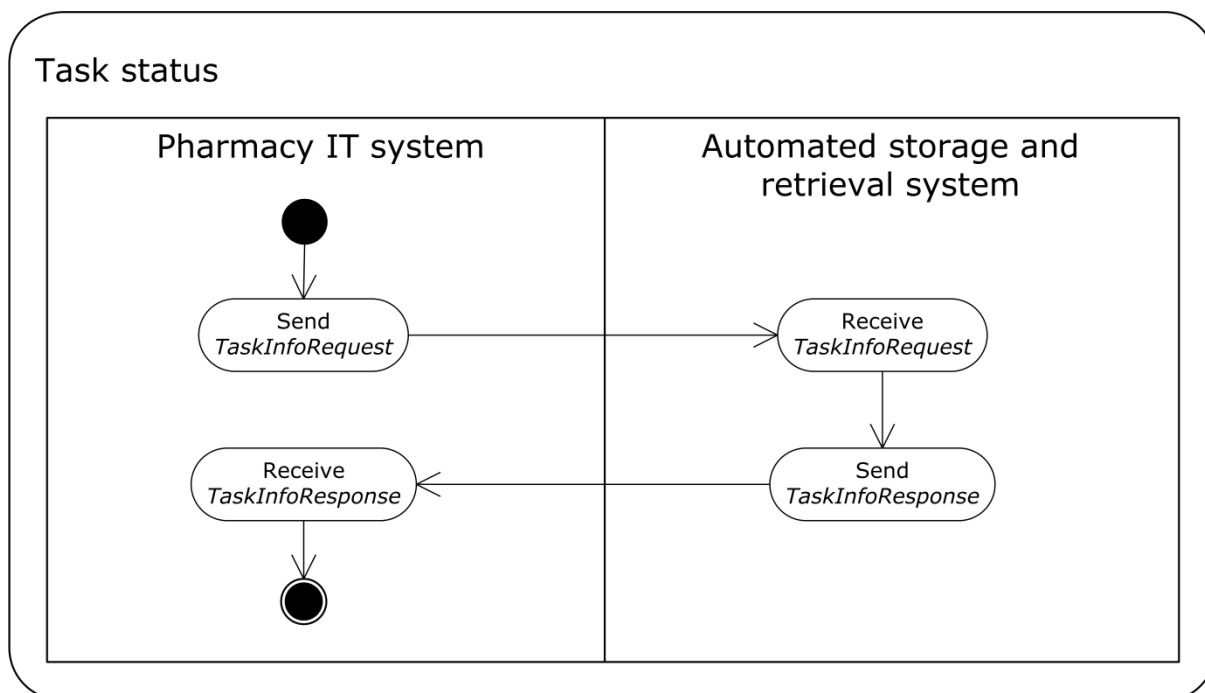
OutputInfoRequest

OutputInfoResponse

Usage

To poll the current status of a task (such as editing a stock output or a new delivery) in progress on the automated storage and retrieval system, the pharmacy IT system can send the *TaskInfoRequest*. The automated storage and retrieval system will respond to it with the *TaskInfoResponse*.

Sequence



8.6.1 OutputInfoRequest

Structure

```
<WWKS>
  <OutputInfoRequest>
    <Task/>
  </OutputInfoRequest>
</WWKS>
```

Elements

Element	M/O	Data type	Description
OutputInfoRequest	M	Tag	Message type
Attributes	M/O	Data type	Description and Values
Id	M	String64	ID of the information process. This ID is returned in the <i>TaskInfoResponse</i> .
Source	M	Integer 32-bit >0	ID of the system sending the <i>TaskInfoRequest</i>
Destination	M	Integer 32-bit >0	ID of the system intended to receive the <i>TaskInfoRequest</i>
IncludeTaskDetails	O	Boolean	This flag specifies whether detailed task information like outputted packs, etc. are to be returned. Possible values: "True" if details of the tasks are to be sent "False" if no task data is to be sent The default value is "False".

Element	M/O	Data type	Description
Task		Tag	Task information follows.
Attributes	M/O	Data type	Description and Values
Id	M	String	ID of the task as specified in the <i>OutputRequest</i> .

