D1.1 – Reference Scenarios for Brand Protection in the Cosmetic Sector

This report provides the main business requirements and motivations related to brand protection in the Cosmetic sector at EU level.

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Main author	Stefano Miccoli, Fincons spa, stefano.miccoli@finconsgroup.com
Contributor	Alessandro Brun, Masque srl, alessandro@masquemilano.com

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Glossary

Term	Definition
BoM	Bill of materials
EdP	Eau de Parfum, product with fragrance concentration between 15% and 20%
EdT	Eau de Toilette, product with fragrance concentration between 12% and 15%
IPR	Intellectual Property Rights
LISC	Legitimate Illegitimate Supply Chain Model described in "Legitimate vs illegitimate: the luxury supply chain and its doppelganger" paper by Iolanda D'Amato and Thanos Papadimitriou

1. Introduction

This task will provide the main drivers and motivations related to brand protection in the Cosmetic sector at EU level, with special focus on SMEs. MASQUE will provide relevant business requirements and work on their prioritization, as well as providing relevant indications for creating an impact at business level.

The present deliverable, D1.1, describes the Reference Scenarios for Brand Protection in the Cosmetics Sector and provides indications and specifications for the development of a system (tag + QR code + app) useful to protect top niche perfumery brands from the risks of illicit trade and to guarantee a safe handling of fine fragrance products during storage, handling and transportation throughout the distribution chain, from the producer to the final consumer.

2. Illicit Trade

In the luxury sector, when thinking about the most critical assets to protect, at the top of the list there certainly are Intellectual Property Rights (IPR). As long as there is ongoing creativity and the brand implements its vision, IPR will play an essential role in protecting the intangibles that are unique to the brand. In the hectic luxury market, it is paramount to preserve the "Unique Selling Proposition" of the brand from copies, parallel markets and other cases of illicit trade, so as to promote fair trade practices and ensure customer reliance and faith.

The LISC model singles out many ways in which the genuine supply chain (from the original designer and producer to the customer) could be altered, thus resulting in illicit trade:

- Infringement (diversion): copy of models, design, formulas, protected by Intellectual Property laws or theft of prototypes;
- Product Diversion (legitimate distributor to illegitimate retailer): demand for counterfeiting fulfilled with legitimate goods by an illegitimate retailer (the legitimate product has been diverted);
- Infiltrations: into the legitimate Supply Chain at the moment of purchase when the customer thinks s/he is dealing with a legitimate retailer but actually s/he is dealing with an illegitimate one;
- Shoplifting (legitimate retailer to illegitimate consumer): demand for original goods fulfilled through shop-lifting at a legitimate retailer, stealing original products.

The reasons why a brand would want to protect from illicit trade are patent:

- Protection of intangibles allows luxury brands to differentiate their businesses from their competitors, which in turn does not allow any competitor brand to take undue advantage of the brand's success
- By enabling exclusive rights and laws, innovation is fostered. The brands are enthusiastic about developing and promoting new ideas and technological advancements, hence being able to offer different products and product lines forte consumers.
- IPRs allow protection of consumers and their interests. Consumers can make a calculated choice about their purchase, and can be rest assured of the genuineness and quality offered. This in turn accounts to be a restoration of faith, which is very important for every luxury brand.
- With enforcement of IPRs, protection of ideas and innovation is fostered. This in turn promotes research and development of the businesses.
- Foreign investments can also be protected by implementation of IPRs.

With the present project, we would want to fight two specific cases of Illicit Trade: the parallel markets, which involve legitimate products but diverted onto an illegitimate distribution chain, and infringments, which non genuine products.

3. Italian niche perfumery: the selected brands

People have certain preferences and predilections when it comes to aroma. Buying a perfume is like looking for that "Second Skin". Embarking on a journey of Sniffing and Smelling in the retail store is more than culling a fragrance than what meets the eyes. There is always a link between the personality and desire of an individual when it comes to scent attraction. A perfume should fit an individual like a glove. A world away from the dreariness of mainstream perfumes, niche fragrances are extraordinary and individualistic, creating moments that dawdle on in the memory forever.

