Global Product Classification (GPC)

The Global Language for Classifying Goods

Third Edition
April 2005

Table of Contents

1. Introduction

Rationale

Without effective education and implementation support, GPC, as a foundational standard could be a barrier to data accuracy.

Benchmark

By 2007 in catalogues 80 % of GTINs will have consistently classified with GPC (GCI Global Scorecard).

Why do we classify things?

Nearly every aspect of our lives is subject to classification. We classify almost everything, dividing our world into a variety of arbitrary categories. Different people classify things in different ways. Some individuals place all their socks in one drawer; others may separate white socks from coloured ones.

In business, classification is a necessity. Even on a bilateral basis when a seller and a buyer are trading, common definitions are needed. They do not discuss individual product GTINs, but use common groupings of products. A dairy product manufacturer and a grocery retailer negotiate based on categories of dairy products.

No classification system is inherently 'better' than another. The only measure of success of a classification system is its value. Different people have different needs, so what works for one individual may not work for another. Yet, this lack of universality doesn't dissuade each of us from working out a system that is right for our purposes. Try as we might, we cannot avoid grouping, organizing, and classifying.

Why do we need a globally accepted, flexible, adaptable and constantly maintained classification system?

The basic philosophy behind the separation of product within a retail food store was historically based on a departmental organisational structure. This structure was established on such criteria as: employee skills, storage temperature, source and similarity of the product. The buying structure on the other hand focused on the supplier as the bases for grouping product. Buyers were assigned suppliers with similar products. This was done to achieve maximum effectiveness in the transportation of the product. If a single person controlled the entire product range from a supplier then the hauling cost and inventory could be minimized. Suppliers also maintained their own category

structure and this structure more loosely employed some commonality of attributes of the product. This varied from supplier to supplier.

With the advent of Category Management many of these criteria within the retail community were left in tact. The new structure still closely resembled the way product was grouped within the store and the philosophy on which it was built. In the meantime supplies remained the same, perhaps even improved based on the advent of such independent structures as ACNielsen, IRI, GFK, etc.

Traditionally for most retailers when the new item is set up it is then assigned into the category structure that the retailer uses. In the past one of the main problems in communicating new items electronically was the inability of EDI to target a particular representative with the retail organisation. EDI also had no way for the retailer to communicate back that it accepted the item and data on the item. Unlike the other more popular transmission like Invoice, Price, Promotion that already had a link connected in the retailer's back end this link for new items had to be set manually. This connection was established by the retailer when the item was assigned to a particular buyer usually on a "New Item Form'.

UCCnet in the late 1990's introduced the concept of synchronisation. This was the solution to the two problems that were inherent in the EDI solution. First it centred on a set of defined responses issued from the retailer legacy applications and provided a mechanism for targeting within the retail organisation. The utilization of a common category structure was employed to communicate a new item between a seller and a buyer. However, this forced the supplier and retailer to choose between employing the new structure internally and mapping their existing structure to the new one. Depending how close the two structures where the level of effort varied. Mapping became a many to many situation where often multiple buyers received the information. However by not choosing the mapping a situation was created where two systems using different structures to maintain the same people, roles and capabilities were required.

Experience shows that there are three types of organisations with regards to classification:

- Organisations that have more than one classification system in place (~30 %)
- Organisations that have only one classification system in place (~27 %)
- Organisations that have no classification system in place (~43 %)

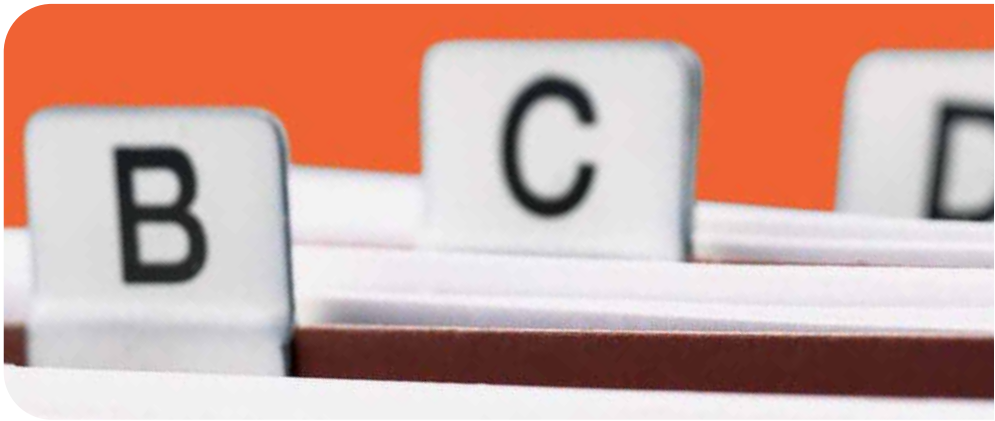
While there are no right and wrong ways to classify things, trading partners would ideally use a common language to group products. Along with their legacy classification systems, the common language would simplify communication just as the English language is accepted and used as a common language of negotiation in international business.

A common standard language for product classification brings many benefits to supply chains / networks:

- Improve accuracy of product information
- Eliminate redundant activities and reduce the cost of item set-up and maintenance
- Allow mapping to different trading partner or third party solution provider views, reducing costs
- Opportunity to group products with category specific attributes
- Simplify publication and subscription processes
- Enable simple search mechanisms with consistent results

Manufacturers need to be able to profile products in multiple views in order to maximise selection exposure to the retailers. They also have to align this with their own internal classification systems that may be based on sourcing, production, or sales departments.

Retailers need to be able to align products to a variety of internal structures such as by buyer, by how the product is merchandised, or by how the product is transported. In addition, retailers have different classification structures unique to their own organisations.



2. GS1 Global Product Classification (GPC)

Why GPC?

Retailers and manufacturers have tried to establish a common way of classifying products countless times over many years. Globally, the classification systems failed either to be adopted because they were too rigid or too detailed; good enough for statistics or financial reporting, but not appropriate for trade.

The Global Commerce Initiative (GCI) - a global user group comprised of the world's biggest multi-national manufacturers, retailers and service providers - agreed on the business rules for setting up a globally standardised model: the Global Product Classification (GPC) Schema. The objective is to improve supply chain performance between manufacturers and retailers by the voluntary adoption of industry standards for product group identification.

The GS1 community owns the GPC Schema. EAN International has appointed ACNielsen as the service provider to host and manage the GS1 Classification Schema on behalf of the industry.

Manufacturers and retailers exchange a variety of information. Historically manufacturers supply their retailers with catalogues containing detailed descriptions of product offerings. Retailers then search through the catalogues of all potential suppliers. The product information is expressed in specific terms and formats, not allowing for easy comparisons between different supplier offers. This process of reviewing various catalogues is inefficient and cumbersome for both manufacturers and retailers.