Example

```
<WWKS Version="2.0" TimeStamp="2013-04-16T11:14:00Z">
  <OutputInfoRequest Id="3330" Source="100" Destination="999">
    <Task Id="1004"/>
  </OutputInfoRequest>
</WWKS>
```

8.6.2 OutputInfoResponse

Structure

```
<WWKS>
  <OutputInfoResponse>
    <Task>
      <Article>
```

```

    <Pack/>
  </Article>
  <Box/>
</Task>
</OutputInfoResponse >
</WWKS>

```

Elements

Element	M/O	Data type	Description
OutputInfoResponse	M	Tag	Message type
Attributes	M/O	Data type	Description and Values
Id	M	String64	ID of the information process. This ID was sent in the <i>TaskInfoRequest</i> .
Source	M	Integer 32-bit >0	ID of the system sending the <i>TaskInfoResponse</i> .
Destination	M	Integer 32-bit >0	ID of the system intended to receive the <i>TaskInfoResponse</i> .

Element	M/O	Data type	Description
Task	M	Tag	Task information follows.
Attributes	M/O	Data type	Description and Values
Id	M	String64	ID of the task. For output tasks, this is the ID specified in the <i>OutputRequest</i> . For new deliveries, this is the DeliveryNumber specified in the <i>StockDeliverySetRequest</i> .
Status	M	String	Status of the task. Possible values: "Unknown" if the task was not found "Queued", if output hasn't started yet "InProgress", if output has started "Aborting", if output is cancelled "PartialDispense", if a part of the order has been dispensed already. The message contains a list of packs dispensed in this step. Packs already announced with a PartialDispensed are not listed again. "Completed" if the output was completed successfully "Incomplete" if the output was not completed fully "Aborted" if the output was aborted "BoxReleased" if a tote was successfully released

Element	M/O	Data type	Description
Article	O	Tag	Article information follows.
Attributes	M/O	Data type	Description and Values
Id	O	String64	Article ID of the affected pack

Element	M/O	Data type	Description
Pack	O	Tag	Pack information follows. This element may occur multiply.
Attributes	M/O	Data type	Description and Values
Id	M	String64	Picking system internal ID of the affected pack
DeliveryNumber	O	String	Stock delivery number of the affected pack
BatchNumber	O	String	Batch number of the affected pack
ExternalId	O	String	External ID of the affected pack
SerialNumber	O	String	Serial number of the affected pack
ExpiryDate	O	String	Expiration date of the affected pack in format YYYY-MM-DD.
StockInDate	O	String	Input date of the output pack in format YYYY-MM-DD
ScanCode	O	String	Barcode of the output pack
SubItemQuantity	O	Integer 32-bit ≥0	Number of units (e.g. tablets or ampules) in the affected pack. The value "0" means that the pack is full.
Depth	O	Integer 32-bit ≥0	Depth of the pack in mm
Width	O	Integer 32-bit ≥0	Width of the pack in mm
Height	O	Integer 32-bit ≥0	Height of the pack in mm
Weight	O	Integer 32-bit ≥0	Weight of the pack in gramme
Shape	O	String	Form factor of the pack. Possible values: "Cuboid" "Cylinder" The default value is "Cuboid".
IsInFridge	O	Boolean	Flag indicating whether the pack has been or is being stored refrigerated. The default value is "False".
BoxNumber	O	String	Number of the box to which the pack was outputted. The data is only required for the "Output" task type if an automatic box filler is being used.
OutputDestination	M	Integer 32-bit	This data is only required for the "Output" task type. Number of the output location to which the pack was sent. A possible error case is output to a point other than the one requested, for example because the requested output point was not operational.

OutputPoint	O	Integer 32-bit	This data is only required for the "Output" task type. Detailed information on the output location (e.g. belt number) used for pack output.
LabelStatus	O	String	This data is only required for the "Output" task type. Status of the labeling of the outputted pack. This is only relevant in conjunction with labeling. Possible values: "Labelled" if the pack was labeled correctly with the data predefined by the pharmacy IT system "NotLabelled" if the pack was not labeled (e.g. because no printer was available) "LabelError" if an error occurred during labeling
StockLocationId	O	String	ID of the stock location in the automated storage and retrieval system. Is only used when an automated storage and retrieval system is divided into several virtual stock locations.
MachineLocation	O	String	Identification of the machine that was or will be used to store packs of this article. Only relevant if the automated storage and retrieval system consists of several physical stand-alone machines.

Element	M/O	Data type	Description
Box	O	Tag	This data is only required for the "Output" task type. Detailed information on the tote used follows. This element may occur multiply.
Attributes	M/O	Data type	Description and Values
Number	M	String	Number of the tote either defined in the <i>OutputRequest</i> or automatically determined during filling.