This explains why protecting a brand from the damages created by illicit trade is particularly relevant when it comes to artistic perfumery (a.k.a. niche perfumery). After scouting the market and discussing with several experts in the field, we came up with the following list of Italian Niche Perfume brands, which are characterised by a very strong "Unique Selling Proposition" (i.e. are tailored to respond to the needs of specific audience, and are irreplaceable) and are therefore most interested in protecting the brand value and intellectual property with all possible means.

Xerjoff | Turin, Italy

Founder: Sergio Momo and Dominique Salvo
Price Point: € 168 onwards (50ml)

Born out of artistic intuition and the charm of timeless architecture, Xerjoff is an Italian Luxury Perfume house founded in 2003, offering distinctive fragrances composed of the finest ingredients, in exquisite packaging. The brand deftly blends the most luxurious materials to complement the most affluent global lifestyles through the combination of old world craftsmanship, rare raw materials and a contemporary artistic sensibility.

Masque | Milano, Italy

Founder: Riccardo Tedeschi and Alessandro Brun
Price Point: €125 onwards (35ml)

This exceptional Italian niche brand was founded in 2013.The concept behind the line is that each fragrance represents a different act and scene in an imaginary opera, called Opera of Life, as conceived by Brun and Tedeschi. Each fragrance in the collection is created by a different nose which reflects experiences, discoveries, interior monologues, emotions, and inner reflections.

PRO FVMVM | Roma, Italy

Founder: Giuseppe, Luciano, Felice and Maria Durante
Price Point: €220 onwards (100ml)

In the early fifties of the 20th century, the desire to create something special and important emerged in a charming rural village in southern Italy – Sant'Elena Sannita. PRO FVMVM ROMA is an olfactory concept, which was brought to life in 1966. The fragrances of PRO FVMVM ROMA remind us of a precise moment of the past - personally or imaginary lived- and brought to a new life. Famous locations, delicious Italian pastry shops, iconic vacation islands, sunny holiday memories, stories from Rome in all its splendor and beauty, have been used to create these unconventional smells without following any existing rules in the world of fragrance.

Mendittorosa Odori d'Anima | Naples, Italy

Founder: Stefania Squeglia
Price Point: €200 onwards (100ml)

Born from a lava catharsis, Mendittorosa Odori d'Anima is an Italian niche brand founded in 2012. Odori d'Anima means "Scents of the Soul". Squeglia's inspiration and unconditional passion to create Mendittorosa is situated within the active Sicilian volcano of "Stromboli "that has been charging the surrounding area with emotion and energy since pre-historic times. These spiritual scents are made from the finest raw materials and collaboratively created to convey deeply personal sentiments. Mendittorosa is fragrant magic comprising of three collections; The Trilogy; Time without Time; The Duo.

Nobile 1942 | Rome, Italy

Founder: Alberto Nobile and now run by his grandson, Massimo Nobile
Price Point: €105 onwards (75ml)

In the year 1942, with the war at the doorstep, a fragrance that evokes the freshness of genuine memories, of men and of places with a story to tell, of an ancient craft and a depth of wisdom; a fragrance that moves, seduced by beauty and by passion was born. The legacy of the Nobile family traditions and a desire for all things precious evoked Massimo to create scents that awakens the "spirit of a man" with options for every taste and sensibility.

Acqua di Parma | Parma, Italy

Founder: Carlo Magnani
Price Point: €105 onwards (50ml)

Started as a small perfume factory in Parma in 1916, Acqua di Parma is an icon of Italian style, literally the essence of the sophisticated lightness and easy elegance Italy is known for around the world. The first fragrance, Colonia, initially used to perfume gentlemen's handkerchief, became a real symbol of Italian chic among American and European celebrities in the pre-war (1930's) and post –war (1950's) years. In 1993 the brand was revived by entrepreneurs Luca di Montezemolo (former chairman of Ferrari), Diego Della Valle (President and CEO of TOD'S) and Paola Borgomanero (a major shareholder of lingerie retailer La Perla) and became a part of the luxury giant LVMH.

