

**Wageningen University – Department of Social Sciences**

**MSc Minor Thesis Proposal Food Law**

---

**The effect of food legislation on the hospitality sector:  
The example of European allergen labelling.**

**2014-2015**

**Applied Food Safety**

**Majed AlMuhanna**

**Supervisor:**

**Harry Bremmers**

**Law and Governance Group**

**(WUR-LAW)**

**LAW-80424**



**WAGENINGEN UR**  
*For quality of life*

## Acknowledgements

I would like to thank my parents and siblings for all their support during my work on this research. Furthermore, all my friends in the Netherlands that sported me during my stay. Special thanks to my friends Mohammed Al Mansouri, Yousef Al Harbi, Erika RAY, Kay Moisan and Alaa El Hawary for their endless support.

A very special thanks to my supervisor Professor Harry Bremmers, who showed endless support and patience with my work, as I learned a lot from him. Furthermore, I would like to thank the Law & Governance department at Wageningen University, especially Professor Bernd van der Meulen.

Moreover, I would like to thank the hotel establishments that answered my questionnaire, as their input were highly appreciated. Furthermore, a special thanks to King Saud University for supporting me financially and morally in accomplishing my master degree in the Netherlands.

Wageningen, June 2015

Majed AlMuhanna Abalkhail

## Contents

<b>Abstract</b> .....	6
<b>1 Introduction</b> .....	7
1.1.1. Food allergies.....	8
1.1.2. Unsafe foods.....	8
1.1.3. Consumer information .....	9
1.1.4. Regulation EU 1169/2011.....	9
1.1.4.1. Probable effect .....	10
1.1.4.2. HOTREC Position.....	11
<b>1.2. Problem</b> .....	11
<b>1.3. Research objective</b> .....	12
<b>1.4 Research questions</b> .....	12
1.4.1. Research range .....	13
<b>1.5 Research methodology</b> .....	14
1.6 Definition of concepts .....	16
1.6.1 Hospitality industry .....	16
1.6.2 Competitiveness .....	16
<b>1.7 Research framework</b> .....	17
<b>2 Hospitality regulations.</b> .....	21
2.1 EU legislation .....	21
2.2 Private standards.....	24
2.3 Conclusion .....	25
<b>3 Hospitality structure</b> .....	26
3.1 Hotel organisational structure.....	26
3.1.1 General organisational structure.....	26
3.1.2 Food and beverage structure .....	26
3.2 Classification structure.....	28
3.2.1 Service-orientation.....	28
3.3 Franchise.....	29
3.4 Upside-down pyramid.....	29
3.5 Customer satisfaction .....	30
3.4 Type of customers.....	31
3.5 Conclusion .....	31
<b>4 Food information regulation</b> .....	32
4.1 History of allergen labelling .....	32
4.1.1 History of EU 1169/2011 .....	33

4.1.2 HOTREC.....	34
4.2 Directive 2000/13/EC .....	35
4.3 Regulation 1169/2011 .....	36
4.4 Other key measures.....	37
4.4.1 Oral information .....	37
4.4.2 May contain .....	37
4.4.3 Threshold .....	38
4.5 Conclusion .....	38
<b>5 Methods implemented in EU Member States.....</b>	<b>39</b>
5.1 France .....	39
5.2 Ireland.....	40
5.3 Italy .....	40
5.4 Spain .....	41
5.5 Positivity and negativities of implemented measures.....	41
5.5.1 List of ingredients on the menu .....	41
5.5.2 Add a sentence to the menu.....	42
5.5.3 Provide a separated menu .....	42
5.5.4 Provide a sign in the restaurant .....	42
5.6 Conclusion .....	43
<b>6 Hotel food liability .....</b>	<b>44</b>
6.1 Audits and fines .....	44
6.2 Conclusions.....	46
<b>7 Allergen control.....</b>	<b>47</b>
7.1 Kitchen facilities .....	47
7.2 Cross-contamination.....	49
7.3 Preventive measures.....	49
7.4 Conclusion .....	50
<b>8 Operationalisation and Results .....</b>	<b>51</b>
8.1 Operationalisation of the study.....	51
8.2 Results .....	56
<b>8.2.1 Hotel characteristic results.....</b>	<b>56</b>
<b>8.2.2 Statements results .....</b>	<b>57</b>
<b>9 Discussion.....</b>	<b>62</b>
9.1 Results of the questionnaire .....	62
9.1.1 Hotel characteristic.....	62
9.1.2 Statements .....	62

9.2 Limitations .....	65
<b>10 Conclusion and recommendations</b> .....	<b>66</b>
10.1. Suggestions for further studies .....	70
References.....	71
European Union legislation.....	75
ANNEX 1 Hospitality Regulations .....	77
ANNEX 2 SPSS Analyses .....	81
ANAAX 3 Questionnaire.....	87
ANNEX 4 Allergens.....	90

## List of Figures

Figure 1 Research framework design. ....	18
Figure 2 Reverse organisational pyramid (Nebel 2007). ....	30
Figure 3 Statements analysis of the results mean.....	61

## List of Tables

Table 1 Comparison between implemented methods.....	43
Table 2 Questionnaire variables and operationalisation. ....	52
Table 3 Allergen information method. ....	57
Table 4 Mean and Std Deviation of the results of Q1-Q10. ....	58

## Abstract

The European hospitality sector is prized worldwide for its use of fresh foods in the cuisine. However with an ageing population and increase of allergic consumers a change has been implemented on the hospitality industry. The new food information regulation EU 1169/2011 was implemented on the 14th of December 2014, which mandates the industry to declare the allergen content of their foods. This will give the industry an advantage by taking the next step in customer service. However, an effect on safety and quality is speculated to damage the hospitality cuisine, as it will push the industry to use more pre-packed products. Consequently, damaging the competitive advantage of the Hospitality in attracting international tourists.

Moreover, the Regulation in Article 44 Paragraph 2 gives the European Member States the decision on how the allergen information is to be declared, thus a variation is expected between the Member States chosen methods. Therefore, this research is focused on analysing the probable effect of this variation, which is done by studying four EU Member States: France, Ireland, Italy and Spain.

This research is done through a literature review of influencing factors in implementing the Regulation, and a questionnaire to see the prospective of hoteliers in 5 and 4 star hotels, especially food and beverage managers, on their projection on their ability to implement the Regulation, as well as the probable effect it has on the hotel industry. The questionnaire, unfortunately have received a low response rate from hotels. Even though, it can be concluded that the effect is greater on small business in the industry compared to big hotels.

**Keywords:** EU 1169/2011, hotels, hospitality sector, allergen labelling, non-prepacked food.

## 1 Introduction

Dietary needs have changed due to changing lifestyles and an ageing population. Dietary restriction due to growth in the incidence of food allergies in recent years is part of this change. Therefore, it became a necessity for legislators to address the growing need for allergen information (EAACI 2014a) To satisfy this, a new regulation EU 1169/2011<sup>1</sup> was introduced from 13th December 2014, which demands that the hospitality industry declares the allergen content of meals. The hospitality industry is the main source of allergic incidents and so, must respond to this change, in particular, through restaurant menus. From a consumer service perspective, this regulation elevates European gastronomy<sup>2</sup> to the next level in providing information that supports food allergy sufferers' needs.

However, Regulation 1169/2011 brings additional responsibilities to the industry with the necessity to properly list this information and avoid allergic reactions (HOTREC 2014b). Nevertheless, if Member States (MS) apply the regulation strictly, it could lead to higher losses, due to allergen cross-contamination, as cross-contaminated food would be considered unsafe and injurious to human health. Therefore, to avoid legal public liability, the industry will become more reliant on pre-packed foods and standardised menus<sup>3</sup>. Thus, limiting the 'freshness' of restaurant food and menus and negatively affecting the diversity of traditional European gastronomy (HOTREC 2011g). Consequently, 'lost cuisine' might damage the tourism competitiveness of European Member States, since food is an important part of the cultural experience in tourism and a tool to market certain touristic attractions. Hence, any damage to food diversity or cuisine can damage tourist experience (Richards).

---

<sup>1</sup> Regulation (EU) No 1169/2011 of the European Parliament and of the Council of 25 October 2011 on the provision of food information to consumers, amending Regulations (EC) No 1924/2006 and (EC) No 1925/2006 of the European Parliament and of the Council, and repealing Commission Directive 87/250/EEC, Council Directive 90/496/EEC, Commission Directive 1999/10/EC, Directive 2000/13/EC of the European Parliament and of the Council, Commission Directives 2002/67/EC and 2008/5/EC and Commission Regulation (EC) No 608/2004<sup>78</sup>

<sup>2</sup>Gastronomy is the study of the influence cuisine and cultural on guests **Ongeldige bron opgegeven..**

<sup>3</sup> Standardized menus are fixed on the long run and gives lesser varieties to the consumer, but sufficient to use for small kitchens and easier to control **Ongeldige bron opgegeven..**

### 1.1.1. Food allergies

Food allergies are an adverse health reaction that people endure when ingesting foods or food additives (Maleki, Burks, and Helm 2006). The symptoms vary accordingly to the type of allergy (either IgE<sup>4</sup> mediated (e.g. as in allergies to nuts, eggs and peanuts) or non-IgE mediated (e.g. Coeliac disease and lactose intolerance)), and the allergen source type (e.g. nuts, eggs, mustard or peanuts). Most symptoms occur after minutes of ingesting the allergen (Motala 2014). The symptoms include hives, itching and swelling of the mouth, lips, eyes and skin, and difficulty in swallowing or breathing (EAACI 2014b). The European Academy of Allergy and Clinical Immunology (EAACI) estimates that one to five percent of people have allergies to one or more of 120 types of food (EAACI 2014a).

Non-pre-packed foods served in the hospitality industry are the main source of allergic reactions that can be dangerous to human health (EU 1169/2011 Section 24). The possibility of eating the allergen increases in restaurants, due to cross-contamination and lack of proper information (EU 1169/2011 Section 48). Controlling cross-contamination is harder in restaurant kitchens', because normally, several dishes must be prepared at the same time (Abbot, Byrd-Bredbenner, and Grasso 2007). With a growing number of people experiencing food allergies and harmful reactions to allergens, the need for adequate information within the hospitality industry is important (Article 14 EC 178/2002)<sup>5</sup>. Consequently, this is one of the main reasons for mandatory allergen information required by EU 1169/2011. The regulation identifies 14 allergens (specified in ANNEX 2) that must be listed when used in ingredients.