GPC allows trading partners to communicate more efficiently and accurately throughout their supply chain activities. It is expensive for companies to develop their own coding systems that cannot be used for external communication. A single universal coding convention acts as a cost-effective link in the supply chain, even if companies customise it for specific purposes.

Classification codes are necessary for effective searching of products and services, for identifying where expenditures are made, and for promoting products to potential buyers. Global Data Synchronisation is dependent on trading partners using the same global standard product classification schema to enable product search, view and subscription and publication activities.

What is the basis for GPC as an industry standard?

Experts within the industry develop GPC. Existing commodity expertise was used wherever possible. The issue is determining what is local expertise in a global environment. There are existing solutions today all over the world and all are different. Recommendations of industry experts have to be agreed by an industry work group before they are implemented. This group have developed the rules on which the schema operates.

What is the classification system used in the Global Data Synchronisation Network (GDSN)?

The classification system used in the GDSN is the GPC. Only items classified according to the GPC will be registered in the GS1 Global Registry i.e. GPC Brick is mandatory in GDSN.

What is the difference between a Global Data Dictionary (GDD) Attribute and a GPC Brick Attribute?

There is no overlap between GDD and GPC attributes. They are maintained in two different databases separately.

GTIN as a key identifies the single product. GDD Attributes describe the individual products. (e.g.: Brand Name, Manufacturer, Length, Width, Height, Price, Colour, etc.)

GPC Brick Code is the key to identify the product group.

Brick Attributes and Brick Attribute Values provide the required granularity by describing further the Brick. Segment, Family and Class are the hierarchy components together with the Brick.

Each GTIN should be assigned to a GPC Brick. That Brick can be further characterised with a Brick Attribute set and the associated Brick Attribute Values.

The GS1 standard package enables consistent use of the GS1 standards globally. The use of specific keys and their associated data carriers are supported by allocation rules, Bar Code or Radio Frequency specifications and other regulations.

What are the benefits of having the GPC in the GDSN?

The GPC provides one common system for classifying items globally. The classification system supports the publication subscription, validation and search processes in the GDSN.

The benefits provided by the GPC in the GDSN are listed below:

- GPC enables internal, external and network synchronisation processes by organising and validating data.
- Allows globally standardised positioning of products by denoting what type of product it is.
- Simplifies matching the publication data with subscription data.
- Enables category analysis and planning support.
- Eliminates redundant activities and improves accuracy of item set-up and maintenance.
- Allows mapping to different trading partners or third party solution providers – reducing costs.
- Improves integrity of the data.
- Provides an opportunity to group products with category specific product group attributes.
- Enables granularity and aggregation internally within a company and between trading partners.

Single Product versus Product Groups

Single Product identification keys, such as the GTIN or GLN, are used to make the unique identification for of a product. There is a one-to-one relationship between the product and the keys. Therefore identification codes can neither be aggregated nor used for reporting or category analysis purposes and do not allow comparisons among different manufacturers. In a typical catalogue, suppliers identify the GTIN, GLN and also describe products with additional components called Attributes. Attributes are characteristics shared by products within a group.

Product Group keys are classification keys and are used to group similar products into common categories.

Classification with GPC is the act of saying: "This product belongs to this Brick, this Brick has hierarchy components (Segment, Family and Class), and this Brick can be further described with a Brick Attribute set and the associated Brick Attribute Values".

A key property of classifications is that such groups can be clustered with others to create a hierarchy. I.e., any group within a classification can be divided into smaller groups based on common characteristics.

The differences between Single Product Identification and Description and Product Group Identification and Description are listed in the table overleaf.

		SINGLE PRODUCT	PRODUCT GROUP
IDENTIFICATION KEY	Key Name	GTIN	GPC Brick Code
	Key Size & Type	14 digit, non-negative integer	8 digit, non-negative integer
	Business Objective	Single Product Identification Tracking, tracing Recall Record keeping	GDSN Product Group Identification Finding groups of products Comparison, benchmarking Enable trade processes
	Purpose	Unambiguously identifies an individual product.	Coherently groups the products to provide visibility and enables streamlined information exchange. Indicates relation of products to other similar products.
	Digits	One-to-one relationship between GTIN and the product. Digits have no other meaning.	Linked to the other hierarchy elements of which the Brick is a member together with Segment, Family and Class.
	Property	Uniqueness	Uniqueness
DESCRIPTION ATTRIBUTE	Purpose	Use the specified Attributes relating to a product as a communication template for trading partners.	For each Brick the associated Brick Attributes and Brick Attribute Values are describing the Brick to provide granularity
	Property	**Single product Attributes** (Typically 30-50 Attributes per GTIN) Not classification attributes Global or global / local or local Neutral or category specific Across industries Can be free text Can be legislation specific Can be external code Mandatory / optional / dependent No glossary	**Product group - Brick Attributes** (Typically 1 -7 Brick Attributes per Brick) No overlap with Single Product Attributes Global only (not Target Market specific) Category specific only Relevant and recognised to the industry Unique (intention, format, technicalities) exclusive Non-legislation specific High level descriptor Proactive glossary, no ambiguity in terms
	Values	Various types from free text to codes and dates.	Normalised value pick list. Only one Brick Attribute Value could be populated per each Attribute.