Laboratorio Olfattivo | Rome, Italy

Founder: Daniela Caon and Roberto Drago
Price Point: €98 onwards (100ml)

Daniela Caon and Roberto Drago's love for niche perfumes gave birth to the story of Laboratorio Olfattivo in 2009. The need to tell a story, reflections on a journey, sensations relived for a split second and fragmented passions form the main ingredients of Laboratorio Olfattivo's fragrances.

The fragrances are created from free inspiration and the aesthetic sensibility of the Nasi called to collaborate, Italian and international artists who love to create good perfumes.

4. Analysis of the product packaging for tag placing

The first important aspect to consider is the position of the Smart Tag on the product. In order to make a robust analysis of the various possibilities offered by products with different packaging, one representative product for each of the selected brands has been considered.

Let's start first by presenting the Bill of Materials of the typical perfume.

As niche perfumery might sometimes go off the beaten track, we will carry out this analysis considering a more widely commercially available fragrance: Gucci by Gucci pour homme (see Figure 1).

Figure 1: Bottle and box of Gucci by Gucci pour homme

The following Figure 2 shows a tree-shaped representation of Gucci by Gucci Bill of Materials (BoM), in the Eau de Toilette version, 75ml format. All the components and raw materials required to manufacture one unit of end product are depicted. Please note that the compound (marked with *) is a fictitious formula of perfume compound since the real formula is not known and the "buy" components (marked with **) are

considered as “leaves” in the Bill of Materials regardless of their complexity being the result of the assembling of a number of smaller sub-components (such as in the case of the atomizer or vaporizateur).

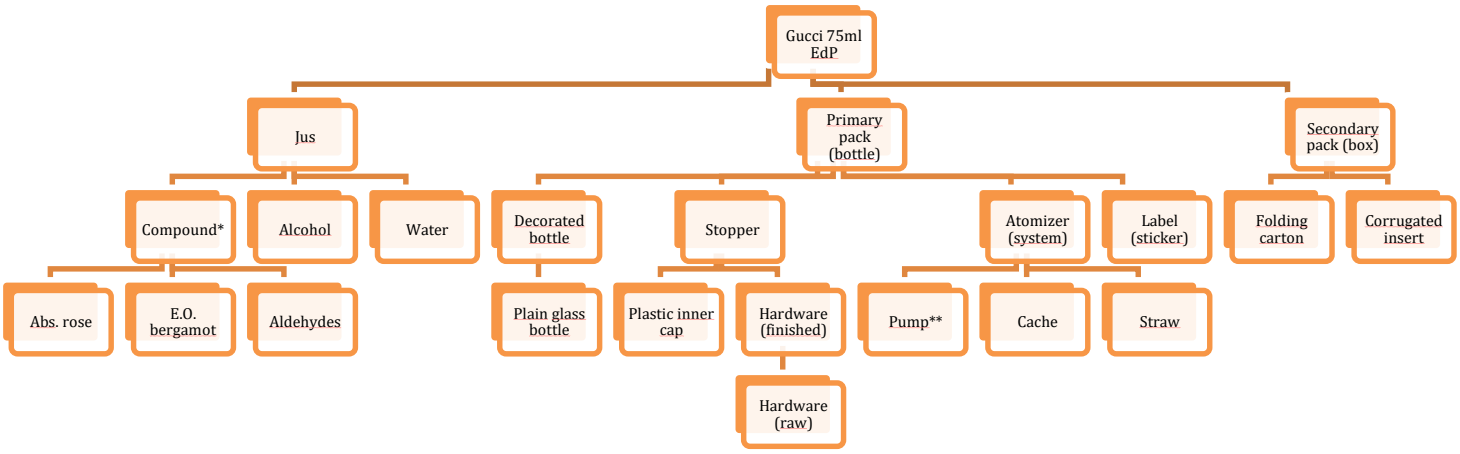

Figure 2: Bill-of-Materials of Gucci by Gucci pour homme 75ml EdP

Key elements of the bill of materials – in particular the primary pack – are illustrated in the following Table 1. Pictures are important to get a better understanding of where the tag can be positioned. Source: www.stocksmetic.com (a large distributor of standard components for perfumery packaging)