### 1.1.2. Unsafe foods

According to the European Union (EU) General Food Law GFL (EC 178/2002), Article 14 Paragraph 2 (a): food is considered unsafe for human consumption if it is injurious to health. Furthermore, in condemning food to be unsafe, attention will be given to incorrect information of labelling, or induction of foods, which can cause adverse health effects (Article 14 Paragraph 3 (b)).

---

<sup>4</sup> IgE Immunoglobulin E is an antibody that contacts to allergen antigens and launches histamine in the body, which cause the allergic symptoms (Maleki, et al., 2006).

<sup>5</sup> Regulation (EC) No 178/2002 of the European Parliament and of the Council of 28 January 2002 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety.

Correspondingly, food will not be placed in the market if it will mislead the consumer, and will be condemned to be unsafe (Article 8, EC 178/2002). Food is condemned to be misleading if characteristics were unclear, and might lead the consumer to make uninformed choices that can be injurious to health (Article 7 Paragraph 1(a) EU 1169/2011). Business operators, including those in the hospitality industry are responsible for the information they provide and must ensure not to mislead the consumer from having informed choices (Article 8 Paragraph 4 EU 1169/2011).

### 1.1.3. Consumer information

In the EU General Food Law, consumers have the right to be properly informed about the food being sold (Article 8, EC 178/2002). A right to information is also clearly stated in (Section 1) of the Regulation EC 1169/2011 in that the EU was established to elevate the consumer's protection. Moreover, this section states that proper information is required to protect consumer health.

Thus, food information must not mislead consumers and should assist them in making informed choices (Article 8, EC 178/2002). The EU food laws are made to guarantee as much safety as possible within the limits of the free movements of goods in the EU market (EC 2000).

### 1.1.4. Regulation EU 1169/2011

Regulation EU 1169/2011 is the main information law, which establishes that information (e.g. article 9, 10) must be declared on all food products. The Regulation adopts the policies of Directive 2000/13/EC<sup>6</sup> on food labelling and Directive 90/496/EEC on nutrition labelling. In Article 9 Section (c), it is mandatory to list any ingredients or products derived from the ingredients listed within ANNEX 2 (the 14 most common allergens and products derived from them). However, the current legislation does not mention cross-contamination or include a 'may contain' statement, which some local food safety authorities have categorised as voluntary (BRC 2013, Jones 2014). Many food industries list 'may contain' statements to avoid legal liability (Voedingscentrum 2014). Moreover, there are no

---

<sup>6</sup> Directive 2000/13/EC of the European Parliament and of the Council of 20 March 2000 on the approximation of the laws of the Member States relating to the labelling, presentation and advertising of foodstuffs.

thresholds (except for sulphur) on the allergen content that drive allergic reactions, with respect to regular consumers.

For the hospitality industry, the most important article in the Regulation is Article 44. For instance, it specifies in Paragraph 1 Section (a) that allergens must be declared on non-pre-packed foods served by or in the establishments. However, the article in Paragraph 2 mandates that EU Member States of determine how to declare this information. Another provision in Article 44, Section (b) of Paragraph 1 states that the labelling requirements specified in Articles 9 and 10<sup>7</sup> are not mandatory for non-pre-packed foods, unless EU MS have decide to adopt national measures requiring this information. For the purpose of this research, the main focus was on Article 44, Paragraph 1, with respect to hotels.

#### 1.1.4.1. Probable effect

The benefit of this legislation is that it pushes forward the consumers' rights to proper information to enable him/her to make informed choices. This notion is stated in Regulation EC 178/2002, which should further reduce the incidence of allergies from non-pre-packed foods. Moreover, it should support an increase in the number of allergen-free dishes, bringing more variety to the businesses' menus. This should satisfy consumers with food allergies, which is a growing number within the population, and will probably further improve the reputation of European gastronomy from this perspective. In addition, it should give the European hospitality industry an extra opportunity in quality service and reputation-building, especially for international visitors with food allergies (Bosselman 2007).

However, if MS adopt strict measures, by listing allergen information in a written form, it could damage the hospitality industry. In addition, HOTREC<sup>8</sup> is concerned that the Member States don't adopt the same flexible national measures, the outcome could damage the industry (HOTREC 2011g). HOTREC argues that the allergen list implemented by the Regulation, will affect the competitive edge of European tourism if national measures are not standardized on a European level (HOTREC 2013).

Furthermore, the industry as represented by HOTREC claims that it is difficult to implement allergen listing, as it does not run according to standardised production (HOTREC 2011g). A

---

<sup>7</sup> Article 9 and 10 of regulation 1169/2011 sets provisions on the information that has to be labelled in the food product.

<sup>8</sup> HOTREC is the umbrella association of hotels, restaurants and cafes representing this industry in the European Commission.

typical kitchen receives many orders at once, which makes allergen contamination harder to control. Therefore, HOTREC fears that the industry may become condemned with misleading consumers, and will resort to the use of pre-packed foods (HOTREC 2014c). These notions could damage the quality of the rich European gastronomy, by reducing the use of fresh foods and day menus. Furthermore, cross-contamination will be unavoidable and can be injurious to consumer health, with several dishes being prepared at the same time in small working area (HOTREC 2011g).

#### 1.1.4.2. HOTREC Position

With several options to apply this information, HOTREC recommends an oral method - dialogue between the business staff and consumers on allergen content. In a question and answer page for the Regulation in DG SANCO, it was emphasised that the consumer must know that such information exists (HOTREC 2013).

## 1.2. Problem

Cuisine is an important part of the cultural experience of Europe: an experience that is renowned for attracting tourists (Richards). As regulation 1169/2011 Article 44 Paragraph 1 (b) gives MS the freedom to choose how the allergen information is declared, some variation is expected within the national measures of MS, because it is not standardised on European level.

Therefore, that variation could result in differences in the food quality and safety between Member States. Thus, it could be hazardous to consumer health because of the lack of proper information on allergens, which is exacerbated by the lack of allergen thresholds within the Regulation.

However, considering the situation in four Member States (France, Ireland, Italy and Spain) on 13<sup>th</sup> December 2014, that used different methods to provide allergen information. Some (e.g. Ireland) have applied the Regulation in a strict, written form. Consequently, this will affect the cuisine, food quality and safety of those EU Member States and could affect the competitiveness of them in tourism.

### 1.3. Research objective

The objective of this research was to analyse the impact of allergen listing prescribed by of Article 44 Paragraph 1 EU 1169/2011 on the competitiveness of the hospitality industry of four- and five star hotels in four EU Member States, with respect to their national measures on allergen declaration. It compared the effect of the variation in national measures adopted by Member States with regard to Article 44 with respect to the probable effect on food safety and quality. Moreover, it analysed the impact of this variation on the competitiveness of hospitality between four EU Member States in attracting tourists. The Member States were chosen<sup>9</sup> according to the national measures on allergen listing and amount of tourist visitors (UNWTO 2014). The EU Member States selected for the analysis were France, Ireland, Italy and Spain.

### 1.4 Research questions

1. What is the hospitality industry structure, specifically of hotels?

The hospitality structure provides insight into the role that food plays in the hotel industry, and how it might be affected by allergen listing. Food is part of the cultural experience in tourism, therefore, how do they affect each other?

2. What legislation regulates the hotel industry?

To achieve a full understanding of the effect of Article 44 on hotels, knowledge of relevant hotel legislation is required. This will give legal insight into how hotels are governed and how food laws affect those regulations.

3. What does Article 44 Regulation EU 1169/2011 require?

Understanding the nature of the Regulation, specifically Article 44 and its accompaniments enhances the accuracy of analysis of its effect on food safety and quality in hotels.

4. What national measures regarding Article 44 Paragraph 1 are adopted in Member States?

To understand the influence of Article 44 (EU 1169/2011) on hospitality competitiveness, an analysis that detects any variation in Member States' national measures is required.

---

<sup>9</sup> See section 1.4.1 research range.

5. Will these national measures lead to unsafe food or misleading consumers? Or possibly lead to the increased use of pre-packaged foods?  
If stricter measures were to be adopted by a Member State, how would this influence the allergen information concerning cross-contamination? Furthermore, will the Regulation lead the hotel business to use more pre-packed foods, as a safer option?
6. What is the effect of the variation of implementing national measures regarding Article 44 on the competitiveness of the hospitality industry in marketing?  
According to HOTREC, if Member States do not have standardised national measures, marketing competitiveness will be affected, as some Member States will implement strict measures and some more flexible measures.
7. How does the variation of national measures implemented affect the tourism competitiveness between Member States?  
According to HOTREC, the variation in national measures will also affect the competitiveness of tourism. Understanding some of that effect would provide a partial overview of the outcome of EU 1169/2011 in the tourism industry.
8. What solutions reduce the negative effects that might occur following implementation of Article 44 in hotels?  
The potential fines incurred with regard to food that is deemed to be unsafe or due to lack of proper information on allergens can amount for example in Spain up to €15,000. In an industry like hospitality, in which 91% of businesses are micro enterprises that employ less than ten people, a fine of such an amount can represent a huge loss to business.

#### 1.4.1. Research range

The case studies for this research were chosen according to the type of hospitality variety and measures implemented by the EU Member States.

For the Member States, the method of choosing the countries for this research was completed on the basis of what national measures were implemented. Several EU Member States have implemented the same national measures as other Member States. Therefore, a

further narrowing was required, which was based on the number of tourists that visit each Member State. For example, France, Germany, the Netherlands and Belgium have implemented the same national measures, in which allergens are declared orally. To narrow this choice, France was selected, because it has the highest number of tourist visitors, according to the World Tourism Organisation Report of 2013 (UNWTO 2014). On an elimination basis, the following four countries were chosen: France, Ireland, Italy and Spain.

With regard to the hospitality industry, the case studies focused on four- and five star hotels. The elimination process was completed according to the business size and the presence of a food and beverage department. Therefore, hotels with a more complex structure were chosen. Moreover, hotels hold larger capital investments with respect to the other establishments within the industry, such as restaurants and cafés that are generally smaller in size (HOTREC 2014a). Furthermore, the four- and five star hotels in most Member States have a food and beverage department within their hotel organisational structure (ECC-Net 2009). Thus, four- and five star hotels in the EU have a structured management in dealing with food.

In summary, the focus of this research was four- and five star hotels in four EU Member States: France, Ireland, Italy and Spain, which were chosen on the basis of the complex structure of hotels and Member States that were different implemented national measure with regard to the high numbers of tourists.

