Load & Maintain your National Product Catalogue

In the role of “Publisher”, you are a data source and therefore will need to load and maintain master item and price data in your National Product Catalogue.

You can do this in a relatively manual way by keying your data directly into the National Product Catalogue – Publisher interface and via a simple Excel-based tool. Alternatively, for a more automated / integrated option you may wish to create your own GS1 XML messages or use a National Product Catalogue Certified solution.

Register & Login to the National Product Catalogue

The National Product Catalogue is only accessible to registered users. To register:

Australia: From the GS1 Australia website [http://www.gs1au.org](http://www.gs1au.org), select National Product Catalogue (under ‘Our services’) and then click Register.

New Zealand: From the GS1 New Zealand website [http://www.gs1nz.org](http://www.gs1nz.org), click on the National Product Catalogue icon and then click ‘Sign up’.

To access the National Product Catalogue’s login page, please visit our website [https://www.gs1au.org](https://www.gs1au.org) then click National Product Catalogue (under ‘Our services’) and then click ‘Log in’.

Please make sure that you meet the minimum system requirements before your Registration.

Price Relationships – a key set up task

For National Product Catalogue GUI interface users, always contact the GS1 Data & Digital Content Services team to create your Price Relationships.

**Australia: NPC Customer Support** - 1300 227 263

**New Zealand: GS1 Services Support** - 0800 10 23 56

If you are using a National Product Catalogue Certified Solution, please contact your provider to discuss Price Relationship creation.

Creating a price relationship is a once off activity per Recipient. It is a short sequence of steps to authorise the Publisher to transmit pricing messages to a
Recipients. The price relationship also establishes the currency type that will be implied within the pricing message. Pricing data will not upload into your catalogue unless you have a price relationship set up for the relevant data recipient.

A Price Relationship can be created via GS1 XML (please contact the National Product Catalogue Technical department npc_tech@gs1au.org if you wish to explore this option).

Data Requirements

The National Product Catalogue Data Dictionary lists all of the supported attributes (fields) available within the system and defines each attribute in detail. However, Publishers are not required to populate every attribute; it depends which industry/ies you operate in as to which of these attributes you must populate.

Your target data set (the fields you must populate), are listed within the National Product Catalogue Data Requirements document.

To display or download a copy of the National Product Catalogue Data Requirements document, select 'Your target data set' from within the 'Loading and maintaining data' section within the 'National Product Catalogue User Guide – Cookbook web page.

Click on your industry’s tab for a list of the attributes and their population status i.e. System Mandatory, Required if Applicable, Conditionally Mandatory etc. – this is your target data set that you must work toward populating.

Product Range

Publishers should aim to populate their entire product range into their National Product Catalogue which can then act as a consolidated product master file for the company. Depending on your industry requirements, you may choose from a number of options such as loading:

i. your **Entire Product Range**
ii. all Products for a **Specific Industry**
iii. all Products for a **Particular Recipient**
iv. all **contract items for a particular Recipient**
Dates in the National Product Catalogue

There are numerous date fields in the National Product Catalogue, each one with an explicit purpose and meaning. This section aims to make it clear how all dates are to be used. Refer to the data dictionary for a definition of each date; here the tips are intended to explain usage beyond just definitions:

Dates that Control Access to your Data

Publication Date
The Publication Date can be set into the future when publishing items to Recipients. Only when the publication date occurs will the data be accessible to those Recipients: default to current date.

Community Visibility Date Time
This is the date when all subscribers to the National Product Catalogue can access your item data in the National Product Catalogue Local Registry. Note that the Community Visibility Date Time entry must be equal to or later than the Publication date. For private label items, this field is not used; thus keeping all data about the item undisclosed to all but the private label owner.

System Generated Dates

Last Changed Date Time
Publishers submitting GS1 XML messages are required to populate the Last Change Date/Time attribute to comply with GS1 XML schema requirements – value entered will be overwritten with the current date/time when processed by the National Product Catalogue.

Non-GS1 XML message suppliers are not required to submit a Last Change Date/Time value.

Dates relevant to your Trading Relationships

Effective Date Time
This is the date when the information about your item i.e. product data, takes effect. Usually set to the current date when new items are loaded. May be set into the future when for example a change is uploaded, but doesn’t take effect for some days/weeks into the future.
First Order Date Time
The date from which the Publisher can begin receiving orders for this item. Typically for seasonal products, say Easter for example, orders may be placed in Dec ‘15, but the start- and end availability window could be mid-March – end April ‘16.

Start Availability Date Time
Usually products will be available from the time they can be ordered, however, typically for seasonal products, the start of availability may be later than the order date.