Example for Output without details

```
<WWKS Version="2.0" TimeStamp="2013-04-16T11:14:00Z">
  <OutputInfoResponse Id="3330" Source="999" Destination="100">
    <Task Id="1004" Status="InProgress"/>
  </OutputInfoResponse>
</WWKS>
```

Example for Output without details

```
<WWKS Version="2.0" TimeStamp="2013-04-16T11:14:00Z">
  <OutputInfoResponse Id="3330" Source="999" Destination="100">
    <Task Id="1004" Status="Completed">
      <Article Id="0004-56-034-G00025T">
        <Pack Id="5637" BatchNumber="Omepra0004" ExternalId="PalH09051200001">
```

```
    ExpiryDate="2015-11-05" Depth="50" Width="50" Height="50"  
    Shape="Cuboid" OutputDestination="3" LabelStatus="Labelled"  
    BoxNumber="123" />  
  </Article>  
  <Box Number="123" />  
</Task>  
</OutputInfoResponse>  
</WWKS>
```

8.7 Cancellation

Lead elements

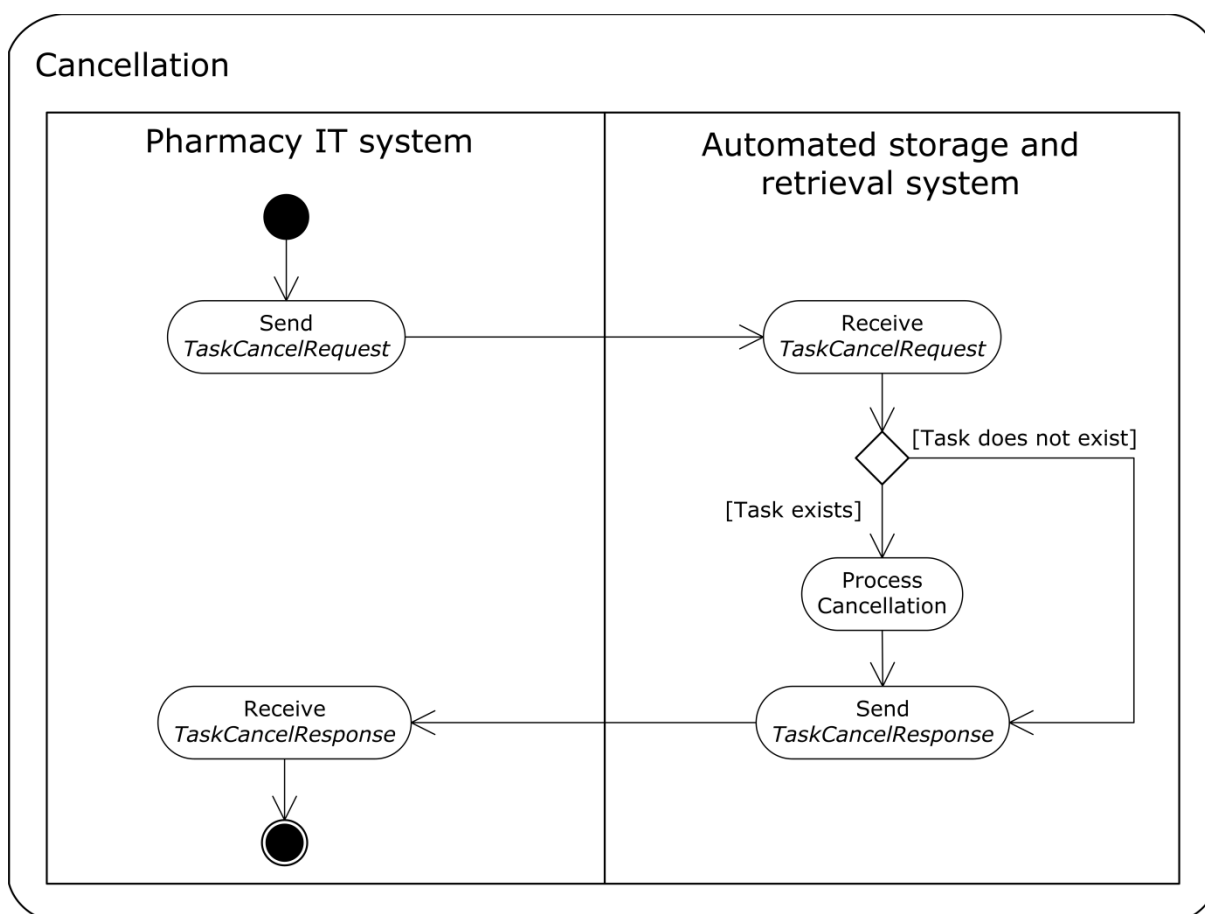
TaskCancelOutputRequest

TaskCancelOutputResponse

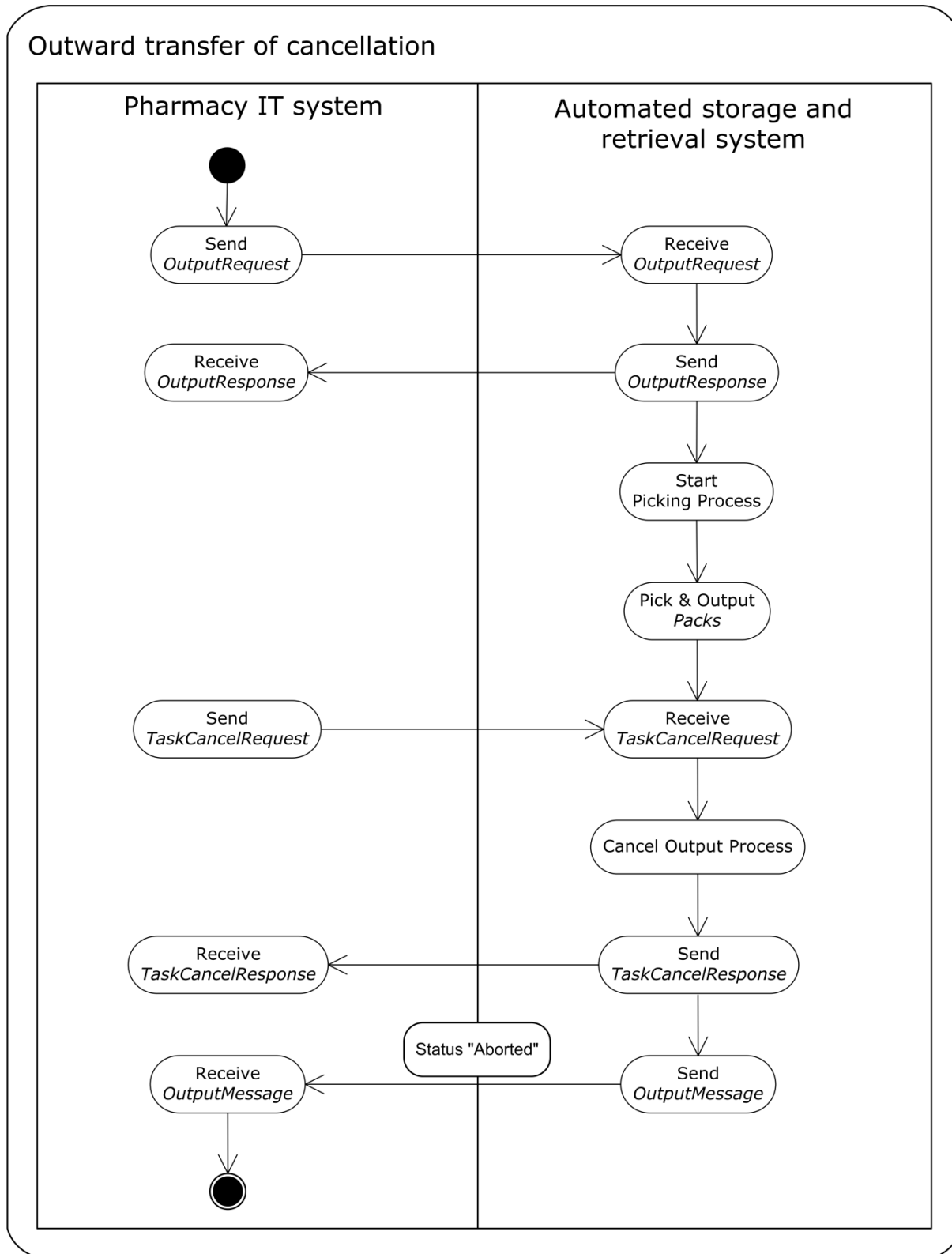
Usage

Wenn ein am KS ablaufender Auftrag (z. B. Auslagern) abgebrochen werden soll, kann das WWS die Nachricht *TaskCancelOutputRequest* senden. Das KS wird die Abarbeitung abbrechen, wenn dies möglich ist und die Antwort *TaskCancelOutputResponse* senden.