## 1.5 Research methodology

The research was conducted using three methods. Firstly, a literature review was undertaken to explore and answer questions one to four - the main body of this research. Secondly, a questionnaire distributed to four- and five star hotels in the selected countries was used to explore and answer questions five and six. Thirdly, a comparison was performed to explore and answer question seven, to calculate an overview of the impact of Article 44 on the competitiveness of tourism.

The literature review assembled information on four aspects of this research. Firstly, material was gathered on the hospitality industry structure for particular hotels, and how it is linked to the tourism and food production. Secondly, regulations that govern the hotel industry and the role of food in these procedures were collected. Thirdly, information regarding Regulation 1169/2011 with respect to Article 44 Paragraph 1 and ANNEX 2 was

collected. The information included application methods and the 14 allergens. Fourthly, the national measures adopted by Member States, and methods used to control allergens were assembled. Collectively, this literature will help enhance understanding of the impact of the Regulation on the hospitality industry and to compare this with the opinions of professionals in the industry.

To understand the impact of Regulation 1169/2011 on the hotels from a professional view. A questionnaire<sup>10</sup> was distributed to four- and five stars hotels in the selected countries. The questionnaire was used, because it is very effective for gathering data, or in this case, opinions, within a short time frame and from wide ranging sources (i.e. the large variety of hotels in different Member States). This was used to determine the industry opinion on the impact of the Regulation in terms of safety, quality and competitiveness. It provided insight into how the Regulation can be implemented practically with regard to cross-contamination, and an indication of whether existing control measures are effective. Furthermore, the Managers' opinion provided useful additional insight on the impact of the Regulation on the reputation of European hospitality, whether damaging or inducing. The questionnaire, which was aimed at food and beverage managers, was devised as a Likert Scale that consisted of statements on the impact of the Regulation on food for sale and competitiveness (see section 8.1.). Answers were categorised according to approval or disapproval on a scale of one to five (strongly agree, agree, neither agree nor disagree, disagree, strongly disagree). The results of the questionnaire were analysed through the SPSS software Version 20.0 for Windows.

Finally, a comparative review was performed, to assess the impact of Article 44 EU 1169/2011 on the competitiveness of tourism. The comparison was made between Member States in regard to their national measures and the probable impact of Article 44 on local cuisine. Attributes for this comparison were the nature of the national measures and the results of the questionnaire that relate to professional opinions within the hospitality industry regarding the future of local cuisine.

---

<sup>10</sup> The questionnaire is attached in the ANNEX 4 of this research.

## 1.6 Definition of concepts

### 1.6.1 Hospitality industry

The European hospitality industry is famous worldwide. Its gastronomy has influenced the teachings of most of hospitality schools in the world. Therefore, it plays a major role in European tourism, which with 475 million visitors annually, holds 50% of the global market share in tourism (HOTREC, 2014). One of the main characteristics of Europe is its fresh cuisine that utilises seasonal ingredients bought on a daily basis (HOTREC, 2014). Another characteristic are the daily markets, as gourmet chefs tend to base their daily menu on the fresh ingredients available from the food market of that particular time. The hospitality industry in itself is a major stakeholder in the food production chain. It consists of a large number of businesses in Europe (an estimated 1.8 million according to HOTREC), which comprise mostly of micro enterprises, with 91% employing less than ten people (HOTREC, 2014). The European hospitality industry accounts for almost 10 million jobs and 4.4% of the total employment in Europe (HOTREC, 2014).

### 1.6.2 Competitiveness

Competitiveness is defined as the variables and measurements that give business and organisations the ability to succeed in overcoming other competitors in the same industry area (Shiring, Jardine, and Mills 2001). Nowadays, competitive advantage is the most important component in the strategic plan of an organisation that aims to succeed in generating profits. Therefore, it is important for businesses and organisations to invest managerial effort into analysing and improving competitive advantage over other businesses in the same city, country and region (Porter 2008).

The variables that are used to measure the competitiveness of an industry are divided into five sections: Infrastructure, Marketing and Sales, Management, Trading and Information Systems. These can be divided into subsections. The variables are not independent, some variables have a bigger influence than others, depending upon the business type (Olmos 2012). This research focused on Infrastructure<sup>11</sup> and Marketing and Sales, as they are the most important competitive sections with regard to the hotel industry.

---

<sup>11</sup> Infrastructure in this sense asserts that the hotel has whether technology, capacity or customer service.

The consumer perspective in this case divide competitive variables into two categories - tangible and non-tangible. In which, competitive variables that are tangible by the consumer is the infrastructure and non-tangible are Marketing and Sales. However, this does not prioritise one as more important than the other. The non-tangible variables are equally important, because they create the environment for the other variables that are tangible to exist (Siguaw and Enz 2007).

#### 1.6.2.1. Marketing

In regard of hotel competitiveness in Marketing and Sales the advantages include market research price and occupation rate and most important publicity. Publicity is important as it showcase the hotel services, which demonstrate how the competitive variables are interlinked (Olmos 2012).

#### 1.6.2.2. Infrastructure

The hotel competitiveness in Infrastructure includes capacity technology and most importantly customer service. The capacity of the hotel includes facilities such as restaurants and quality services. Customer service is most important for this research, as it focus on customer satisfaction, which includes authentic local cuisine that gives customers a local touristic experience and their use of fresh foods sold in the daily market. Thus, cuisine gives a competitive advantage to the hotel.

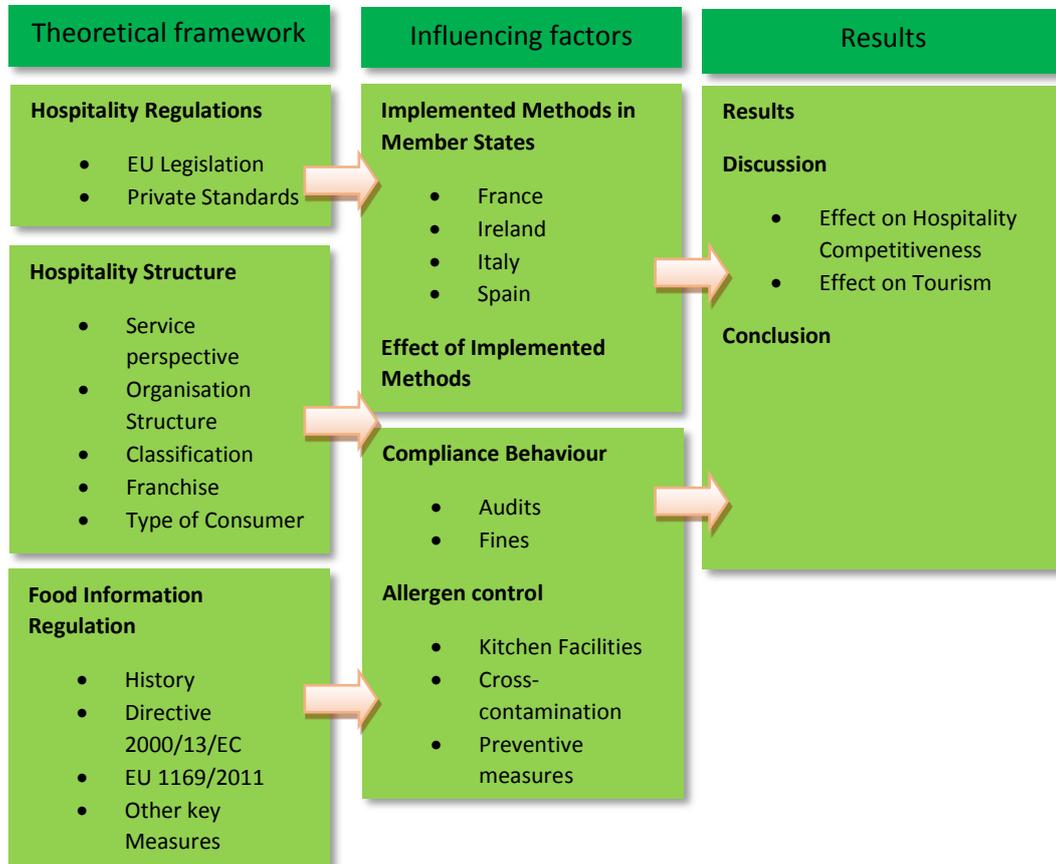
In the context of this research, the focus was on the competitiveness of cuisine and how it affects the competitiveness in regard to the variables of infrastructure and Marketing and Sales. The measurement of this competitiveness was gathered from the answers of the questionnaire, which was distributed to food and beverage managers in four and five stars hotels in the chosen EU Member States. Therefore, the measurements were quantitative, and were compared with the industry view on how food is used as a marketing tool, and how the allergen listing is implemented in the infrastructure and marketing of the industry. Consequently, giving a final view on the allergen listing effect on the competitiveness of the hospitality sector.

### 1.7 Research framework

The research framework was designed to guide this research on how to approach the research questions. The framework was separated into three sections (Figure 1): Theoretical framework, Analysis and Results to narrow down the research to fully understand the impact

of Regulation EU 1169/2011 Article 44 Paragraph 1 on hotel competitiveness on an international level, and how it affects the competitiveness of tourism in Europe.

Figure 1 Research framework design.



### Theoretical framework

The theoretical framework focused on providing background information on regulation and structure within the hospitality industry. And also assessing relevant literature associated with implementation of Regulation EU 1169/2011. The theoretical framework is divided into three chapters.

In Chapter 2, hospitality regulations and background information are provided to elucidate the laws that govern the hotel industry. Specifically, the role of food legislation in four- and five star hotels. The Chapter is divided into two sections: EU legislation and the private standards used by the hotel industry.

In Chapter 3, hospitality structure, provides a brief background on hotel structure, particularly four- and five star hotels. It is intended to give an understanding of how hotels

are structured, with a further emphasis on the role of food in that structure. The chapter also analyses how customer service is involved in the managerial structure of hotels.

Chapter 4, food information regulation, focuses mainly on the EU Regulation EU 1169/2011, particularly Article 44 Paragraph 1. The Chapter mentions a brief history on the discussion that occurred between the EU and food stakeholders, before the final regulation was drafted. Furthermore, it provides a brief summary of Directive 2000/13/EC, and other key legal measures associated with implementation of Regulation EU 1169/2011. Moreover, it discusses HOTREC's position regarding implementation of Article 44.

### **Influencing factors**

To explore influencing factors on implementation of EU 1169/2011 Article 44 Paragraph 1 in the hotel industry, the focus was on gathering literature on implementation of the Regulation in the hotel industry. This included the implemented methods chosen in the four EU Member States studied: France, Ireland, Italy and Spain. And also enforcement- and allergen control methods for the Regulation in the Member States.. This section is divided into three Chapters.