End Availability Date Time
Products are not “deleted” out of the National Product Catalogue; rather they are “end dated” to indicate when they are no longer available.

Final Batch Expiry Date
For End Availability products, the last expiry date for the final run of production. It is to be used to assist in purchasing decisions; as to possibly how long a product may remain in the supply chain, despite being discontinued from production.

Consumer Availability Date Time
The date the product should be made available to consumers – no earlier. An example for this usage could be the simultaneous release of the “Harry Potter” books at stores throughout the world on the same day, or may be in line with an advertisement campaign that has promised consumer availability by a certain date.

End Date Time of Exclusivity
The date when the product is no longer exclusive to a single Recipient.

Seasonal Availability Start Date Time
The first date when the item is available. Note: the seasonal availability can be different from both the ordering time and dispatching time. The availability is the Publisher’s intention of how long the product will be available to Recipients.

Seasonal Availability End Date Time
The last date when the item is available. Note: the seasonal availability can be different from both the ordering time and dispatching time. The availability is the Publisher’s intention of how long the product will be available to Recipients.
Price record dates

**Catalogue Price Effective Start Date Time**
The date when the price record becomes effective.

**Catalogue Price Effective End Date Time**
The last date when the price record is effective

**National Product Catalogue Data Upload Options**

In total, there are currently four methods of entering product and price data into the National Product Catalogue. Two methods are manual and two are automated / integrated.

You will need to determine the best upload method for your initial load, which may not be the best option for ongoing maintenance. Each option below is described to help you ascertain whether it would suit your circumstances. Things to consider are: number of products to load and maintain, cost, level of integration with other internal IT systems, your ability to provide consistently high quality timely and accurate data.

Some options refer you to user guides that are external to this document.

Manual Data Upload methods are:

- Publisher Excel Template
- Publisher Graphical User Interface (GUI)

Automated/Integrated Data Upload methods are:

- National Product Catalogue Certified Product
- In-house developed upload files

Note that in regards to the Automated/Integrated Data Upload methods, the National Product Catalogue will only store data that meets its data model (that is published and updated from time to time). Attributes and content sent to the National Product Catalogue that do not meet the data model, or attributes and content that do meet the data model but are not allowed/supported for the product hierarchy level in question, will not be stored.
Publisher Excel Template

The Publisher Excel Template Service is provided as a cost effective entry method for uploading and maintaining data on the National Product Catalogue. Data is entered into the Excel Template worksheets. The Excel Template is primarily a Microsoft Excel spreadsheet, pre-populated with the National Product Catalogue data attribute headers. Once populated, a user can then upload their Item and Price information to the National Product Catalogue via the Publisher GUI.

Publisher Excel Template users should consider using one of the National Product Catalogue certified products, see section “National Product Catalogue Certified Products” below.

Confirm whether any errors were encountered during the upload process by checking the Data Load Report.

Publisher Graphical User Interface (GUI)

GS1 Australia has developed a new and powerful graphical user interface (GUI) for its National Product Catalogue Publisher community. Publisher makes it much easier for Publishers to load and maintain product and pricing information. The interface has been developed in consultation with users and incorporates requests put forward by those who use the system regularly.

One of the key user enhancements is the instant validation process that allows users to immediately see warnings and fix errors as the data is being entered, removing the need to separately await feedback from the National Product Catalogue Validator tool.

Contemporary screen designs allow easy navigation around the system, speed up workflow and make managing product and pricing data easier.

Process Overview: Login to Publisher, add new product and price(s), save, release and publish.

After 30 minutes of inactivity, you will be logged out of the system.
Your company should decide on a sustainable method of uploading and maintaining data onto your National Product Catalogue on an ongoing basis. Certified product providers can assist with this. National Product Catalogue uploads are supported by an extensive group of National Product Catalogue Certified Product Partners; GS1 Australia recommends that suppliers use a ‘Certified Product’.

For further information regarding the National Product Catalogue Certified program, refer to: https://www.gs1au.org/our-services/national-product-catalogue/certification-program/

GS1 Australia recommends all Publishers to seriously consider using one of the National Product Catalogue Certified Products.

**Process Overview:** This will vary depending upon the National Product Catalogue Certified Product, but in essence, you will:

- Populate your certified product, usually automated from backend systems.
- Automatically validate your data locally in the certified product, including any additional validations your company has added beyond those for National Product Catalogue.
- The National Product Catalogue Certified Product will connect to the National Product Catalogue, load your data via the National Product Catalogue Validator and display the load result.