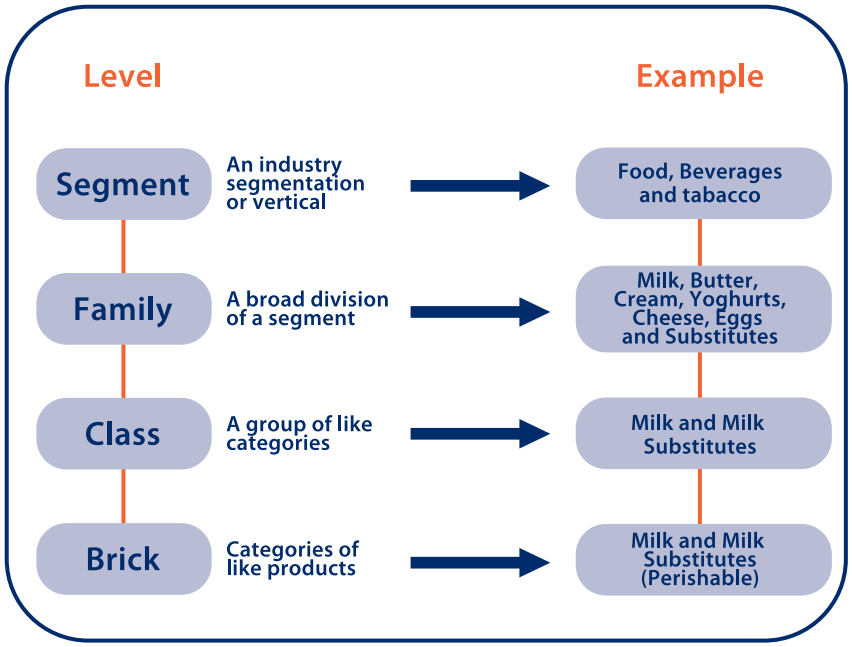
3. GPC Format and Structure

GPC General Principles

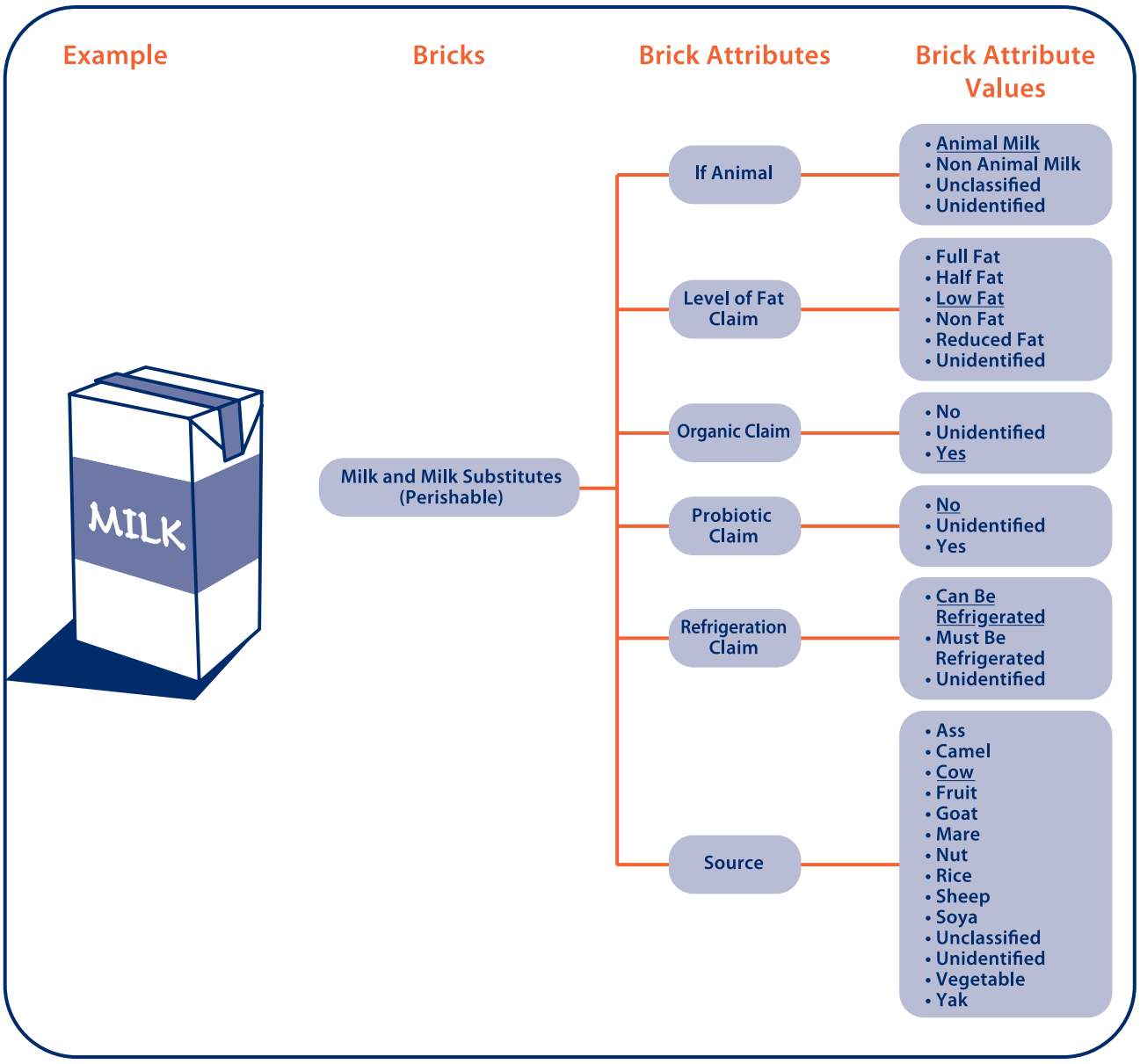
- Modularity and flexibility of the classification.
- Logical grouping of bricks. The logic behind the schema is transparent
- Universally applicable and not culturally biased.
- Initially published in Oxford English.
- Facilitate the collection of relevant classification information acceptable by the industry.

Schema principles

- The GPC schema provides an optional 4 - tier hierarchy – Segment, Family, Class and Brick.
- Each level of the schema is determined by rules and/or principles, and also industry decision. However the rules applied differ depending on the level – Segment, Family, Class, Brick, Brick Attributes and Brick Attribute Values.
- The business rules apply to any level or entity of the schema
- Each Brick has assigned 1 or more Brick Attributes; in turn each Brick Attribute has a set of associated Brick Attribute Values.



Example of a Brick and associated Brick Attributes and Brick Attribute Values:

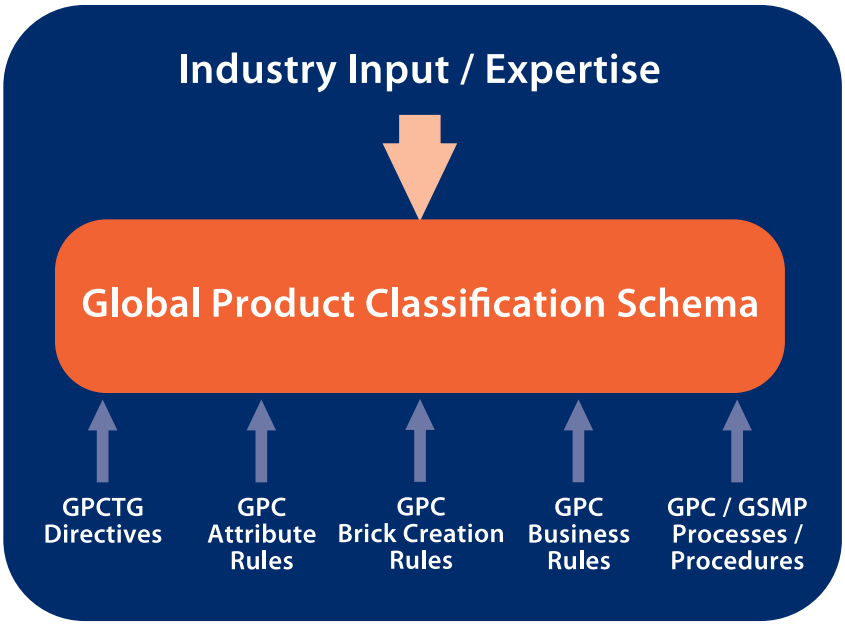


4. Creating the Schema Industry Collaboration

Built on a foundation of rules, balanced with reality (what is required by the industry).