In Chapter 5, the implemented measures of the Member States, the focus is on how Article 44 is implemented in the four chosen countries for this research. Furthermore, it includes an analysis on the probable effect of each Member States' chosen methods on hotel competitiveness outside the EU. Chapter 6, Member State enforcements methods, analyses the tools used by the local authorities in Member States to guarantee the implementation of this regulation. This analysis was carried out through examination of the compliance behaviour that is evident in the system of audits and fines in each Member State.

Chapter 7, allergen control, provides a brief overview of the physical methods used to control allergens in the kitchen. It includes an indication of the layout of kitchen facilities in the chosen four Member States and how they might cope with the implementation of allergen labelling. It also considers the probability of cross-contamination in kitchen facilities and the preventive measures needed to avoid cross-contamination to guarantee a safe meal for the customer.

### **Methods and results**

Finally, this section focuses on operationalisation of the questionnaire, which was disseminated in the hotels in the chosen Member States. It discusses the results of the questionnaire and examines the answers. The findings provide further evidence of the

impact of Regulation 1169/2011 Article 44 Paragraph 1 on the competitiveness of hotels from a global perspective and , therefore, it's impact on the competitiveness of European tourism. This section is divided into three chapters.

Chapter 8, the questionnaire and operationalisation, examines the measures used to design the statements included in the questionnaire and reviews the results of the questionnaire.

Chapter 9, discusses integration of the measures implemented by the Member States, and analyses the results of the questionnaire. The analysis was made to gather an understanding of the impact of allergen labelling on hotel- and tourism competitiveness.

Chapter 10, the conclusion, gives an overview of the findings of this research, with a recommendation in the form of a policy option, in the case that the Regulation has a negative impact on the industry.

## 2 Hospitality regulations.

This Chapter provides background information on the regulations that affect the hospitality industry, especially hotels. It includes EU legislations that affect hotels from tourism-, nutrition- and food perspectives. And also gives an overview of the private standards that hotels use, with specific regard to the role of food within them.

There is no general preference for standardization or standardized regulations within the hospitality industry. This is emphasised by hotels in particular, because many successfully operate as multinational chains that include hotels in different countries with different regulations, customs and hospitality procedures. Hotel chain companies can integrate a hotel in any place in the world in an easy manner. Moreover, this preferred situation has an impact on travellers' experience.

### 2.1 EU legislation

The EU legislation that influences the hospitality industry was derived from the HOTREC's website. This website contains detailed, relevant information on EU legislation especially for the hospitality industry under its policy section. The policy section was created to guide the industry and local associations on EU legislation and has an impact on implementation of it. HOTREC is an umbrella organisation that represents all of the hospitality associations in EU Member States in Brussels (HOTREC 2011k). Therefore, it is one of the stakeholders that can influence preparatory measures in implementation of the legislation. The legislation can be categorised into two<sup>12</sup> parts: tourism and food and health. The key focus of this section is to emphasise the area of legislation with most impact in the hospitality industry and explore exceptions to legislation that are relevant to the hospitality industry.

#### **Tourism**

Tourism legislation has been an important focus in the Europe, since establishment of the EU. The European Commission introduced a communication agenda entitled: "You the world's number one tourist destination – a new political framework for tourism in Europe.", which defines four pillars of focus (HOTREC 2011l):

- Improving the tourism sector's competitiveness.
- Promoting the sustainable development of European Union tourism.

---

<sup>12</sup> For further regulations that also influence the hotel industry see ANNEX 1.

- Enhancing the image of sustainability and quality in destinations in Europe.
- Maximising EU policies and financial instruments in for more development in tourism.

A key legislation in EU tourism is the communication agenda<sup>13</sup> for sustainability and competitiveness of European tourism. The agenda provides a framework for tourism stakeholders and Member States to further study and accept responsibility for their sustainable footprints. One of the key points in the agenda is the impact of food in hotels, particularly regarding waste reduction. Another point is that tourism establishments must not harm the surrounding environment around the property by producing waste (HOTREC 2011a).

Other provisions for tourism in the legislative system include Regulation EU 2011/692<sup>14</sup> - a statistical tool established by the European Commission. The Regulation will help the tourism or hospitality industries gather statistical data for further development (HOTREC 2011f). The main features of this statistical regulation account for the classes of hotels and number of short trips and destinations.

### **Food and health**

Food and health comprise one of the most important sectors in the hospitality industry as they provide important services. With regard to health, the main foci are nutrition-, alcohol- and smoking provisions. With regard to food legislation, the most important elements of hotels are food hygiene, safety and labelling. As this research explored the aspect of labelling, the focus of this section is on hygiene and safety (HOTREC 2011h).

### **Health**

With regard to health, the most important key measures include alcohol safety, smoking bans and nutrition in regards to obesity. The main focus of nutrition concerns the increase in incidence of obesity in Europe. The European Commission has introduced a platform for stakeholders on a European level. The aim is to provide a platform that stakeholders can commit to and act within to improve the public health levels in Europe (HOTREC 2012a). In order to strengthen the platform, the Commission have issued a white paper that has been designed to serve as a plan to reduce obesity in Europe.

<sup>13</sup> <http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:52010DC0352>.

<sup>14</sup> Regulation (EU) no 692/2011 of the European Parliament and of the Council of 6 July 2011 concerning European statistics on tourism and repealing Council Directive 95/57/EC.

Part of this plan is the enforcement of nutritional labelling in food-serving establishments, with the hospitality industry as the main target (HOTREC 2012c). This was established by the Food Labelling Act of Article 44 Paragraph 2<sup>15</sup> of Regulation 1169/2011.

## Food

Food is one of the most important elements in the hospitality sector, as one of the main products of this industry. Thus, HOTREC forms part of the EU Food Policy Advisory Group<sup>16</sup>, which gives the hospitality industry a voice in the European Commission on legislative matters in food. For that reason, HOTREC participated in the plenary meeting for food operator stakeholders in drafting Regulation 1169/2011.

The most important sector in the food legislation in hospitality is the EU General Food Law GFL 178/2002. The GFL is considered as the main legislation for industries producing and selling food in Europe. However, it defines restaurants on the same basis as retail industries<sup>17</sup> and does not recognise differences that characterise the complexity of the hospitality industry (FSAI 2015).

Another key provision in food is Regulation 852/2004<sup>18</sup>, which specifies the mandatory hygiene requirements for all food operators that provide foods. It provides the mandatory requirements on all aspects of hygiene with regard to establishment design, kitchen layouts, storage etc. Furthermore, it states that all food operators, including the hospitality industry, must have a food safety management plan that is based on the HACCP<sup>19</sup> system. Moreover, it mandates that the management is responsible for food safety in the establishment and ensuring proper hygiene to avoid health risks. This is a very important notion, as hygiene is of particular importance in the implementation of allergen labelling, as proper hygiene will prevent cross-contamination in the kitchen. Therefore, adherence to the hygiene regulation will prevent any allergen reactions to the consumer. However, the provisions of the hygiene regulation do not include any exceptions or provide special guidance specific to the hospitality industry.

---

<sup>15</sup> The paragraph established that all the labelling requirements in article 9 and 10 are optional, including nutritional labelling, see section 4.3.

<sup>16</sup> The food policy advisory group is a group that represents the stakeholders in the food chain, which formulates and shares opinion in regard to regulations for the food sector.

<sup>17</sup> For further information, see section 1.2.

<sup>18</sup> Regulation (EC) No 852/2004 of the European Parliament and of the Council of 29 April 2004 on the hygiene of foodstuffs.

<sup>19</sup> Hazard Analysis and Critical Control Points, are a systematic approach in managing the critical steps in food production to guarantee a safer product at the end of production (Meulen 2011).

## 2.2 Private standards

Application of private standards, particularly certification, is carried out by enterprises for marketing and standardisation of internal procedures in order to guarantee quality. The hospitality industry use private standards as a marketing tool to reassure several types of consumers. However, the hotel industry does not use the private standards for standardization, as it is a leisure service. This is of particular importance in the case of four- and five star hotels, as standardisation is not required to achieve quality because the key objective of these types of hotel is to provide high quality services.

Taking into account the private standards that are used by the hotel industry in Europe, they can be divided into two categories: European private standards, such as the ECO label and International private standards, like green key.

### **ECO label**

The EU has begun to place increasing emphasis on improving the sustainability of all industries in Europe. A commitment was made by the European Commission in 2009 (2009/578/EC)<sup>20</sup>, which established the ECO label. The main objective of the ECO label is to ensure sustainability of tourist accommodation by applying criteria that reduce the environmental footprint of hotel establishments (HOTREC 2011d).

With regard to food, the list of criteria<sup>21</sup> classifies food production as optional criteria. One of the criteria is the use of locally-produced food produced in season. Another criterion is the use of organic foods, with of at least two dishes based on organic ingredients included in the establishment's menu (HOTREC 2011d).

### **Green key**

Green key is an international, voluntary, eco-friendly label that aims to raise awareness amongst hotel management and staff on their environmental footprint. It shares most of the same criteria as the ECO label. However, qualification in regard to the criteria for food requires the use of organic and locally-produced foods. In addition, vegetarian dishes must be provided by establishments and tap water instead of bottled water must be provided for business conferences (Key 2012).

---

<sup>20</sup> Commission Decision (2009/578/EC) of 9 July 2009 establishing the ecological criteria for the award of the Community eco-label for tourist accommodation service.

<sup>21</sup> The ECO label is awarded on the basis of points, in which an establishment must achieve a certain amount of points.

### 2.3 Conclusion

EU regulations and private standards indicate the importance of the role of food in the hotel industry. The main focus of EU regulations with regard to tourism is in minimising waste, which is frequently associated with food. Food hygiene requirements are also very important and are used by the hotel industry to control cross-contamination in the kitchen. Private standards indicate the importance of local ingredients, which is in line with the European hospitality industry's characteristic use of fresh ingredients.

## 3 Hospitality structure

This Chapter provides background information on how European hotels are structured and classified and how food plays a role in this structure and classification. The study focused on four- and five stars hotels, in particular.

Before beginning with the structure of the hospitality industry, an understanding of the diversity of the hospitality industry is needed. The hospitality industry comprises of a group of sub industries that provide services and goods to consumers. It consists of different industries with their own entities, for example, cruise ships, airlines, large event conferences and resorts. Thus, the hospitality industry is quite diverse with large sub industries as its own entities (Enz 2015b).