Sequence



The following diagram shows the cancellation function in a stock output process.



8.7.1 TaskCancelOutputRequest

Structure

```
<WWKS>
  <TaskCancelOutputRequest>
    <Task/>
  </TaskCancelOutputRequest>
</WWKS>
```

Elements

Element	M/O	Data type	Description
TaskCancelOutputRequest	M	Tag	Message type
Attributes	M/O	Data type	Description and Values
Id	M	String64	ID of the cancelation process. This ID is returned in the <i>TaskCancelResponse</i> .
Source	M	Integer 32-bit >0	ID of the system sending the <i>TaskCancelRequest</i>
Destination	M	Integer 32-bit >0	ID of the automated storage and retrieval system intended to receive the <i>TaskCancelRequest</i>

Element	M/O	Data type	Description
Task	M	Tag	Task information follows. This element can be used multiple times.
Attributes	M/O	Data type	Description and Values
Id	M	String64	ID of the task to be canceled. For output tasks, this is the ID specified in the <i>OutputRequest</i> .

Example

```
<WWKS Version="2.0" TimeStamp="2013-04-16T11:14:00Z">
  <TaskCancelOutputRequest Id="3335" Source="100" Destination="999">
    <Task Type="Output" Id="1004"/>
  </TaskCancelOutputRequest >
</WWKS>
```


8.7.2 TaskCancelOutputResponse

Structure

```
<WWKS>
  <TaskCancelOutputResponse>
    <Task/>
  </TaskCancelOutputResponse>
</WWKS>
```

Elements

Element	M/O	Data type	Description
TaskCancelResponse	M	Tag	Message type
Attributes	M/O	Data type	Description and Values
Id	M	String64	ID of the cancelation process. This ID was sent in the <i>TaskCancelRequest</i> .
Source	M	Integer 32-bit >0	ID of the system sending the <i>TaskCancelResponse</i>
Destination	M	Integer 32-bit >0	ID of the system intended to receive the <i>TaskCancelResponse</i>

Element	M/O	Data type	Description
Task	M	Tag	Task information follows. This element may occur multiply.
Attributes	M/O	Data type	Description and Values
Id	M	String64	ID of the canceled task. For output tasks, this is the ID specified in the <i>OutputRequest</i> .
Status	M	String	Status of the cancellation. Possible values: "Unknown" if the task is not known "Cancelled" if the task could be canceled "CancelError", if the cancellation failed

Example

```
<WWKS Version="2.0" TimeStamp="2013-04-16T11:14:00Z">
  <TaskCancelOutputResponse Id="3335" Source="999" Destination="100">
    <Task Type="Output" Id="1004" Status="Cancelled"/>
  </TaskCancelOutputResponse >
</WWKS>
```

