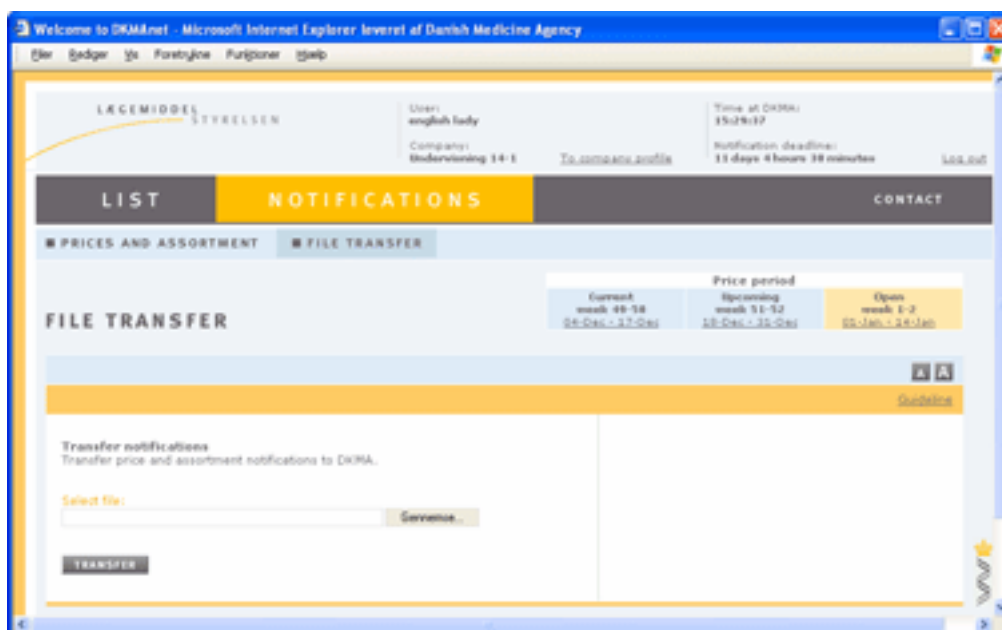# Technical specifications of XML files for notification on DKMAnet - Prices and Packages

Introduction:

Users of DKMAnet - Prices and packages can notify price and assortment changes by transferring an XML file (called forms) to the Danish Medicines Agency. XML files are transferred via the menu item Notifications on DKMAnet – Prices & Packages. Choose View on the tab Notifications and select the file that you want to transfer (like when attaching files in e-mails).

Notifications, which may be transferred by an XML file

You can transfer two types of notifications:

1. **New packages** - called "newPackageRequest". Indicate the following:
   - Company number
   - Product number
   - Drug ID. If unknown, please contact the Danish Medicines Agency.
   - Package size
   - Packages type (code for package type – a list of codes can be obtained here <link to codes which may be obtained by VHC >)

Do NOT indicate:
   - Name of medicinal product
   - Drug form
   - Strength of the medicinal product
   - MT number

2. **Update of existing packages**, called "updatePackageRequest".

There are five different types of transaction (or: Actions) for "updatePackageRequest":

1. **Activate package**: Activation of a new package. State the price and a supply estimate to market (activate) the package. This type of transaction is called "INTRODUCEPACKAGES".
   Example: 01. NewPackage+Activation.xml (the example also includes an example of the NewPackageRequest):

```xml
<?xml version="1.0" encoding="UTF-8"?>
<tns:notificationsIn xmlns:tns="http://tax.xnet.dkma.dk"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
      <newPackageRequest>
                 <organisationKey>123456</organisationKey>
                 <productNumber>234567</productNumber>
                 <drugId>28101234567</drugId>
                 <packageSize>20 x 0,5 ml</packageSize>
                 <packageType>FIN</packageType>
      </newPackageRequest>
      <updatePackageRequest>
                 <drugpackage>
                             <organisationKey>123456</organisationKey>
                             <productNumber>234567</productNumber>
                             <wholesalePrice>100.00</wholesalePrice>
                             <supplyEstimate>200</supplyEstimate>
                 </drugpackage>
                 <action>
                             <actionCode>INTRODUCEPACKAGES</actionCode>
                 </action>
      </updatePackageRequest>
</tns:notificationsIn>
```

2. **Deactivate package**: Temporary withdrawal of a package from the market with the possibility of marketing (activating) it again at a later date. This type of transaction is called "STOPPACKAGES".
   Example: 03. Deactivation.xml:

```xml
<?xml version="1.0" encoding="UTF-8"?>
<tns:notificationsIn xmlns:tns="http://tax.xnet.dkma.dk"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
      <updatePackageRequest>
                 <drugpackage>
                             <organisationKey>123456</organisationKey>
                             <productNumber>234567</productNumber>
                 </drugpackage>
                 <action>
                             <actionCode>STOPPACKAGES</actionCode>
                 </action>
      </updatePackageRequest>
</tns:notificationsIn>
```

3. **Discontinued package**: The package is no longer part of the assortment. When a package is discontinued, it cannot be marketed again. Note that a discontinued package is not the same as deregistering the medicinal product. This type of transaction is called "WITHDRAWPACKAGES".