### 3.1 Hotel organisational structure

#### 3.1.1 General organisational structure

The organisational structure of hotels is complex with institutions divided into several separate operational areas (Houghton and Tremblay 1994). In the case of four- and five star hotels, organisational structure is generally divided into nine departments: front desk; housekeeping engineering; telecommunication; human resources; security; food and beverage; marketing and sales; and control. Each of these departments have subdivisions in concordance with employment positional structure. In addition, each department has its own manager and vice manager, who manage the department's staff (Bosselman 2007).

The food and beverage department is discussed further in the next section. However, other departments deal with the food and beverages within the hotel. Marketing and sales deal with banquets and conference catering. The control department manages the purchases for the food and also the storage units (Bosselman 2007). Therefore, as mentioned previously, food plays an important role in hotel organisational structure.

#### 3.1.2 Food and beverage structure

The main goal of the food and beverage department in the hotel industry is to meet the desires of the hotel guests, with emphasis on quality and service. In this subdivision, the focus is on the organisational structure of the food and beverage department in hotels, and how it plays a role in the hotel management and sales.

In the past, restaurants in hotels were managed as a secondary function. The hotel industry considered it a 'necessary evil' to provide guests with food during their stay. It was only more recently that hotels started to strategise their food and beverage operations to generate profits (Strate and Rappole 2007).

From an organisational structure perspective<sup>22</sup>, the food and beverage department is run by people in four main positions (e.g. Executive Chef, Restaurant Manager, Beverage Manager and Executive Stearate). Under each of the main positions are staff members that include chefs, kitchen staff, bartenders and service staff. According to the hotel size and property type, the food outlets<sup>23</sup> are divided into four elements: restaurants, lounges, banquet facilities and room service. The beverages section is also divided into four categories: the bar, service bar, portable bar and in-room bar or minibar (Siguaw and Enz 2007).

Profits generated from the food and beverage department are considered the second highest, after lodging, and are important in marketing. Therefore, it is a crucial department, as the hotel use it to market its services outside the hotel itself. Consequently, banquet- and catering services are an advantage for full-service hotels that can generate profits during off-season<sup>24</sup> (Siguaw and Enz 2007).

From a strategic point of view, hotels use food and food services to give the hotel a competitive advantage above other local hotels. In competition with other local competitors, the quality and service atmosphere of the food services can be a major advantage. Another strategy that hotel businesses use involves celebrity chefs, which can create competitive advantage above other local hotels, specifically in marketing (Strate and Rappole 2007). An additional advantage is the use of fresh foods bought at the daily market, as it gives customers an experience of local culture. Another strategic opportunity to increase sales of food, is the change of menu during the year. The change of the menu can be seasonal or according to a theme. The strategy of changing the menu from time to time is to keep the non-resident customers interested in dining in the hotel facilities (Strate and Rappole 2007).

Therefore, as previously mentioned, the food and beverage department plays an important role in the hotels strategy to compete with local hotels. This competitive advantage depends upon quality of the food and variety. Variety adds to this competitiveness. Furthermore,

---

<sup>22</sup> Other than the Department Manager.

<sup>23</sup> Food outlets are kitchens that are serving the food or the point from which food is sent out from.

<sup>24</sup> Low guest demand on hotels.

food services (i.e. quality, variety and service of the food) and the hotel can be a 'tiebreaker' in competition with local hotels.

### 3.2 Classification structure

The classification structure of the hospitality industry in specific hotels is very complex, it depends on two aspects (Houghton and Tremblay 1994): service-orientation of the hotel and the number of stars<sup>25</sup> a hotel has. Although, both are interlinked, they are still used as separate classification structures.

#### 3.2.1 Service-orientation

Regarding service-orientation of the hotel, classification can be divided into two types: the property type and the service style. A hotel property is categorised by the style and location of the building. The categories of property styles include: boutiques, apartment, seaside or resort, historic, spa, airport, midmarket, budget and independent hotels. Therefore, the hotel property type strategizes<sup>26</sup> its competitiveness with regard to infrastructure and service type. Furthermore, the property type structurally targets the consumers that the hotels want to attract. Consequently, the property type determines the size of the food and beverage management department. For example, resort hotels house a high number of guests in their facilities, and require larger kitchens (Bosselman 2007).

Regarding service classification, hotel services can be divided into conferences, luxury, comfort and budget (Harper 2008). The service style determines the quality of the services offered by hotels. Hotels that offer conference services are marketed to companies and business customers. Hotels that offer luxury services must consider the quality and atmosphere that the hotel can deliver to guests. This is reflected in the marketing strategy and consumer target selected. Consequently, the service type, determines the size of the kitchen and the amount of staff. For example, in the conferences service style the hotel would require a large centralised outlet for food preparation. In summary, any changes in the kitchen or food service can influence the quality of the hotel (Siguaw and Enz 2007).

---

<sup>25</sup> The service orientation can be classified by the amount of stars a hotel has in regard to quality see Annex 1.

<sup>26</sup> Conference hotels in their marketing strategy do not aim for single guests, but aim to large conference groups.

### 3.3 Franchise

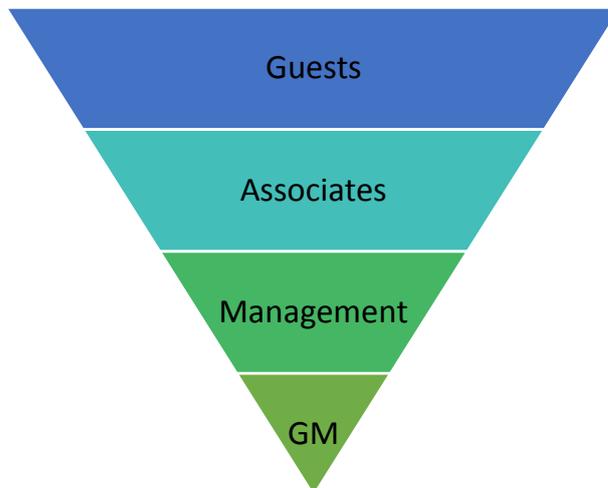
Franchise is an important tool to achieve competitiveness. Being part of a brand can be a marketing tool that enables the hotel to communicate about the quality of its services to the public (Strate and Rappole 2007). The franchise strategy also includes the food and beverage department. Many hotels, especially four star hotels, leverage food franchises to manage their food and beverage department. From a financial perspective, this can reduce hotel expenditure and costs. Furthermore, if the franchise is well known, it can create an operational advantage above other competitive four star hotels (Strate and Rappole 2007). Therefore, some hotels use franchise as a competitive strategy against other local hotels (Enz 2015a).

### 3.4 Upside-down pyramid

When reviewing the organisational structure of the hotel, emphasis must be placed on the role of consumers in that organisation. Most hotels, therefore, use an organisational structure that represents an upside-down organisational pyramid. The upside-down pyramid highlights the important role of consumers in management of the hotel (Nebel 2007). Consumers are addressed as customers, because the industry's organisation and service revolve around them.

The customer forms the base of the upside-down pyramid, making it the most important individual in the organisation. The General Manager is at the top of the upside-down pyramid, making it the least important individual (see Figure 2). The pyramid emphasises that all of the divisions and sectors in the organisation, along with their managers, serve the customer (Nebel 2007), which makes the customer the 'main manager' in a certain sense, as the service of the hotel is tailored to satisfy consumers' needs. This is a unique situation in the service field, where the customer is part of the decision-making process (Houghton and Tremblay 1994). This emphasises the role of customer satisfaction, which in this case, is provision of satisfactory allergen information.

Figure 2 Reverse organisational pyramid (Nebel 2007).



### 3.5 Customer satisfaction

As previously mentioned, the structure of the hotel organisation generally revolves around the customer. Customer satisfaction is, therefore, a very important target for hotels. Customer satisfaction is achieved by a special treatment from the personnel of the organisation that the customer visits. Many hotels credit or reward staff for treating guests and attending to their needs in a very friendly manner. The aim of this target is to guarantee customer satisfaction and a return visit to the establishment (Nebel 2007). Many hotels aim to guarantee the same high standards of treatment for their more loyal returning customers. In ensuring ongoing customer satisfaction, guests' food preferences and needs play an important role. The preferences include specific foods that satisfy religious beliefs, allergens and also favourite foods that might be prepared on specific customer request. Waiters who serve food in the hotels must engage in polite dialogue with the customer (Nebel 2007). This is very important, as waiters that give extra attention to guests will be well-suited to serving guests with food allergies. Thus, ensuring allergen information is shared between customer and chef to guarantee customer safety and satisfaction (HOTREC 2010).

### 3.4 Type of customers

Customer type is very important in the hospitality industry, as the service-orientation towards them is very different. Customer types are divided into two categories: guests that stay in the hotel and business customers that are served outside<sup>27</sup> the hotel property (Siguaw and Enz 2007).

The business customer is important, as the service includes catering businesses or catering services, whether for a social events or big events, such as conferences. This type of customer generates major profits for hotels major after accommodation. Therefore, an important a strategic opportunity is to orient hotel services towards this type of customers. In this regard, it can define the type of hotel and the type of services that they offer (Siguaw and Enz 2007).

### 3.5 Conclusion

The hospitality structure revolves around the customer and customer satisfaction is an important goal in this type of business. Furthermore, food is an important factor in achieving customer satisfaction. Therefore, food plays a significant role in the structure and classification of the hotel industry. Also, food play a major role through local cuisine, as it adds to the hotel competitive advantage. Consequently, the industry is easily affected by change in or implementation of food regulations, especially Regulation EU 1169/2011, as it exerts a direct effect through Article 44 Paragraph 1.

## 4 Food information regulation

This Chapter focuses on the provisions of Regulation 1169/2011, and how they were established. It also explores the discussion that was associated with establishing the regulation, and the essential elements that affect the hospitality industry, as well as other measures implemented by the food industry for labelling allergens, such as 'may contain' statements. Consequently, the Chapter provides a complete overview of the history and content of Regulation EU 1169/2011 regarding the hospitality industry.

### 4.1 History of allergen labelling

Allergen labelling was not initially considered by regulators, as their initial priority was to guarantee that consumers were adequately informed on the nature and quality of food. At the time, the main food content rule was that if an ingredient amounted to 25% of the net weight of a food product it must be declared on packaging of the product; anything less was not essential to mention (Mills et al. 2004). However, this created problems for consumers with specific food allergies, as ingredients that they may be allergic to that did not amount to 25% of the net weight product could be omitted from the product information.