8.9 Stock location checking

Lead elements

StockLocationInfoRequest

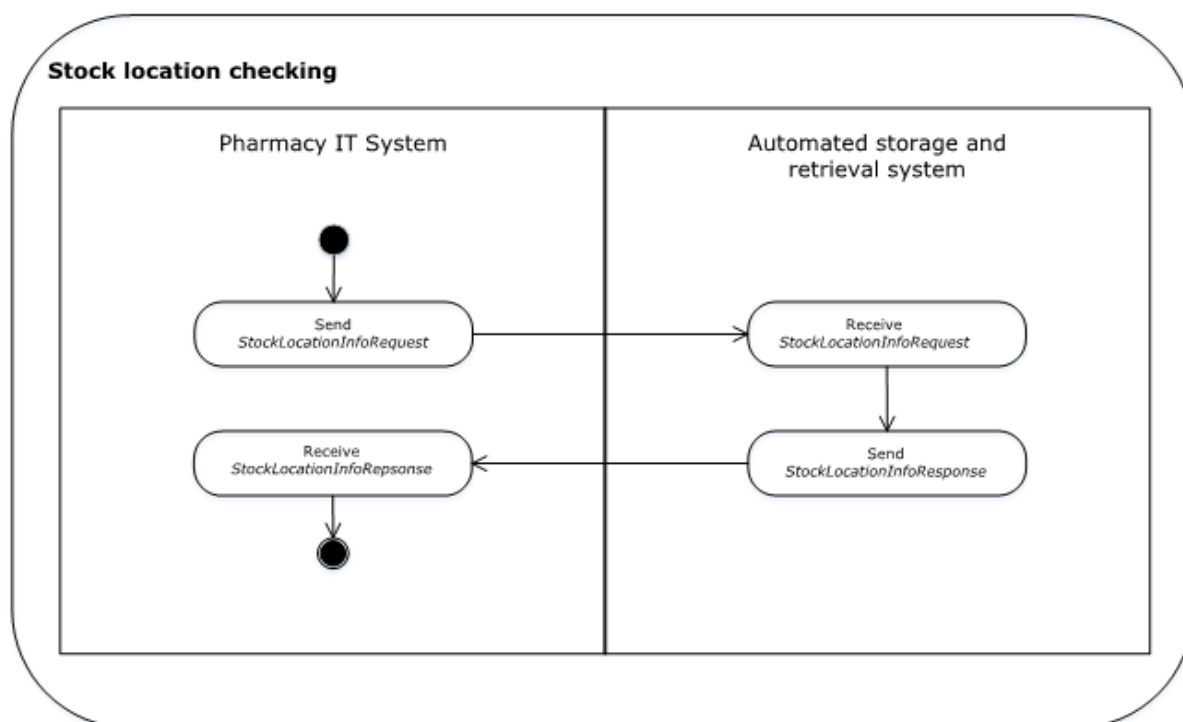
StockLocationInfoResponse

Usage

When the pharmacy IT system wants to check the currently configured stock locations of the automated storage and retrieval system, it sends the *StockLocationInfoRequest*.

The automated storage and retrieval system will respond with a *StockLocationInfoResponse*. These messages are only used when an automated storage and retrieval system is divided into several virtual stock locations.

Sequence



8.9.1 StockLocationInfoRequest

Structure

```

<WWKS>
  <StockLocationInfoRequest/>
</WWKS>

```

Elements

Element	M/O	Data type	Description
StockLocationInfoRequest	M	Tag	Message type
Attributes	M/O	Data type	Description and Values
Id	M	String64	ID of the stock location request process. This ID is returned in the <i>StockLocationInfoResponse</i> .
Source	M	Integer 32-bit >0	ID of the system sending the <i>StockLocationInfoRequest</i>
Destination	M	Integer 32-bit >0	ID of the system intended to receive the <i>StockLocationInfoRequest</i>

Example

```
<WWKS Version="2.0" TimeStamp="2013-04-16T11:14:00Z">
  <StockLocationInfoRequest Id="3335" Source="100" Destination="999"/>
</WWKS>
```

8.9.2 StockLocationInfoResponse

Structure

```
<WWKS>
  <StockLocationInfoResponse>
    <StockLocation/>
  </StockLocationInfoResponse>
</WWKS>
```

Elements

Element	M/O	Data type	Description
StockLocationInfoResponse	M	Tag	Message type
Attributes	M/O	Data type	Description and Values
Id	M	String64	ID of the stock location request process. This ID was returned in the <i>StockLocationInfoRequest</i> .
Source	M	Integer 32-bit >0	ID of the system sending the <i>StockLocationInfoResponse</i> .
Destination	M	Integer 32-bit >0	ID of the system intended to receive the <i>StockLocationInfoResponse</i> .

Element	M/O	Data type	Description
StockLocation	M	Tag	Stock location information follows. This element may occur multiply.
Attributes	M/O	Data type	Description and Values
Id	M	String64	Identification of the stock location
Description	O	String	Optional description of the stock location

Example

```
<WWKS Version="2.0" TimeStamp="2013-04-16T11:14:00Z">  
  <StockLocationInfoResponse Id="3335" Source="999" Destination="100">  
    <StockLocation Id="463563" Description="Narcotics" />  
    <StockLocation Id="674638" Description="SmartDrugs" />  
  </StockLocationInfoResponse>  
</WWKS>
```