Element	**Picture**
Standard Glass Bottle	
Vapo (atomiser)	
Cache pomp	
Stopper (inner cap)	
Stopper (full)	

Table 1: Illustration of main components of primary pack

From a simple analysis of the bill of material, it is easy to single out the various possibilities where the Smart Tag could be placed:

- In the bottle (floating in the "jus" or on the bottom of the bottle): theoretically possible but aesthetically unacceptable considering the very rigid standards of the niche perfumery market;
- on the bottle (in particular hidden under the cache): theoretically feasible if the tag could be completely hidden under the cache;
- in the cap (stopper), in particular hidden between the plastic inner cap and the hardware: this is feasible from the aesthetical point of view, as the tag will not be visible;
- hidden somewhere in the secondary pack: in order to verify the feasibility of this alternative, we need to proceed with a detailed study of the secondary pack of the selected brands.
    - Cheap brands: cardboard box. The tag should be glued somewhere during the production of the box. Most probably it will be possible to see it.
    - Laboratorio Olfattivo: two pieces squared box (in the typical shape called "coffret"), wrapped with paper. The base of the coffret has a mask used to keep the bottle in place. It is easy to hide the tag under the mask. It will go completely unnoticed.
    - Acqua di Parma and Masque Milano: two pieces round box (base and top) made of cardboard wrapped with nice printed paper. The tag could be placed on the inner cardboard tube before wrapping it with paper. Another option is to hide the tag on the base, under the foam used to keep the perfume bottle steady. In both cases the tag would be invisible and the whole box would need to be tampered in an attempt to remove the tag.
    - Mendittorosa: rough wooden box (remembering of the boxes to transport art pieces): the tag could be placed in the inside of the box, yet it would be visible by the customer and could be removed by operators deciding to practice illicit trade.
    - Xerjoff: take for instance the fragrance Alexandria: the secondary pack is a big and sturdy wooden (or wood-like) box. The box is wrapped by nice printed paper and hence the tag could be placed on the wood before wrapping it with paper.
    - Nobile 1942: take for instance the fragrance Rudis: the secondary pack is a two pieces' leather box (remembering some old-fashioned pencil cases made with dried leather). The tag could be placed at the bottom of one of the two pieces, but it could be removed without tampering with the box.

Results of the analysis are as follows:

Position of the tag	**Aesthetical requirement**	**Technical requirement**
In the bottle	No (tag could be seen from the outside and will alter the very refined aesthetic of the bottle)	Yes (tag could work in liquids)
Under the cache	Yes (could not be seen; could not be removed without tampering with the Cache)	Verify dimension (typical inner cap is a cylinder with diameter 18mm) Verify possibility to work in contact with metal (tag is metallic: tin or other alloys)
Inside the stopper	Yes (could not be seen; could not be removed without breaking the stopper)	Verify dimension (typical cache is a cylinder with diameter 22mm) Verify possibility to work soaked in glue or resin Verify possibility to work in contact with metal (sometimes inside the cap there is a coin-sized bit of metal to make the stopper heavier)

Inside the secondary box	It depends (in some cases it could be seen; in some cases could be removed without breaking the box)	Yes (double check possible problems to work in contact with glue and with particular materials (wood, leather)

Table 2: Analysis of the possible positions for the tag in the primary/secondary pack

It is worth testing all of the alternatives to see whether our hypothesis on the technical requirements are actually verified.

The following pictures show the primary and secondary packages for the highlighted brands.