Generic GPC Business Rules

- Application of clear & consistent structuring.
- Use of non-culturally biased terms and spellings.
- Application of a standardised naming convention.
- Ensuring that each Segment, Family, Class and Brick has the necessary coverage and scope, with the ability to add appropriate new values as identified.
- Avoid ambiguity through clear and concise definitions.
- Provide a generic and standardised schema by ensuring that all products are uniquely placed.
- A Brick must as far as is practical contain products that can be characterised by the same set of attribute types relevant to the product.
- Products that are grouped and sold together (excluding kits) will be classified as variety packs. This applies to the Class, Family & Segment level of the hierarchy.



Variety packs should only be created where necessary.

- The schema will allow for the creation of a Class specific Brick to capture product that cannot be immediately placed into an existing Brick or the industry determines that they should not be broken out. These Bricks are called 'others'.
- Grouping products based on what they physically are.

GPC Hierarchy Rules

- Resulting Bricks must be grouped coherently and logically.
- Categorised information must be recognised globally.
- Hierarchy groupings must be relevant and suitable for all search functionalities.
- Provides a flexible classification.
- The hierarchy should be created describing the types of products and not which channel / vertical they will be sold in. This will ensure products that are available in different channels / verticals can be classified and identified easily.

GPC Brick Rules

The list of rules below is a comprehensive list of rules that have been used for Bricks across verticals. These rules are not 'general' in the sense that they are not appropriate for all segments. They should be used where they are relevant and are applied in all relevant segments.

- Broad Area of Differentiation
- Broad Area of Application
- Products Serve a Common Purpose and Use
- Processed to Similar Methods
- Products are Used and Applied in a Similar Manner
- Products are of a Similar Form and Material
- Split between Powered vs. Manual Products
- Replacement parts will be classified in one Brick per Class
- Storage and Preservation
- Variety Packs
- Other
- Application and Function

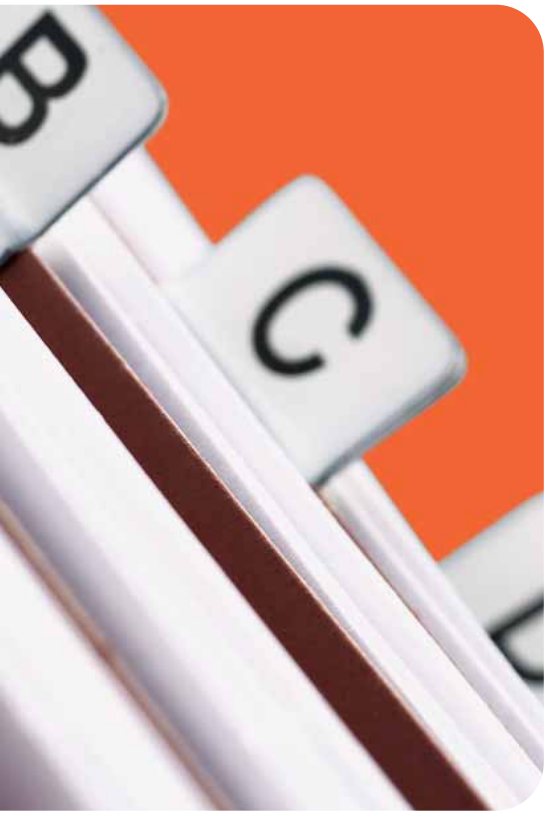
Brick Attribute Rules

- Brick Attributes must be globally applicable and not biased towards a region, culture or country.
- Brick Attributes must be recognised, understandable and relevant to the industry, in terms of product classification.
- Brick Attributes must be unique (intention, format, technicalities), objective and mutually exclusive – includes both Brick Attributes and their Brick Attribute Value choices.
- Brick Attributes must be based on objective logic, and must not be subjective or emotive.
- An example of a non-classification attribute would be a marketing view e.g. Indulgence.
- Brick Attributes must not relate to global, regional or local legislation requirements. It is a piece of information required globally, but will be governed / legislated locally. E.g.: If Organic, Food Quality / Food Assurance Claims etc.
- Brick Attributes must be standardised in terms of naming.
- High-level descriptor – Would a user require or expect to search, subscribe or publish information through his view? The best method for collection is not necessarily how the User would publish. I.e.: the ideal method of collection may require more granularity.
- Single, comprehensive and exhaustive code list.
- No ambiguity in any terms / words used.
- All Brick Attributes will be described to show what information they are seeking to identify.
- No Brick Variant will be used.
- The number of Brick Attributes should be the minimum of 1 and an average of 3-4 and targeted to 7.
- Brick Attributes should refer to high-level classification (Brick) descriptors of product groups rather than describing the individual product concerned.
- An example of a non-classification attribute would be Brand, as it relates specifically to an individual or small group of products.

Brick Attribute Values

- Normalised value pick list. Only one Brick Attribute Value could be populated per each Brick.
- Brick Attributes must contain a default value in cases of limited information or non-applicability – unclassified and unidentified.
- Brick Attributes must possess a single comprehensive and exhaustive code list.
- Brick Attribute Values must be

managed and maintained by the Service Provider and where necessary the GPC Task Group (GPCTG)
- Duplicate Brick Attribute Values are not permissible; all values should be uniquely defined.
- There should be no abbreviations within Brick Attributes values.
- Brick Attribute Values should be in alphabetical order and created on the basis of key words.



- Contentious terms or words used as a value or within a value must be added to the glossary, along with a concise definition.