This option requires a connection via: **AS2, HTTP/s, or FTP** which attract additional fees. Usually it will be your Certified Product provider who arranges the connection and may bundle the cost into the overall service.

**In House Developed**

Alternatively, your company can create your own GS1 XML files and then send it to the National Product Catalogue via an AS2, FTP or HTTP/s connection.

Please note that this can be a higher-maintenance option.

*To discuss this approach, please contact the National Product Catalogue Technical department. GS1 Consulting may be engaged to assist and/or project-manage your in-house development project.*
A full catalogue extract should not be uploaded every time. Only upload item and price records that are either new or have been modified. Uploading a full catalogue every time will generate unwanted updates for your trading partners.

National Product Catalogue Certified Products ensure this does not occur by comparing extracted records against the last successful upload. Only new or modified records are then uploaded to the National Product Catalogue.

In-house development requires a connection via: **AS2, HTTP/s, or FTP**. For more information on:
- Connectivity options and costs
- Message formats
- Sample messages


For information regarding the National Product Catalogue Validator and associated Business Validation Rules, refer to ‘Validating Data’ within the “Loading data, validator and training” section within the ‘National Product Catalogue User Guide - Cookbook’ web page.

**Publish your National Product Catalogue**

Once you have confirmed your data has been uploaded in the National Product Catalogue, the next step is to publish the data to Recipients. No Recipient (trading partner) can view or access your data until you have published it specifically to that Recipient, except to see the GTIN itself and its unpublished status.

The GS1 Data & Digital Content Services team will assist with the ‘initial’ publication as part of the National Product Catalogue Ready process.

After being pronounced “National Product Catalogue Ready”, any new items will need to be published to your trading partners. Existing items will also need to be published as new National Product Catalogue Recipients are engaged.

Three publication options are available:
- Manual publication via Publisher Graphical User Interface (GUI).
- Automated publication using the Auto Publish to Recipients function. Setup and maintenance of the Auto Publish option is maintained through the GS1 Data & Digital Content Services team.

Load and Maintain your National Product Catalogue
Publication using GS1 XML messages.

**Manual Publication**

To publish data to a Recipient:

- Select the applicable GTIN(s) from the National Product Catalogue GUI ‘Supplier Item List’.
- Click on the ‘Publish’ icon in the toolbar in the Supplier Item List.
- In the ‘Select publication targets’ screen, select the Recipient(s) you wish to publish to or if a Recipient is not already in the list, click on ‘Search’ to find it.
- Click on the ‘Publish’ button

You don’t publish individual GTINs; rather you publish product hierarchies – see explanation below.

**Publishing at Highest Level**

Publishable hierarchies exist at the level of the Order and Invoice Unit and at all higher levels. Typically, the Order and Invoice Unit is the CASE, the highest level in the hierarchy. It is common for there to be one publishable hierarchy per product SKU. The example below depicts this. The user will only be presented with GTIN 29355456005013, which represents the one publishable hierarchy: your Recipient will receive a ‘payload’ containing all three levels of the hierarchy - Case-Inner-Base.

**BASE_UNIT_OR_EACH**

GTIN - 09355456005019

**PACK_OR_INNER_PACK**

GTIN - 19355456005016

**CASE**

GTIN - 29355456005013
ORDER UNIT = Y
INVOICE UNIT = Y
For a single hierarchy, multiple GTINs will be displayed within the Retailer Publication list when the Order and Invoice Unit is at the lowest level of the hierarchy and/or more than one GTIN within the hierarchy is flagged as an Order and Invoice Unit.

If a Publisher selects all GTINs within the hierarchy for publication, the Recipient will receive multiple ‘payloads’. A ‘payload’ refers to the message sent to trading partners that contain new and updated item data. The National Product Catalogue will always include the published item and all lower level items within a single ‘payload’ or message.

**Example:**

In the example above, if the supplier selected the BASE_UNIT_OR_EACH, PACK_OR_INNER_PACK and CASE for publication, the Recipient will receive the following ‘payloads’.

- **Payload One:** BASE_UNIT_OR_EACH
- **Payload Two:** BASE_UNIT_OR_EACH and PACK_OR_INNER_PACK
- **Payload Three:** BASE_UNIT_OR_EACH, PACK_OR_INNER_PACK and CASE

Most Recipients only want a single hierarchy to come through to them (highest level only). This is at times difficult, particularly when a supplier has many GTINs.

Whenever possible, **Publishers should publish at the highest level only.**

Publishers publishing items to two or more target markets within the one catalogue (i.e. Australia – 036 and New Zealand – 554), should contact the GS1 Data & Digital Content Services team to discuss data loading and publication options.