In 1993, the suggestion to change the labelling criteria from 25% to 5% of net weight was proposed to the Codex Alimentarius Commission Committee on Food Labelling by Nordic countries. In addition, they suggested adding the most common worldwide allergens to a mandatory list, even if they comprised less than 5% of the net weight of food products (Mills et al. 2004). These measures were adopted by the Codex Alimentarius in the General Standard for Labelling Pre-Packaged Foods.

The Codex Standard states that specific foods that can cause hypersensitivity must always be declared (Section 4.2.1.4). These eight foods include: cereals, crustaceans, eggs, fish, peanuts and soybeans, milk, tree nuts and sulphite above 10 mg/kg. The declaration includes by-products derived from the listed foods, even if they are produced using biotechnology (Section 4.2.2) (FAO 1985).

The European Commission issued a White Paper on Food Safety in 2000, which enhanced the focus on allergen labelling further (EC 2000). It suggested amends to Directive

79/112/EEC<sup>28</sup> on the labelling, presentation and advertising of foodstuffs (EC 2000). Consequently, the EU adopted these amendments in the new Food Labelling Directive 2000/13/EC. This Directive included a mandatory list of food substances that can cause the most severe allergic reactions and abolished the '25% rule'.

#### 4.1.1 History of EU 1169/2011

The main purpose of this Regulation was to provide a horizontal law on food information and guarantee accurate food information for consumers with food allergies<sup>29</sup>. In the previous Food Labelling Directive 2000/13/EC, information on allergens in pre-packed food products was required to be listed within the ingredients. However, the Directive was not obligatory for non-pre-packed food products, with the decision to make this mandatory given to individual EU Member States. The Directive was established on that basis, because the hospitality industry did not at that time influence the internal market of Europe. The final consumer bought non-pre-packed food products within the Member States providing them. However, this situation changed because of the increased amount of consumers requesting more regulation on allergen information in non-pre-packed foods. Moreover, almost 70% of the allergen or intolerances cases<sup>30</sup> originate in non-pre-packed food industries (Commission 1992).

Prior to the final draft of EU 1169/2011, several meetings were conducted between food operators, stakeholders<sup>31</sup> and European Commission legislators. Stakeholders met with the legislators in 2006 and in 2008. The hospitality industry was represented by HOTREC.

The first meeting in 2006 declared the original script of the Regulation that was proposed by European Parliament. HOTREC was notified that the regulation would include mandatory allergen labelling for mass caterers only. At the first meeting, HOTREC urged the European Commission to maintain the legislation regarding to the hospitality industry, as in the previous Directives 2000/13/EC (HOTREC 2006).

In the second stakeholder's meeting, which took place in 2008, the European Commission changed the regulation to mandate that all the sections in Article 9<sup>32</sup> were made obligatory

---

<sup>28</sup> Council Directive 79/112/EEC of 18 December 1978 on the approximation of the laws of the Member States relating to the labelling, presentation and advertising of foodstuffs for sale to the ultimate consumer.

<sup>29</sup> See section 1.1.4.

<sup>30</sup> See section 1.1.1.

<sup>31</sup> This is made to take the industries perspective as they are the most affected.

<sup>32</sup> This means that information on the content, weight and place of origin of the ingredients must be listed.

for the hospitality industry. Also, it mandated that the information must be easily accessible to the final consumer. With regard to how the information was specified, the decision on implementation was given to the EU Member States. This angered the hospitality industry, as represented by HOTREC. They argued that consumers did not often request this information, and if it was required, it would freely be provided on request (HOTREC 2008). Furthermore, HOTREC argued that the responsibility for allergies should lie with consumers to notify the waiters at individual establishments. At the end of the meeting, HOTREC asked the European Commission to reconsider their decision, with the basis of their claim as that the industry did not influence the internal market of Europe (HOTREC 2008).

After the second stakeholder meeting, HOTREC made a statement in the European Tourism Forum that said the proposal of the Regulation was clearly made for pre-packed foods and not for non-pre-packed foods (HOTREC 2013). Additionally, HOTREC sent an official letter to the Spanish<sup>33</sup> representative in the European Commission that requested reconsideration of the mandatory information. They argued that it was not feasible for the industry to implement this section of the legislation, which was mentioned in the assessment report attached with the Regulation draft (HOTREC 2010). Also, they argued that it would provide consumers with a false impression that they are completely safe and protected from food allergies. This notion is critical, as a possibility of allergen cross-contamination would still exist.

Therefore, in 2011, the Regulation was adapted including more feasible mandatory information criteria, in which the industry must list allergen information. Also, it enabled Member States to exercise decision on this aspect..

#### 4.1.2 HOTREC

As mentioned before (Section 4.1.1), the original draft of the Regulation mandated that the provisions in Articles 9 and 10 would be mandatory for the hospitality industry (HOTREC 2008). Therefore, HOTREC was relieved with the final draft of the Regulation (HOTREC 2014b). However, the association is still concerned on the matter of the implementation of Article 44, which is left to the EU Member States' local authorities to decide.

HOTREC still advise the European Commission and the EU Member States to implement a standardised method, in which the information would be provided in an oral dialogue, because this method would be feasible for the industry. The previous advice was given for

---

<sup>33</sup> At that time leader of Spanish Council Presidency in EU.

the reason that the association foresees that the Regulation could damage to food quality and cuisine in the future (HOTREC 2014b).

#### 4.2 Directive 2000/13/EC

The European Directive 2000/13/EC<sup>34</sup> was the first food information law established for the whole EU. Its original purpose<sup>35</sup> was to further guarantee consumer protection from unsafe food by giving correct information on food sold in the market. The Directive identifies a mandatory list of components that must be declared on food product labels in Article 3. The declared components include: net quantity; date of minimum durability; storage conditions; instructions for use; place of origin; and the name of the business. Also, the ingredients of beverages containing more than 1.2% volume of alcohol must be declared on the label (2000/13/EC). The list includes pre-packaged foods.

In 2003, the Labelling Directive 2000/13/EC was revised to ensure that allergenic substances causing adverse effects in human health must be mentioned on the label. It is specified in Article 6 as ingredients in Annex 11 should be listed in the list of ingredients (2003/89/EC)<sup>36</sup>. The Annex and the Directive include 14 allergens that are currently mandatory to mention on the label by the Food Information Legislation 1169/2011.

Furthermore, the Directive emphasises hygiene to guarantee the elimination of cross-contamination of allergenic substances used in other manufacturing lines. Manufacturing is regarded non-hygienic, because of allergen cross-contamination that can be present in the final product. For that reason manufacturers use 'may contain' statements to lift legal liability in the case of an allergic reaction to the final consumer (Meulen 2011).

Regarding the hospitality industry, the provision of non-pre-packed foods in the market is regulated by Article 14 (2000/13/EC). The Article requires food sold or packaged to the ultimate consumer in the establishment to be labelled in relation with the provisions of Article 3 and Article 4 Paragraph 2. This is completed with local authorisation of the Member State. However, it also specifies in Article 14 Paragraph 2 that the Member States are not necessarily obliged to follow the article.

---

<sup>34</sup> In this section, the focus will be on the impact of the Directive on the hospitality industry during its implemented time.

<sup>35</sup> See sections 1.1.3 and 1.1.4.

<sup>36</sup> Directive 2003/89/EC of the European Parliament and of the Council of 10 November 2003 amending Directive 2000/13/EC as regards indication of the ingredients present in foodstuffs.

According to HOTREC, the reason for not specifying the labelling requirement to the hospitality industry is that it does not influence the internal market of Europe, because the food is sold to the consumer in the Member States themselves (HOTREC 2006).

### 4.3 Regulation 1169/2011

Regulation 1169/2011 EU merges Directive 2000/13/EC, which is intended for the labelling of foodstuffs, with Directive 90/496/EEC on nutritional labelling. The Directives were combined to improve the food information, with relation to the presentation and advertising of foodstuffs, as well as nutritional- and allergen labelling (Dongo 2011). The Regulation applies to all food business operators in all stages of the food chain. Thus, it also applies to the hospitality industry. Furthermore, the requirements in the regulation emphasise that the presentation of the foodstuffs and the commercial publicity of food must not mislead the consumer (Article 7 Paragraph 1). It also emphasises that food business operators are responsible for providing accurate information on food being produced in and sold from their establishments.

The Regulation states mandatory information that must be declared on labels that are additional to the listed mandatory information in 2000/13/EC<sup>37</sup>. The additional information includes allergenic substances, nutritional declaration and place of origin, with modalities, as described in Article 9 Paragraph 1. Furthermore, the new regulation adds specific requirements on the name of the food, which includes the physical condition and the processing it has been exposed to (Annex VI, Part A, Point 1).

With regards to labelling legibility, the Regulation focuses on how mandatory information is indicated on labels (Article 12 Paragraph 1-2). Information on allergens must be printed in bold writing, so that it can be very easily distinguished within the ingredients list (Article 21 Paragraph 1 Section b). Additionally, the mandatory information must be declared in a language that consumers will understand (Article 15 Paragraph 1). In this case, the language of the EU Member State that the foods are sold in, and if necessary, several languages may be used (Article 15 Paragraph 2).

With regard to voluntary information that is not mandatory according to the list in Article 10 Paragraph 1, specific provisions are made to ensure that it will not mislead the consumer. If

---

<sup>37</sup> This includes the net quantity, date of minimum durability, storage conditions, instruction of use, place of origin, the name of the business and beverages that contain more 1.2% alcohol.

the voluntary information promotes health, the claim must be based on scientific data if appropriate (Article 10 Paragraph 2 (EU 1169/2011)).

For the hospitality industry, Article 44 Paragraph 1<sup>38</sup> is still the most relevant with regard to the liability instructions that are mentioned in Article 8. Article 8 mandates the responsibility to all food operators, including the hospitality industry, in the provision of accurate information to the final consumer. Article 13 Paragraph 1 mandates that regardless of the national measures implemented, allergen information must be placed in a visible place, so that consumers can easily see the information. Furthermore, in Article 44 Paragraph 2 an option is provided to EU Member States on whether to force the national industry to follow the mandatory information 39 listed in Articles 9 and 10 (EU1169/2011). However, this was not included in this research, as the focus is on the national measures that are implemented in accordance with Article 44 Section 2.