Example: 05. Withdrawal.xml:

```xml
<?xml version="1.0" encoding="UTF-8"?>
<tns:notificationsIn xmlns:tns="http://tax.xnet.dkma.dk"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
    <updatePackageRequest>
        <drugpackage>
            <organisationKey>123456</organisationKey>
            <productNumber>234567</productNumber>
        </drugpackage>
        <action>
            <actionCode>WITHDRAWPACKAGES</actionCode>
        </action>
    </updatePackageRequest>
</tns:notificationsIn>
```

4. **Reactivate package**: Activation (marketing) of a package, which has been temporarily withdrawn from the market (deactivated). This type of transaction is called "REINTRODUCEPACKAGES".
Example: 04. Reactivation.xml:

```xml
<?xml version="1.0" encoding="UTF-8"?>
<tns:notificationsIn xmlns:tns="http://tax.xnet.dkma.dk"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
    <updatePackageRequest>
        <drugpackage>
            <organisationKey>123456</organisationKey>
            <productNumber>234567</productNumber>
            <wholesalePrice>200.50</wholesalePrice>
            <supplyEstimate>300</supplyEstimate>
        </drugpackage>
        <action>
            <actionCode>REINTRODUCEPACKAGES</actionCode>
        </action>
    </updatePackageRequest>
</tns:notificationsIn>
```

5. **Price notification**. Notification of price and (if required) a supply estimate for a package. This type of transaction is called "CHANGEPACKAGEPRICES".
Example: 02. Pricechange.xml:

```xml
<?xml version="1.0" encoding="UTF-8"?>
<tns:notificationsIn xmlns:tns="http://tax.xnet.dkma.dk"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
    <updatePackageRequest>
        <drugpackage>
            <organisationKey>123456</organisationKey>
            <productNumber>234567</productNumber>
            <wholesalePrice>700.50</wholesalePrice>
            <supplyEstimate>600</supplyEstimate>
        </drugpackage>
        <action>
            <actionCode>CHANGEPACKAGEPRICES</actionCode>
        </action>
    </updatePackageRequest>
</tns:notificationsIn>
```