Figure 3: Primary and secondary pack of Laboratorio Olfattivo

Figure 4: Primary and secondary pack of Acqua di Parma

Figure 5: Primary and secondary pack of Mendittorosa

Figure 6: Primary and secondary pack of Xerjoff

Figure 7: Primary and secondary pack of Nobile 1942

5. Definition of perfume related information managed by the system

Concerning the access to perfume information registered in the TagItSmart platform, two target groups are identified to address the IS-COSMEU-Tag use cases:

- auditors (operating on behalf of brands, distributors and retailers) can have access to information related to the production batch to protect the brand (and the partner distributors) from illicit trade;
- end users (sales reps or final customers) information enriching the customer experience and allowing a deeper product knowledge.

Policies to restrict the access to the designated subset of information only will be enforced by the IS-COSMEU-Tag applications.

The following Table 3 provides the overview of all the perfume metadata that has to be managed by the IS-COSMEU-Tag solution, with description and data and access restrictions of each property.

Property	Target group	Description	Constraints
Brand name	Auditor End-user	The brand of the perfume	Mandatory
Product name	Auditor End-user	The name of the perfume	Mandatory
Concentration	Auditor End-user	Concentration of perfume [eau de toilette; eau de parfum; parfum; parfum concentreé; attar – or pure oil]	Mandatory, One of the available options
Size	Auditor End-user	The size of the perfume	Mandatory, integer number [ml]
Version	Auditor End-user	Information about the perfume version (e.g.: travel version; deluxe version…)	Optional
EAN code	Auditor End-user	Article number, used for consistency check with package barcode	Mandatory
Short description	Auditor End-user	Brief description of the perfume to provide contextual information	Optional
Production year	Auditor End-user	The year the perfume was produced	Mandatory, from 2017 onwards
Production month	Auditor End-user	The year the perfume was produced	Optional, number from 1 to 31
Production day	Auditor End-user	The day of the perfume was produced	Optional, number from 1 to 366
Production batch	Auditor End-user	Reference to the production log	Mandatory, incremental number
Market	Auditor	Destination market of the perfume, can be a specific country – e.g. Iran – or a region – e.g. GCC Countries	Optional
Distributor	Auditor	Distributor (or retailer) name	Optional
Head notes	End-user	list raw materials or accords	Mandatory, (at least one material*)
Heart notes	End-user	list raw materials or accords	Mandatory, (at least one material*)
Base notes	End-user	list raw materials or accords	Mandatory, (at least one material*)

Long description	End-user	Text that encompasses the product “brief” or some storytelling about the fragrance creation and so on	Optional
Multimedia assets	End-user	References to multimedia assets (images, videos, 3D models) stored outside of the TagItSmart platform that enrich the consumer experience	Optional

Table 3: Overview of perfume metadata managed by IS-COSMEU-Tag

* Most common materials are suggested from a list; it is possible to add other materials as a free text field.

6. Temperature tracking requirements to prevent product damages

The IS-COSMEU-Tag aims to leverage on the TagItSmart smart labels with the use of irreversible thermochromic ink to monitor the temperature the perfume is exposed to throughout the distribution chain, detect any deviation which could generate damages to the fine fragrance products.

As it is well known, alcoholic perfumery deals with fragrant oils (compound) diluted in alcohol (ethanol). As the freezing point for ethanol is very low, perfumes are typically able to resist well to cold temperatures (of -20°C or lower). On the other hand, some smelling ingredients, especially “fresh” head-notes such as citruses (bergamot oil, lemon oil, lime, tangerine and so on) are losing their characteristic smell if over-heated.

For this reason, it is paramount that perfume brands (especially when it comes to niche perfumery) have a mean to guarantee that the products are stored and handled at a proper temperature range, throughout the distribution chain, from the producer to the final consumer.

For the above reasons, the smart labels should be to handle the “damaged product” if any of the the following conditions has been reached:

- the monitored temperature T reached -10°C or below;
- the monitored temperature T reached +38°C or above;
- the monitored temperature has been over +35°C for 12 hours (continuatively) or more.

In case none of the three above conditions are reached, the IS_COSMEU-Tag system will communicate to the user that the product was stored, handled and transported in an appropriate temperature range, thus not affecting negatively the product quality.

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