## 4.4 Other key measures

### 4.4.1 Oral information

The liability of oral information is an important measure in the case of allergen labelling, which was the only method to supply the consumer with accurate allergen information. Oral information is legally binding in the EU. With regard to food allergens, this notion is clearly mentioned in Article 8 of Regulation 1169/2011, which specifies the responsibilities of food business. In Article 8, the business operators are responsible for any information provided for their food, even commercial advertisement and indication that they provide on their food.

Consequently, this is important for this research, as further emphasis will be given on the impact of different methods of implementation of the Regulation by Member States.

### 4.4.2 May contain

Labelling provisions for allergens in Regulation 1169/2011 does not include 'may contain' statements. 'May contain' statements were previously established as a voluntary measure by some local authorities (BRC 2013, Jones 2014). However, this is not the case in Regulation 1169/2011. 'May contain' statements are not legally binding and food operators must

---

<sup>38</sup> Includes 14 allergens that must be labelled see Table 1 in ANNEX 4.

<sup>39</sup> Food labelling information other than allergens and intolerances.

declare their lack of allergen control (FSAI 2014). These statements are usually used by the food businesses to avoid legal liability in the chance of allergic reactions to their products. This is mostly, because of non-hygienic compliance and disregard of allergen traces from other process lines, which can unintentionally end up in final products (Meulen 2011).

Therefore, to avoid legal liability from allergen traces, the hospitality industry, led by HOTREC is advised to provide oral information. This gives space for dialogue if consumers should develop a reaction. In cases of severe allergies, the dialogue can be effective<sup>40</sup> (HOTREC 2014b). It also gives the hospitality industry the freedom of from legal liability through the organised use of such statements. The consumer, however, may not be aware that the statement is not legally-binding.

#### 4.4.3 Threshold

Part of allergen control and measurement of the allergic reaction or intolerances is scientifically-associated with threshold. However, in Regulation 1169/2011 the threshold or limitations for the allergens on the allergenic substances is not mentioned (except for sulphur as it must be declared in amounts above 10 mg/kg or 10 mg/ litre). Therefore, the threshold can be set as a voluntary measure for local authorities in EU Member States, as in the case of Ireland, who requested information on the threshold of the allergens from EFSA (EFSA and Panel 2014). Furthermore, the threshold cannot be implemented in the hospitality industry as it is not a standardized production method for food. Consequently, it is not necessary for threshold to be implemented in the industry (HOTREC 2013).

#### 4.5 Conclusion

This Chapter concludes the history of regulation of allergen labelling, especially development of EU 1169/2011. Furthermore, it gives legal key measures that are used by the food industry to deal with the allergen content, such as 'may contain' statements that are used by the food industry to avoid public and civil liabilities, but now abolished by the current Regulation. Moreover, it emphasises the importance of the liability of oral information, which is essential for the implementation of Article 44, as some EU Member States rely on oral declaration for specifying allergen content.

---

<sup>40</sup> As the consumer indicates the severity of his allergies an extra caution is given from the food establishment, in this case hotels.

## 5 Methods implemented in EU Member States

In this Chapter, the local methods implemented by EU Member States are examined. The examination includes each countries official decrees for the implantation of Article 44 Paragraph 1, and the dates that they were issued. Similarly, an analysis was performed on the probable impact on hotels and accuracy of the allergen information of each method implemented.,

### 5.1 France

On 8<sup>th</sup> September 2013, Carole DELGA announced the consumer information document in regard to food allergies. The document included provisions on how food allergen information should be presented in hotels and restaurants, in which the food is served in the establishment itself. The document also established provisions for pre-packaged products. It also declares that a draft decree is under development by the National Consumer Council (NCC). The document also insists that until the decree is announced, a written record must be made of all of the potential allergens in food products and the allergen content written in a menu, from which restaurant staff who serve food can provide the allergen information to the consumer. Furthermore, an indication must be set in the menu that this information is available, which can be a sentence, such as “in case of food allergies, please contact the waiter” (Delga 2014). These provisions are being currently used until the official decree is announced, furthermore some hotels have already implemented this measure in their restaurants.

On 19<sup>th</sup> April 2013, an official decree was announced in regard to allergen information for non-pre-packaged foods. The decree states that allergen information must be available in a written form. Furthermore, it must be handed to the consumers if they request this written information. Moreover, it emphasises that the information must be set in places, to which the public is admitted. This implies that there must be a written indication that this information exists. In addition, the decree also emphasises that the allergens must be declared, even if this is in an unmodified way in the final dish (JORF 2015).

## 5.2 Ireland

The provisions that declare allergen information were established in December 2014, by the legislation S.I.No. 489 of 2014. The provisions establish two methods to declare the allergen content. The first is to prepare a central folder specifying with all allergen context. The second is to list all of the allergen content in all of the menus in the establishment (FSAI 2014). When using the second option, a recommendation is given by the Irish Restaurant Association, which emphasises that a symbol or a short letter for each of the 14 allergens is provided to consumers next to details of the dishes on the menu (RAI 2015).

Also, the Food Standard Agency of Ireland drafted a manual for hospitality establishments to use for allergen control in their kitchens. The manual indicates proper hygienic methods and emphasis on how to label allergen content. In addition, the Agency declares that within Regulation 1169/2011, the use of 'may contain' allergens is not allowed. In the case that the establishment cannot provide correct or accurate allergen information, the consumer must be made aware of this situation prior to buying the food (FSAI 2014).

## 5.3 Italy

The Italian national authorities applied Legislative Decree 109, which was introduced on 27<sup>th</sup> January 1992, by amending the articles to the provisions of Regulation 1169/2011. Moreover, it added new articles in regards to allergen declaration and non-pre-packed food establishment. This amended version of the legislation has taken time to implement, even after enforcement of Regulation 1169/2011, because a detailed review was required. The review analysed what items will be replaced or amended and which will be completely new in the Legislative Decree of 109/1992 (Pira 2014).

On 6<sup>th</sup> February 2015, the Ministry of Health established a circular with provisions on how the allergen information should be displayed. The Ministry made the choice open for food operators to select the best method that suits them. The method suggested by the Ministry is indication on the menu itself or an indication on the menu to contact the waiter regarding the food allergies. Also, it can be assigned on the premises of the establishment indicating the presence of a special menu with all of the allergen content. However, the ministry emphasises that there must be a recorded list of allergen content available for inspectors and consumers if requested (Amoruso 2015).

## 5.4 Spain

In Spain, Royal Decree 126/2015 was introduced on 27th February 2015 and officially printed in the Governmental Gazette on 4<sup>th</sup> March 2015. Before the decree came into existence, a website for hotel allergen labelling was developed in cooperation with FEHR - the Spanish Federation of Hotels and CEHAT - the Spanish Confederation of Hotels and Tourist Emendation. The website includes specific provisions on how to provide allergen information, including medical methods in cases of allergic reactions or intolerances and proper methods of dealing with allergens in the kitchen. In the website, it was recommended that until an official decree was announced, the correct method for indicating allergens would be to record information in a separate, central folder that could be accessed by the consumer, if information is requested in a written form, or the information could be given orally by restaurant staff (Nutricion 2014).

However, when the Royal Decree was announced, the provisions included new ones that mandated all non-pre-packed food operators to provide a separate menu. The separate menu must include all of the dishes served in the establishments with all of the allergen content. Furthermore, an emphasis was made on providing information in written format that must be made available to inspection authorities and consumers (BOE 2015).

## 5.5 Positivity and negativities of implemented measures

There are four major methods to inform consumers of the allergen content that are applied by the EU Member States. The Member States chosen for this research have selected complex methods. For example, Italy, have based their policy on three possible methods, with the eventual selection chosen by the individual hotel itself.

### 5.5.1 List of ingredients on the menu

This method requires all hotel restaurants to list the allergen content within their menu. This method is the harshest according to HOTREC, as it does not recognise the possibility of allergen traces in the dish. Also, it decreases the practicality of changing the menus from time-to-time, and from season-to-season. Moreover, it is the most costly for hotels to implement, as it requires the change in all of the menus (HOTREC 2011g). Alongside this, it can create a false sense of security for customers, implying that they are completely safe, because of the allergen information provided (HOTREC 2010). Consequent cases of severe allergy can be very dangerous to customers' health.

However, the positive feature of this implementation method is that it gives the customer easy access to the information without the need to request further help. Therefore, the customer doesn't require any special care to get this information, and most importantly, the allergen content cannot easily be missed, as it is in all of the menus.

### 5.5.2 Add a sentence to the menu

This method requires the establishment to add a sentence in all of the menus "in case of food allergies please contact the waiter", with the waiter providing allergen information to the customer on request verbally. This method, is considered the easiest to implement for the hospitality industry, as it is not costly (HOTREC 2011g). In addition, it gives extra emphasis on customer care, which is an important factor in the hotel industry. Also, severe allergies can be directly indicated by the customer to the waiter, which can then be relayed to the kitchen with the result of more precise attention whilst cooking and preparing food (Siguaw and Enz 2007).

However, not having a separated written menu or a written access to the information for the customer can be a downside of this implemented measures. In several cases, customers do ask for this kind of information, which is within their rights.

### 5.5.3 Provide a separated menu

Providing a separated menu with allergen information is also an easy method for the hospitality industry to implement. It is easier for hotels, to change the menu without additional costs. It also gives customers access for to a written document if needed. However, not having a dialogue between the customer and the waiter can be dangerous, as a lost opportunity to assess how allergic the customer is to certain food ingredients (HOTREC 2013).

### 5.5.4 Provide a sign in the restaurant

For this method, the establishment provides a sign in the restaurant, which must be placed in a clearly visible place for all customers. The sign should indicate that written allergen information is available, if requested,. This method has the same benefits and downfalls as providing a separate menu, because in most cases they are implemented together (e.g. Spain use this method with the separate menu but Italy doesn't).

**Table 1 Comparison between implemented methods.**

	Method	Country	Written form	Dialogue form	Attention to sever allergies	Flexible *	Costly *
1	<b>List of ingredients on the menu.</b>	Ireland Italy	✓				✓
2	<b>Add a sentence to the menu.</b>	France Italy		✓	✓	✓	
3	<b>Provide a separated menu.</b>	Ireland Italy Spain	✓			✓	
4	<b>Provide a sign in the restaurant.</b>	Spain		✓	✓	✓	

\* Initial implementation in the first year EU 1169/2011 went into force.