Schema Numbering System

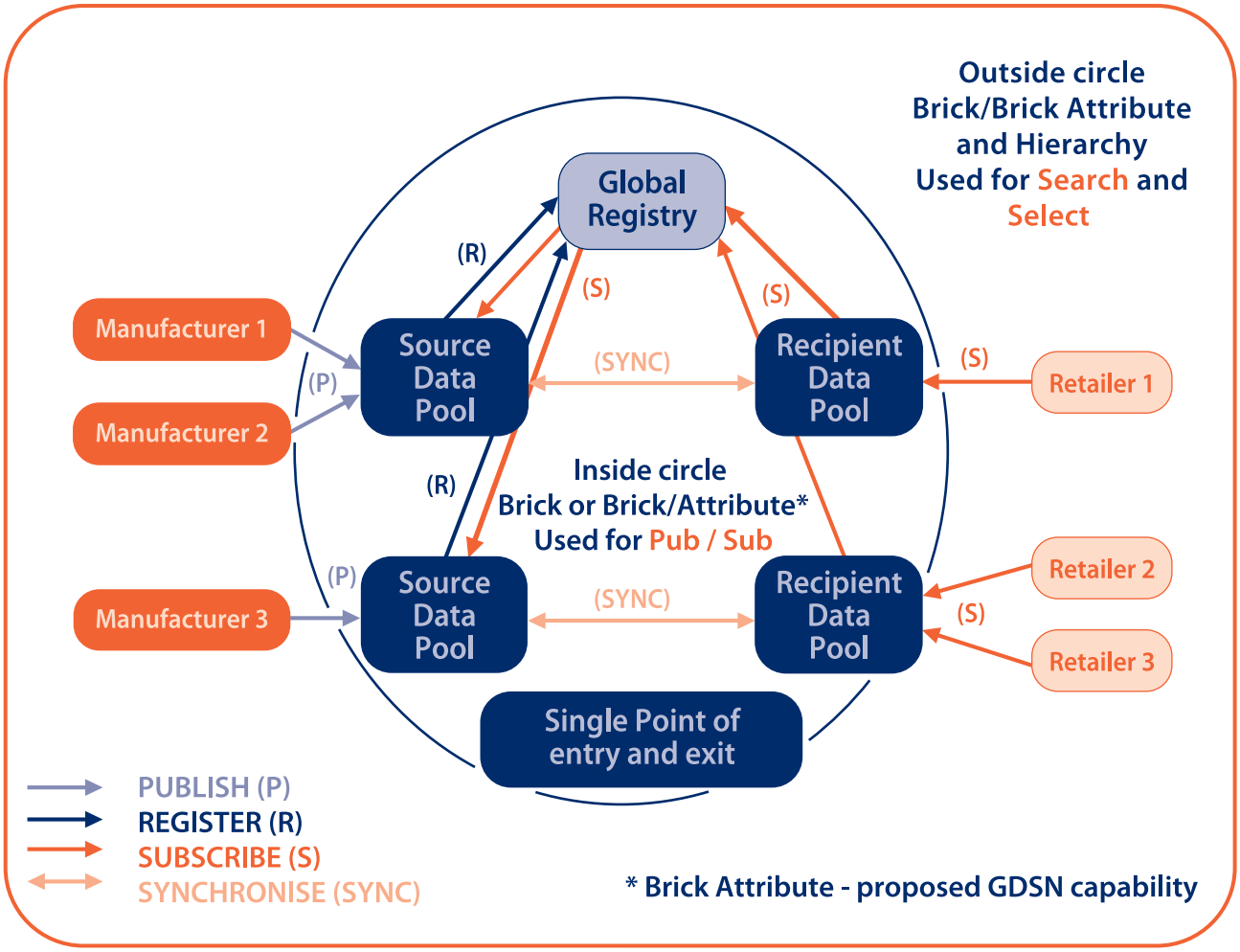
- All numbers are 8 digits in length, non-negative integer
- Unique identification
- Constant, i.e. the description can change, but the number remains the same
- **Brick Numbering**
- The code always starts with a '1'
- **Brick Attribute Numbering**
- Repeatable field
- The code always starts with a '2'
- Reusable against another Brick, where applicable
- **Birck Attribute Value Numbering**
- Repeatable field
- The code always starts with a '3'
- Reusable against another Brick, where applicable
- **Temporary GPC Brick Number**
- Devised by the GPCTG in conjunction with the GDSN Task Group
- Stems from the mandatory use of GPC in the Global Registry and the need to register items that are not currently covered by the GPC
- Brick Code: 99999999
- Brick Name: Temporary Classification
- Brick Definition: Temporary GPC Brick Code

GPC Rules Governing Codes

STEP	Action/Description/Rule		
Format	Length	Level	Example
	8	Segment codes	10000000
	8	Family codes preceded with the Segment code	10200000
	8	Class codes preceded with the Family code	10203000
	8	Brick codes preceded with a "1"	10000123
	8	Brick Attribute Type codes preceded with a "2"	20000123
	8	Brick Attribute Value codes preceded with a "3"	30000123

5. Main Areas of Usage

Data Synchronisation



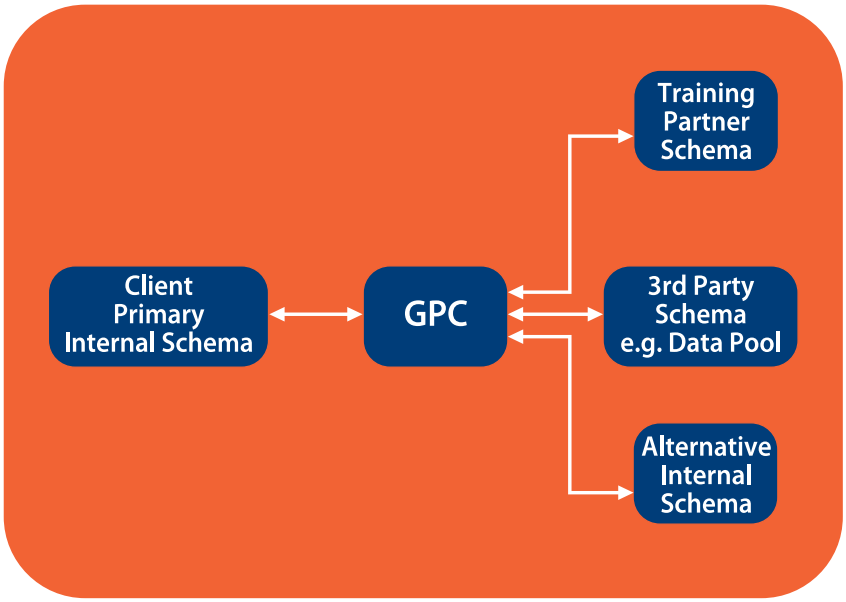
GPC Brick has been mandated as the common classification to be used in the GDSN. There are 3 main areas where its function is critical as one of the four foundational keys (together with GTIN, GLN and Target Market).

These are

- **Publication** (i.e. suppliers denotes what type of product it is),
- **Subscription** (retailer determines types of products they want to receive), subscription is possible by GTIN, GLN, Target Market, GPC Brick code and any combination of these 4 keys, except GTIN and GPC Brick Code which are mutually exclusive.
- And **validation** (all parties ensure that the classification is correct, and all the associated attributes are supplied)

Please note that GPC Task Group is recommending to the GDSN community to use additional subscription criteria in the near future - not only the GPC Brick Code but also

- GPC Brick Code together with Brick Attribute Types and Brick Attribute Values
- Class level subscription
- Family level subscription
- Segment level subscription



Category management projects

GPC is used as a common language to which participating parties map their legacy schemas, and through this process can easily understand how each local classification compares.