**Auto Publication**

The Auto Publish function automates the publication of new items to Recipients. The key features of Auto Publish:

- Publishers must nominate Recipients for Auto Publication
- Only new items are auto published – existing items that are un-published will not be auto published
- Publication is always at the highest level of the hierarchy
- A price message for an un-published item will trigger the auto publication feature (assuming that the Recipient has previously been included within the Auto Publish list and the Publish with Price option is selected)
• Auto publication does not apply when an item is re-set for publication after previously being published and then un-published to a Recipient
• Manual publication via the ‘Supplier Item List’ screens remain active for all Recipients, including Recipients listed within the Auto Publish list

As part of the National Product Catalogue Ready processes, the GS1 Data & Digital Content Services team will work with Publishers to ensure that initial publication is established for all active Recipients.

**GS1 XML Catalogue Item Publication (CIP) Message**

To determine whether GS1 XML publication messages are supported, Publishers using a National Product Catalogue certified product should contact their product provider.

For companies using In-House developed and supported GS1 XML messages, contact you’re the National Product Catalogue Technical Team to determine the correct method for publishing items to your National Product Catalogue Recipients.

**Updating your National Product Catalogue**

Once you have been declared National Product Catalogue Ready and your products have been published to the Recipients, it is supplier’s responsibility to update and maintain the data in your National Product Catalogue.

To properly maintain the catalogue supplier will need to understand the concepts of a CHANGE versus CORRECT. The Action Code used will determine whether you are intending the record to be read as a change or correction.

**CHANGE** is for an update that truly is a change. For example, an update to the product specifications, this may be to the product dimensions.

**CORRECT** is when you need to correct a mistake. For example, an item with a blue label was incorrectly registered with a black label. A CORRECT action code is used to update the item record.

Both CHANGE and CORRECT action code is also used when modification are made to a price record.

Some of the common scenarios are:
<table>
<thead>
<tr>
<th>Scenario</th>
<th>Action Code</th>
<th>Field to be updated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company has changed the dimensions of the product (by less than 20%).</td>
<td>CHANGE</td>
<td>Height, Width or Depth</td>
</tr>
<tr>
<td>Company will discontinue a product.</td>
<td>CHANGE</td>
<td>End Availability Date Time</td>
</tr>
<tr>
<td>Company will end date a pricing record.</td>
<td>CHANGE</td>
<td>Effective End Date Time</td>
</tr>
<tr>
<td>Company has sent an incorrect product description.</td>
<td>CORRECT</td>
<td>Trade Item Description</td>
</tr>
<tr>
<td>Company has changed the Price Start Date of the product.</td>
<td>CORRECT</td>
<td>Effective Start Date Time (must be in the future)</td>
</tr>
</tbody>
</table>

**Updating Net Content and Dimensions**

Please note that some data fields such as Dimensions, Net Content and Gross Weight can only be changed by 20%. This means that your Data Load will fail if the value in these fields changes by more than 20%.

You need to comply with the GS1 Standards when changing the net content, gross weight and/or dimensions of your products as in some cases a new GTIN is required.

For more information, please refer to GTIN Allocation Rules: [https://www.gs1.org/1/gtinrules/index.php?p=overview](https://www.gs1.org/1/gtinrules/index.php?p=overview)

**End Dating an Item**

One of the fields that you will need to update is the End Availability Date Time.

For GTINs that are currently available in the market, this field is generally blank. You will need to update this field if the GTIN or item hierarchy is to be discontinued.

Usually, all items in the product hierarchy must be end-dated to end date the product. An exception would be if supplier introduces a new case pack end dates the previous one, but keeps the same base item, which itself would not be end dated.

If you are using GS1 XML, please use the action code CHANGE_BY_REFRESH against the GTINs to be End-Dated.
Updating Prices and Allowances

One of the attributes that you will need to update in the Pricing Data Section is Price Effective End Date Time.

For GTINs whose price is still valid this attribute is generally blank. To update the current price, enter a date within the Price Effective End Date Time field and then create a new price record. When end dating a price record it is critical that any associated Allowance and or Charge records are also end dated (values must be aligned).

If you are using GS1 XML, please use the action code CHANGE_BY_REFRESH against the prices to be updated (note in XML the price action is contained in the item depiction loop)

**Tip 1** – When creating a new price for a product for a specific Recipient, you must first end date the previous price and allowance.

**Tip 2** – Your pricing record will be rejected if the date range overlaps an existing price record date range (assuming all other price attributes are identical).

**Tip 3** – Prices cannot be end-dated if the item has already been end-dated.