9 Information about invalid or unsupported message

Lead element

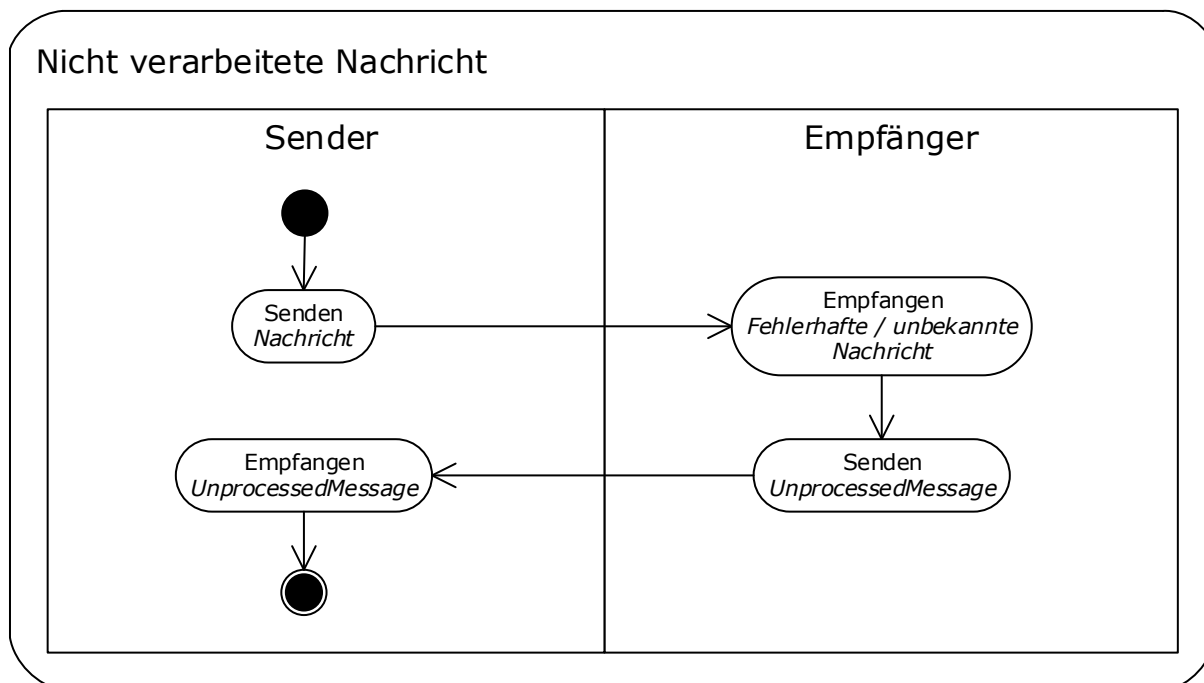
UnprocessedMessage

Usage

If PIS or ASRS receive a message, that they are not able to process, they may inform their counterpart about this fact by sending the message *Unprocessedmessage*.

An automated reaction by the recipient, except logging, is not expected. This message is intended for simplifying debugging during interface development.

Sequence



9.1.1 UnprocessedMessage

Structure

```

<WWKS>
  <UnprocessedMessage/>
</WWKS>
  
```

Elements

Element	M/O	Data type	Description
UnprocessedMessage	M	Tag	Message type
Attributes	M/O	Data type	Description and Values
Id	M	String64	ID of the of the <i>UnprocessedMessage</i> .

Source	M	Integer 32-bit >0	ID of the system sending the <i>UnprocessedMessage</i> .
Destination	M	Integer 32-bit >0	ID of the system intended to receive the <i>UnprocessedMessage</i> .
Reason	O	String	Reason of not handling the message. Possible values are: "SyntacError", if the message is no valid XML or has other syntax errors. "NotSupported", if the recipient is not supporting this message.
Text	O	String	Additional text with additional hints on reason for not processing this message.

Element	M/O	Data type	Description
Message	M	Tag	Information abot received message. The messag text is embedded as CDATA XML into the element.
Attributes	M/O	Data type	Description and Values
Id	O	String64	ID of received message, in case the recipeint has been able to extract it.

Example

```

<WWKS Version="2.0" TimeStamp="2013-04-16T11:14:00Z">
  <UnprocessedMessage Id="3335" Source="100" Destination="999"
    Reason="SyntacError" Text="Missing WWKS tag">
    <Message Id="839" Source="999" Destination="100">
      <![CDATA[
        <WWX Version="2.0" TimeStamp="2013-04-16T11:14:00Z">
          <InputRequest Id="1002" Source="999" Destination="100">
            <Article>
              <Pack ScanCode="12156894"/>
            </Article>
          </InputRequest>
        </WWX>
      ]]>
    </Message>
  </UnprocessedMessage>
</WWKS>

```