Buying Programmes – Product Search

GPC is used as a common language to search for products across different environments (e.g. catalogues and data pools) where no common classification previously existed). Through a map between the buying categories and GPC the buyer can determine requirements to return the appropriate products

Internal and External Benchmarking and Routing

GPC acts as a common language between internal and also external organisations (across function, business unit or country) and provides a single view against which company performance can be measured. This information can also be used in sourcing projects where retailers want to compare similar products. Provides a framework for the centralisation of systems providing a common classification against which products can be stored PIMs (Product Information Masters) etc. and can facilitate automatic routing of information.

6. GPC Lifecycle

Creating / Validating Information

Applicable to

- Suppliers (they own the product)
- Retailers (who hold a lot of legacy information)
- 3rd parties (who either help create or hold legacy information too)

Three main ways to approach this (either in-house or with support)

- Identify the GPC information at an atomic level i.e. associating it with individual products or similar groups of products
- Creating a 'map' between local/own schema and GPC and then associating the GPC information to products via a system algorithm
- Cross referencing 'meta data' from 3rd parties who can identify the GPC information on behalf of the supplier or retailer

Before Mapping – Understand the Logic

As a guide: look for the primary and secondary rules which have been used to build GPC and your schema

In some cases the logic may not be readily apparent, especially if the hierarchy has been based on a subjective basis – in such a scenario it may be difficult to map to the schema

Mapping

Maps may vary

- One Brick may align to one client group
- One Brick may align to more than one client group
- Many Bricks may align to one client group
- Combinations – Alignment through using different levels, i.e. bricks and attributes, and available levels within the client schema, GDD Attributes, and client specific information

Depends on source data

- Depth/granularity
- Subjectivity
- Nature – Classification vs. description
- Technology bias!

Mapping Examples

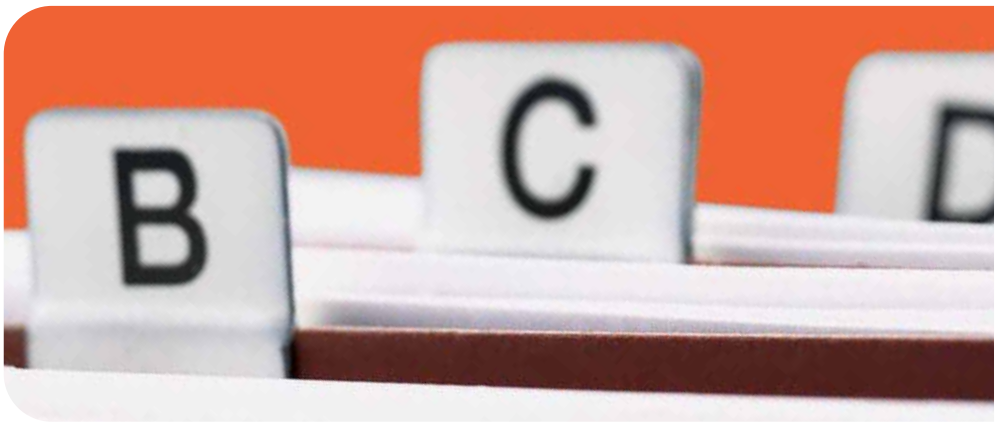
One Brick = One Client Group

- Brick=Sandwiches-Filled Rolls and Wraps (Perishable) (10000255)
- Client=Sandwiches, Cold Ready to Eat, Fresh

One Brick = More than One Client Group

- Brick = Fruit - Prepared and Processed (Frozen-10000204
- Client=Fruit - Apple / Pear Family - Frozen
- Fruit - Citrus - Frozen

Many Bricks = One Client Group



- Brick = Extracts (1000050) + Soups - Prepared (Shelf Stable) 10000262)
- Client - Soup / Bouillon / Stock - Ambient

Combinations within GPC
- Client Foreign Pilsner Beer maps to Brick =Beer (10000159)
- Brick Attribute - Style of Beer (20000170) - Pilsner (30003232)

Combinations with GDD and others
- Client Premium Pilsner Beer maps to Brick =Beer (10000159)
- Brick Attribute - Style of Beer (20000170) - Pilsner (30003232)
- GDD Attribute – Brand or Price to determine "premium"

Transmit / Store Information

Placeholders are required
- As attributes (Bricks and Brick Attributes…possibly hierarchy)
- And as a schema in the system

Validation
- It is a 'normalised' field, therefore it can be checked automatically and used when information is loaded into systems and catalogues (data pools)
- The field will drive category specific fields e.g. % alcohol

Publishing
- Hold information in a ready state to be sent into the GDSN

Ensuring the 'pipeline' is able to manage GPC
- It may that the information is converted along the way and the quality is lost – what's sent is not received!
- Encouraging all to use GPC and for all other standards to have basics in place e.g. EANCOM

Using Information

As part of the Pub / Sub process
- Provides a common categorisation to subscribe against
- Initially using Brick… later using the hierarchy and Brick Attributes
- If cross referenced to local category buyer can select local category and subscribe (system will convert and send out subscription)

As part of GDS for retailers
- Use the standards to automate internal process flows and also address quality issues at the same time

As a common language
- **Category management**
- Reduce mapping work
- Reduce costs
- Allow more alignment
- Increase flexibility to create new views

- **Internal Benchmarking and Routing**
- Used to group similar products for sourcing exercises
- Comparing assortments and performance across countries
- Measuring company performance based on categories
- Using a key to route information automatically in organisations

7. Practical Implementation Examples: What's in it for me?

If I am a Manufacturer

All externally facing communication that references product data will use GPC. For internal use, they may continue to use their proprietary classification.

- Product Specs
- Price Lists
- Shipment and Share Reports
- Inventory Positions
- Product Image Mgmt
- Category Management
- POS Data
- Shelf Data (plan-o-grams)
- Joint Business Plans
- Order Acquisition & Shipment Status
- Consumer Response

Better market research data integration

Improved category management

- Category specific product grouping
- Data mapping from multiple sources
- Efficient communication
- More direct response to consumer's behavioral pattern

Fewer stock outs

If I am a Retailer

Better view of buying spending – buying efficiency improvements

- Sourcing/Procurement, Private Label Management, Digital Asset Management, Buying Catalogue

Efficiency improvement with complexity reduction

Improved category management

Wholesalers and retailers use GPC to **support** their **merchandising** activities.