XML form – Notifications.xsd:

```xml
<schema xmlns="http://www.w3.org/2001/XMLSchema"
xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:tns="http://tax.xnet.dkma.dk"
targetNamespace="http://tax.xnet.dkma.dk">
            <!-- NON NEGATIVE DECIMAL -->
            <simpleType name="nonNegativeDecimal">
                      <restriction base="xsd:decimal">
                                  <minInclusive value="0.0"/>
                      </restriction>
            </simpleType>
            <simpleType name="productNumberType">
                      <restriction base="xsd:int">
                                  <minInclusive value="0"/>
                                  <maxInclusive value="999999"/>
                      </restriction>
            </simpleType>
            <!-- MARKET SITUATION CODE -->
            <simpleType name="marketSituationCodeType">
                      <restriction base="xsd:string">
                                  <enumeration value="New"/>
                                  <enumeration value="Activated"/>
                                  <enumeration value="Deactivated"/>
                      </restriction>
            </simpleType>
            <!-- MARKET SITUATION -->
            <complexType name="marketSituationType">
                      <sequence>
                                  <element name="marketSituationCode"
type="tns:marketSituationCodeType"/>
                                  <element name="marketSituationDescription"
type="xsd:string" minOccurs="0"/>
                      </sequence>
            </complexType>
            <!-- STATUS CODE -->
            <simpleType name="statusCodeType">
                      <restriction base="xsd:string">
                                  <enumeration value="ERROR"/>
                                  <enumeration value="SUBMITTED"/>
                                  <enumeration value="REJECTED"/>
                                  <enumeration value="PENDING"/>
                                  <enumeration value="FAILED"/>
                                  <enumeration value="REGISTERED"/>
                                  <enumeration value="CANCELLED"/>
                                  <enumeration value="ADJUSTED"/>
                                  <enumeration value="BYPASSED"/>
                                  <enumeration value="ACCEPTED"/>
                      </restriction>
            </simpleType>
            <!-- STATUS -->
            <complexType name="statusType">
                      <sequence>
                                  <element name="statusCode" type="tns:statusCodeType"/>
                                  <element name="statusDescription" type="xsd:string"
minOccurs="0"/>
                      </sequence>
            </complexType>
            <!-- ACTION CODE -->
            <simpleType name="actionCodeType">
                      <restriction base="xsd:string">
                                  <enumeration value="INTRODUCEPACKAGES"/>
```

```xml
                                <enumeration value="STOPPACKAGES"/>
                                <enumeration value="WITHDRAWPACKAGES"/>
                                <enumeration value="REINTRODUCEPACKAGES"/>
                                <enumeration value="CHANGEPACKAGEPRICES"/>
                        </restriction>
                </simpleType>
                <!-- ACTION -->
                <complexType name="actionType">
                        <sequence>
                                <element name="actionCode" type="tns:actionCodeType"/>
                                <element name="actionDescription" type="xsd:string"
minOccurs="0"/>
                        </sequence>
                </complexType>
                <!-- DRUG PACKAGE -->
                <complexType name="drugPackageType">
                        <sequence>
                                <element name="organisationKey" type="xsd:int"/>
                                <element name="productNumber"
type="tns:productNumberType"/>
                                <element name="drugName" type="xsd:string"
minOccurs="0"/>
                                <element name="drugForm" type="xsd:string"
minOccurs="0"/>
                                <element name="drugStrength" type="xsd:string"
minOccurs="0"/>
                                <element name="wholesalePrice"
type="tns:nonNegativeDecimal" minOccurs="0"/>
                                <element name="supplyEstimate" type="xsd:long"
minOccurs="0"/>
                                <element name="packageSize" type="xsd:string"
minOccurs="0"/>
                                <element name="marketSituation"
type="tns:marketSituationType" minOccurs="0"/>
                                <element name="timestamp" type="xsd:dateTime"
minOccurs="0"/>
                                <element name="productCode" type="xsd:string"
minOccurs="0"/>
                                <element name="status" type="tns:statusType"
minOccurs="0"/>
                        </sequence>
                </complexType>
                <!-- A DRUGPACKAGE AND AN ACTION-->
                <complexType name="drugPackageInputType">
                        <sequence>
                                <element name="drugpackage"
type="tns:drugPackageType"/>
                                <element name="action" type="tns:actionType"/>
                        </sequence>
                </complexType>
                <!-- NEW PACKAGE -->
                <complexType name="newPackageType">
                        <sequence>
                                <element name="organisationKey" type="xsd:int"/>
                                <element name="productNumber"
type="tns:productNumberType"/>
                                <element name="drugId" type="xsd:long"/>
                                <element name="drugName" type="xsd:string"
minOccurs="0"/>
                                <element name="drugForm" type="xsd:string"
minOccurs="0"/>
```

```
                                                <element name="drugStrength" type="xsd:string"
minOccurs="0"/>
                                                <element name="mtNo" type="xsd:string" minOccurs="0"/>
                                                <element name="packageSize" type="xsd:string"/>
                                                <element name="packageType" type="xsd:string"/>
                                </sequence>
                        </complexType>
                        <!-- NEW NOTIFICATIONS -->
                        <complexType name="notificationsIn">
                                <sequence>
                                                <element name="pricePeriodDate" type="xsd:date"
minOccurs="0"/>
                                                <element name="updatePackageRequest"
type="tns:drugPackageInputType" minOccurs="0" maxOccurs="unbounded"/>
                                                <element name="newPackageRequest"
type="tns:newPackageType" minOccurs="0" maxOccurs="unbounded"/>
                                </sequence>
                        </complexType>
                        <element name="notificationsIn" type="tns:notificationsIn"/>
</schema>
```

Receipt for transfer

When making a notification by transferring XML files to DKMAnet – Prices & Packages all data must be **100 % correct** in all data entries in order for the file to be accepted. A data error (a syntax error and/or a wrong value) means that the entire transfer will be rejected.

When the transfer is complete you will be notified of the receipt. A list of the individual notifications in a transfer usually appears on the Status page on DKMAnet - Prices & Packages (Choose List – Status).

Possibility of making a notification of more changes in the same transfer:

There is no problem in transferring a file that includes an arbitrary composition of transaction types. Neither is the number of notifications limited.

Security and operation when transferring an XML file:

You can only make a notification of price and assortment changes through DKMAnet – Prices & Packages if you have been appointed company administrator or user of the system. You must furthermore log on with a valid certificate (employee signature).

The security of DKMAnet is controlled by means of the company number. Therefore, you cannot make a notification of price and assortment changes regarding medicinal products that are not attached the company number(s), which you have access to.

Whether you make a notification by means of a file transfer or you do it manually always the latest notification will be valid. If for instance you have made a notification of a new price for a certain package via a file transfer and later the same day overwrites this price notification by a manual entry on DKMAnet – Prices & Packages, the manual notification shall be transferred to the Danish Medicines Agency at the expiry of the price period.

You can make notifications until 8.00 pm on the last day in the notification period. If you have started a notification via file transfer before 8.00 pm the notification shall be processed and accepted even if the file transfer is not complete before the deadline at 8.00 pm.

Updates to technical specifications of XML files

Any updates of the technical specifications of XML files for DKMA-net – Prices & Packages are available on the website of the Danish Medicines Agency. Here, you will also find the documentation.

Questions and support:

In case of questions or if you need help or information about the transfer of XML files to DKMAnet – Prices & Packages you may contact DKMAnet Medicine Prices at medicinpriser@dkma.dk or +45 4488 9595.