Priority on **horizontal** vs. vertical; short-term **representation** is critical; further vertical or industry specific developments will add new functionalities

B2B applications:

- Online ordering for Not For Resale, Data Synchronization, Vendor relation management
- Pragmatic, streamlined exchange of data therefore the GS1 GPC is manageable and usable

Business Development Projects with manufacturers:

Category management projects.

If I am a Service Provider

Key areas to look at…

Identifying which **GPC codes** are relevant to which products

Understanding **its role as a central language** and how it relates to (not replace) local categorisations

Conducting detailed **cross referencing** with the local views to understand in practice how they can align

- Can you **automate processes** such a routing to a buyer
- Facilitate **cross category comparisons**
- Automatically (or at least easily) **assign the GPC codes** or internal categorisations using the standard

Integrating GPC into the business workflows and systems

- Identifying where (systems) they will hold GPC
- Process to create, maintain, & distribute GPC
- Ongoing change management processes…

8. GPC and UNSPSC alignment considerations

GPC has well-proven, robust business rules; is managed through THE GSMP and has support from GCI, the GS1 community, solution providers, data pools and the Global Registry.

UNSPSC covers many verticals, including products and services and a globally recognised brand.

UNSPSC and GPC are complementary. They do not compete; GPC provides essential detailed classification and attribute information.

The potential business need for the alignment of GPC and UNSPSC requires validation. A Change Request has been submitted and it could trigger the whole process. The most critical component is the alignment of the different governance models. Without this arrangement GPC and UNSPSC can be aligned via only a rather static mapping. There are times when there may be alignment between Commodity and Bricks, at times Bricks may replace Commodity, at times Bricks may sit above Commodity at the Class level and at times where there is no map between Commodity and Brick. An Integration Project Plan will be required to work from the development of a roadmap to detailed development activities.

Potential Alignment Benefits

Users

- Better communication
- Access to both the schemas
- Efficiency improvement with complexity reduction

GPC

- Is linked to a broader global standard
- Establishes a role in UNSPSC to define commodities
- Enable a higher classification or "roll-up" of Bricks

UNSPSC could

- Allow the UNSPSC community to leverage the expertise of GPC to improve / maintain the code
- Provide users with greater specificity or "drill-down" for commodities

9. GPC Governance

The question of 'Who manages the GPC' should be divided into two separate questions: **Who manages the development of the GPC? And who manages the implementation of the GPC?** When phrased this way the answer becomes apparent, the GPC task group is responsible for development, communication, education, guidelines and governance of the structure while the GDSN group is responsible for its communication and implementation within the network.

GPC GDSN Version Alignment

- To simplify the change process and minimize the impact on the trading partners only a single version be employed at one time.
- Theory is sound on versioning release (Modification-M; Addition-A; Deletion-D) by limiting amount of work on Deletes to only twice a year while M and A can be updated more frequently. But does it meet the need of GPC?
- GPCTG regard the schema as ongoing development, which should not be subject to GDSN version restraints. It was suggested a full snapshot of the schema is delivered to GDSN every quarter that the GDSN should integrate.
- GDSN will use its own identifier for the version published within GDSN.
- Schema development and thus version will be a continuous exercise and may be available from other sources such as the GS1 website. GPC publications will identify the GPC schema version in context of its "as at" published date.

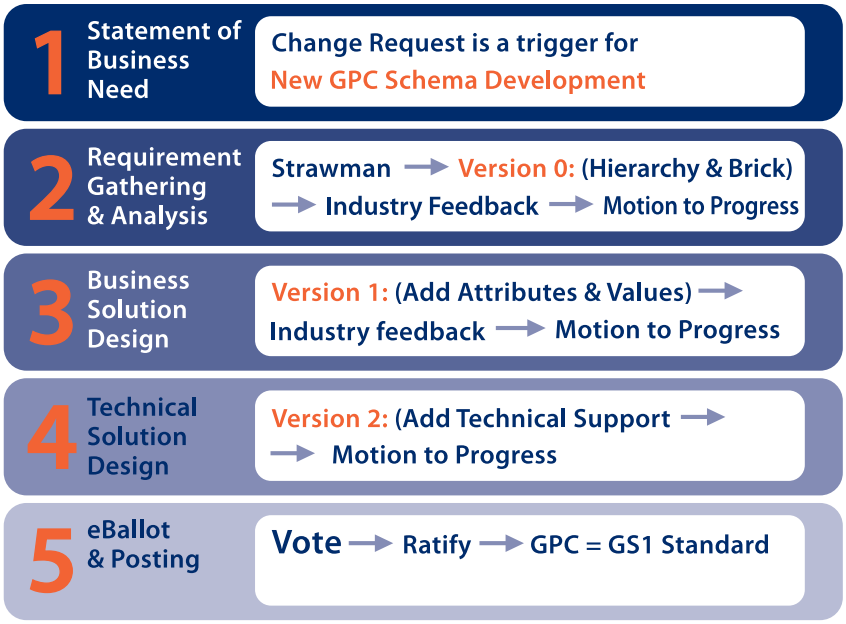
Development and Implementation Cycle

STEP	WHO	WHAT	WHEN [Days]
1	GPC Sub - team	GPC Development Version X	1-180
2	GPC Task Group	Establish cut off date for Version X Start Version (X+1)	182-189
3	Service Provider	Provide access to schema X and deltas (Version X vs Version (X-1))	189-197
4	Data Pool	Assess impact and communicate to users	197-220
5	Registry	Deployment of the GPC	220-227
	Network	Deployment of the GPC	197-227

GPC Development Process triggered by Change Requests.

Key methodology is used to provide a quality Schema that acts as a common language allowing it to be linked to local category views (hence the granularity and building block approach).

- An individual submits a Change Request via the GSMP process.
- This Change Request gets routed to the GPC Task Group (GPCTG).
- ACNielsen collects existing schemas and further input from across the industry. This basis starts off the review process (Strawman).
- The information is then reviewed and signed off by a GPC Development Sub-team - an industry group of category experts including suppliers, retailers, and – more recently - other market research groups. If the group believes the GPC Schema does not meet industry needs, they provide feedback and suggest changes. (Version 0).
- The Schema is then submitted to the industry for open review. The Schema is reviewed by the industry, feedback is received and changes are made.
- The GPC Development Sub-team develops the attributes and the associated values (Version 1).
- The Schema is then submitted again to the industry for open review. The Schema is reviewed again by the industry, feedback is received and changes are made (Version 2).
- The GPC Task Group then votes and proposes it as a standard to GS1 management.
- GS1 management ratifies it and the schema becomes an GS1 standard.



10. GPC Classification Development Status

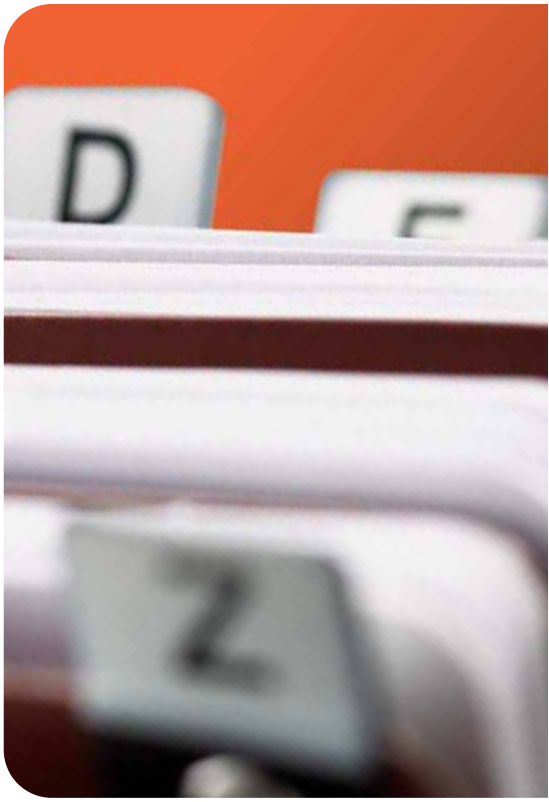
The development of future classification schemas depends on market demand. Retailers and manufacturers working together within the GSMP develop all schemas.

Since GPC was launched the following schemas have been developed through the GSMP:

- Food, Beverage and Tobacco (FBT)
- FMCG Non-food (Baby Care; Beauty, Personal Care and Hygiene; Healthcare; Homecare; Pet Care and Food)
- Cross Segment
- General Merchandise: Arts, Crafts / Audio Visual / Camping / Clothing / Communications / Computing / Footwear / Furniture / Kitchen Merchandise / Musical Instruments / Personal Accessories / Books / Sporting Goods / Stationery / Toys & Games;
- Hardlines: DIY / Household Appliances / Automotive

Key figures on GPC progress up to date:

- Projected trends 26-30 Segments, 72-90 Families, 464-600 Classes, 5-9000 Bricks, 20-36000 Attributes, 40-70000 Values
- Focused on FMCG retail categories
- Phased schema delivery
- Rules and principles updated and published
- Committed sub-team members (15 GM + 3 Hardlines sub-teams)
- Chairperson (s)
- Conference calls, workshops
- Sub-team population – not enough industry participation
- Three Types of GPC Change Requests (CRs): CRs for new schema development, CRs for ongoing maintenance of existing schemas, Industry feedback CRs - Service Requests



11. New Offering

Targeted approach to user support. New business model and opportunity for Data Pools and MO's. An opportunity to deploy uniform answers globally, and support local needs. The model supports education, access and use.

GS1 Member Organisation (MO) Business Motivation

No distribution and / or development cost. MOs can be the 'Sales Agents' of GPC services to Non-GDSN users. Value add services and translation opportunity. They can also facilitate Change Requests and provide Helpdesk to their user community.

Data Pool Business Motivation

For GDSN users to provide interactive access through a user interface to facilitate item set up, Pub/Sub and search. For Non-GDSN users to provide access through a user interface. Facilitate Change Request; Enable Change Management by setting up classification assignment; Helpdesk.

What happens to data not covered by the GPC?

All items will be covered by the GPC. New products can be classified as "Temporary Classification" (Brick number 99999999) until the classification is defined and published by the GPC Task Group.

- The complete set of GPC schemas is published for:
- Food Beverage and Tobacco
- FMCG Non-food (Baby Care; Beauty, Personal Care and Hygiene Products; Health Care; Home Care; Pet Care and Food)

Other schemas are available for industry review:

- Hardlines (Do It Yourself [DIY]; Automotive; Home Appliances)
- General Merchandise (Clothing; Footwear; Personal Accessories; Communications; Computing; Sporting Goods; Toys and Games; Arts and Crafts; Furniture and Furnishings; Kitchen Merchandise; Printed & Reference Materials; Stationery; Camping; Music; Audio Visual)

Will there be a plan to migrate from various classification systems to the GPC?

Trading partners are responsible for migrating their current classification system to the GPC.

Many data pools and GS1 Member Organisations can assist their users in accomplishing this task.

Access to GPC Work In Progress Schemas

http://eroom.uc-council.org/eRoom/facility/AlignDataBusinessModelingGroupBMG/0_33e9b

If this link doesn't work please try this path: http://eroom.uc-council.org

GSMP Align Data Business Requirement Group (BRG) >> Work Teams and Task Groups >> Global Product Classification Work Team >> 1 PUBLISHED SCHEMAS

Login: guest ; Password: guest

12. Conclusion

Why do classifications matter?

GPC is a powerful tool and a key part of the common language to facilitate buyer-seller relationships. Embedded in working infrastructures, it becomes relatively invisible without losing any of that power. In this brochure we have demonstrated that classification should be recognised as a significant part of the GS1 global standard package.

Overall, GPC can be summarised as follows:

- A rule-set based, fundamental GS1 global standard
- Describesing the product group a certain product belongs to and not the product itself
- A Global business language of classification, both in a bilateral and multilateral trading relationship, but not necessarily replacing any current 'local' classification systems
- Facilitates Facilitating publication, validation and subscription processes as part of the mandatory fields in the Global Data Synchronisation Network (GDSN)
- Supports Supporting selling / buying programs – high level search and drill down
- An 'Electronic Manual' of global codes and definitions
- Its Users: Big or small trading partners (manufacturers, retailers, distributors), catalogues, data pools and the registry
- Note that GPC and UNSPSC will be aligned
- Improve product information quality
- Eliminate redundant activities and reduce the cost of item set-up and maintenance
- Spend analyses, standardised product use, conduct supplier rationalisation initiatives
- Benchmark buying patterns against peer and competitor companies
- Conduct market share analysis
- Allow mapping to different trading partner or third party solution provider views, reducing costs
- Opportunity to group products with category specific attributes
- Enable aggregation of electronic catalogues by big buying organizations

We have argued that a key for the future is to produce a flexible, globally adaptable classification, whose users are aware of its dimensions, and which explicitly retains traces of its construction. In the best of all possible worlds, at any given moment, the only good classification is a living classification. GPC is a great example of a living classification.

For more information:
Zoltan Patkai
+32 2 788 7829
zoltan.patkai@gs1.org

Notes

GS1 AISBL
Blue Tower
Avenue Louise 326, b10
B-1050 Brussels, Belgium
T +32 (0)2 788 78 00
F +32 (0)2 788 78 99
info@gs1.org

www.gs1.org