Table 1 provides a comparison between the four implemented methods, in respect to form, attention to information and flexibility. For form, there are two methods implemented: written in menus or a dialogue between the waiter and the customer. Attention to information means the emphasis that the allergen declaration method will give to severely allergic customers (Dongo 2015). Flexibility, in this context, means that the method is easy for the establishment to implement without the burden of higher cost, but providing accurate information to the customer.

## 5.6 Conclusion

This Chapter includes the best methods for implementation of EU 1169/2011, in regards to flexibility in the first year and cost. From this respect, listing the allergens in the menu is the strictest form of implementation, with adding a sentence in the menu the least strict. A chance of giving the customer false information, is present in all four methods, as it is not a standardised activity that have a systematic production process as fast food chains and factories.

## 6 Hotel food liability

This Chapter will focus on the public liability of the information provided by the hotel. The responsibility of the information is mentioned in Article 8 Paragraph 1. Therefore, hotels are publicly liable in the case they do not commit to their responsibility of providing accurate allergic information. Furthermore, EU Member States must implement national measures to guarantee the compliance of establishments that serve food with the Regulation, which is mentioned in EC 178/2002 Article 17 Paragraph 2 Point 3. The national measures guarantee compliance through a system of audit plans and fines.

### 6.1 Audits and fines

Audits support guaranteed compliance of the industry with the regulation, as seen, many establishments have yet to implement this regulation (Spiteri 2015) (FVO 2015). In addition, some EU Member States have developed decrees regarding the implementation of the Regulation at a late stage, almost three months after the original date of introduction of the regulation, which was the 13th of December 2014 (e.g. France made a decree on 19th of April), (Jones 2014, Jareño 2015). Audit inspections are of key importance in assessing and understanding compliance in implementing the Regulation in the hospitality industry.

In the General Food Law EC 178/2002 the public liabilities of the food operators is set by EU Member States in Article 17, as food operators are responsible to assure the safety and accurate information of the food they sale. Therefore, to guarantee fulfilment of those responsibilities, the Member States perform inspections on a periodic basis. This is achieved through a system of planned audits. Sanctions apply if the food operators, in this case, hotels, fail to apply with EU food regulations.

As a result, the provisions regarding responsibility in the GFL differ from one country to another. Thus, looking at the four EU Member States chosen for this research and the variation in their auditing systems, the timing and amount of fine can be clearly seen. Most EU Member States perform audits twice a year. The sanctions for businesses that violate the Regulation vary according to the country. Information about audit plans and sanction amounts was collected from the FVO reports on those countries. FVO is an auditory body, which examines EU Member State compliance with EU legislation in regard to food and the environment.

In France, the inspection times depend mainly on the history of the establishment. If it has a good previous record in inspections, and has a low risk level, it will be inspected once every five years. However, in high-risk businesses, inspections can be carried out as frequently as once or twice a year. Also, the amount of fines depends on the level of violation with the legislation, which is decided on case by case (DG(SANCO) 2010).

Ireland, like France, depends on risk levels and compliance of the company with EU food laws. However, in the general plan for audits in regard to hygiene implementation, the audits occur twice a year (FSAI 2015). If an establishment fails to comply with the regulation, a fine generally not exceeding €5,000 is given, however, in cases of extreme violation, the fine can exceed €250,000 (FSAI 2009).

For Italy, inspection is organised on a regional level, the audits inspection plan is set twice a year: one inspection is announced and the second is unannounced. Failing to comply with the regulations can lead to fines of €2000-€13,000, depending on the specific violations. Moreover, extreme non-compliance can result in withdrawal of the business' license (DG(SANCO) 2014).

In Spain, auditing is arranged by regional governments, which also carry out inspections and administer sanctions, as appropriate. The number of times the audits performed on the food operators depends mainly on the regional governments, which differ from region to another ((SANCO) 2008). However, sanctions are set on a national level, with fines for minor violations from €3000 to €15,000 and major violations €15-€600,000 (BOE 1983).

As previously mentioned, many hospitality establishments have not yet implemented the regulation. This is partly because inspections are only carried out once or twice a year in some EU Member States. Therefore, depending on the date of the last audit (i.e. before 13 December 2014), there is a chance that the next audit will not take place for up to one year later (BOE 2011). In addition, many small businesses are not necessarily aware of the EU regulation that mandates the listing of food allergens. This awareness or implementation may not be put in place until an audit or an inspection is made. Nonetheless, this excludes large establishments, such as four- and five stars hotels, as they host legal divisions within their organisation that follow any new regulations (Nebel 2007). Therefore, in this research, Sections 6 and 7, the results of the questionnaire and the adopted national measures for implementing Article 44 were compared with the compliance of the hotels with the Regulation.

## 6.2 Conclusions

Audits and fines are important methods for EU Member States to implement food allergy regulation. In the implementation of EU1169/2011, the variation of auditing plans within the EU will affect the compliance of hotel industry. Some hotels might use the time procedure of the audits to their advantage, by delaying implementation of the Regulation to save costs.

## 7 Allergen control

This Chapter includes methods of allergen control to prevent cross-contamination. The methods include: kitchen layouts, cross-contamination in the kitchen and preventive measures.

### 7.1 Kitchen facilities

Kitchen facilities in hotels are an important variable in measuring the impact of Article 44 on the hospitality industry. An important regulation that must be considered in this section is EC 852/2004, which specifies requirements on food hygiene. In the Regulation, Chapter 1 lists the general requirements for the food premises that includes considerations for the kitchen.

An important consideration is that all kitchens are designed to prevent microbial cross-contamination. However, allergen cross-contamination is a different matter, because, allergen traces cannot be killed, like bacteria, in food processing stages. Therefore, dealing with the allergens has different requirements to those outlined in the requirements for the food premises in EC 852/2004. Moreover, the Regulation only prioritises on keeping the kitchen clean. With a focus on the layouts and construction design, in respect to adequate maintenance, cleaning and protection against accumulation of dirt. Furthermore, it focuses on the control and zoning of the food premises, according to the temperature and preparation type of food: separation of raw food ingredients from cooked foods, and equipment used to process meats from those used to process vegetables. Therefore, these are general requirements that do not specifically tackle allergen control (EC 852/2004).

Size is an important factor, because the smaller the kitchen size, the more likely cross-contamination will arise. However, looking at the general requirements of the kitchen size there is no specification set by the local authorities of EU Member State. There is no layout specification, the requirements focus on managing to cope with the provisions of Regulation EC 852/2004. An important factor that must be considered is that the site of the kitchen is mostly dependent on the anticipated number of people the establishment expects to serve (Walley 1970).

With regards to specific requirements on the kitchen layout, the four chosen Member States in this research did not have specific requirements other than EC 852/2004. France was the only country that used a sheet that specifies the principles and requirements for food

premises'. However, there are no specific requirements on food allergies, and France relies on kitchen design on the basis of regulations made to eliminate microbial cross-contamination. The document requires a clear separation of cooking zones. The main objective of the sheet is to reduce health hazards that workers are exposed to (INRS 2007).

The same was established for Spain, except with less detailed information than the document from France contained (AESAN 2005). However, the layout is accepted by the local competent authority, depending on the type of business and size (FIBE 2004). For Italy, on the other hand, there are no national requirements, because the requirements are established on a regional level.

For Ireland, the Food Standard Agency determines the layout according to the provisions of regulation EC 852/2004. With regard to size, it is declared case by case dependent on type of the business. Furthermore, the emphasis on kitchen size for Ireland is accepted, once licensing is granted by the authority (FSAI 2015).

For the hotel industry, there are no specific layout regulations for the kitchens. However, large sized hotels occasionally have more than one kitchen. The number of kitchens can differ from one hotel to another, as some hotels have only one main kitchen (Bosselman 2007). Furthermore, the use of one kitchen is a strategy to save on costs. This is very important, as in the case of food allergens it can be easily seen that relying on one kitchen makes it harder to separate food ingredients and minimise cross-contamination (Bosselman 2007).

Managing the allergens in the kitchen is not only done in the premises itself. Hoteliers must focus on three key areas: the supply chain; the kitchen; and the food serving area, with an emphasis on clear communication between all three. Focus on the supply chain depends upon the complexity of the chain. The Institute of hospitality<sup>41</sup> emphasises that businesses that adhere to the HACCP system, will manage to control food allergens in the kitchen, because HACCP system analyses<sup>42</sup> the hazards, which are associated with each specific contaminants. Furthermore, the system establishes protection and preventive measures for the cross-contamination of allergens in the kitchen (Dyson 2014).

---

<sup>41</sup> The Institute of Hospitality is the oldest hospitality Association in the world, established in the 1930s, which is based in England.

<sup>42</sup> The provisions of HACCP are listed in Regulation 825/2004 in article 5.

## 7.2 Cross-contamination

One challenge within the food sector in the hospitality industry is from hidden allergens. Allergens are considered hidden in the case of cross-contamination, meaning traces of allergens that can trigger an allergic reaction or intolerance to severe allergic people (Kumar and Budin 2006, Anibarro, Seoane, and Mugica 2007). As mentioned<sup>43</sup>, it is a very dangerous situation if the food organisation does not provides correct allergen information, and they must reduce cross-contamination probability.

Cross-contamination can occur in the kitchen through food-to-food contact, food to-man contact or food to equipment contact. Therefore, hidden allergens are remnant traces from human preparation of food, its storage or from the equipment, including knives and cutting boards that are used for other food ingredients (Duan, Zhao, and Daeschel 2011). The chance of cross-contamination increases when preparing food in an area, in which a lot of different ingredients are being prepared at the same time (Kirsch et al. 2009).

## 7.3 Preventive measures

The most effective way to prevent cross-contamination is by preparing appropriate preparation areas for the food and scheduling the right order for preparation. An example, cooking meals for consumers with food allergies must be done with equipment that has been just cleaned, and then regular dishes for non-allergenic consumers must be prepared afterwards (Blanchfield 2001). Another example is the separation of the cooking area to regular cooking area and a specialised area for preparing dishes for consumers with food allergies (Kumar and Budin 2006).

Specialised equipment is available in different colours<sup>44</sup> that can help for chefs distinguish between equipment used for regular food preparation and separate ones that are used for preparing food for consumers with food allergies (Webstaurantstore 2015). One of the most important things in cleaning the equipment and the working area is to use a wet cleaning method, as it is the most efficient way to trap the hidden allergenic substance with water. With dry cleaning, the particles will fly all over the working area as dust, therefore, spreading cross-contamination even further (Huggett and Hischenhuber 1998).

---

<sup>43</sup> See section 1.1.1.

<sup>44</sup> Different coloured cutting boards and knives etc.

With the implementation of Regulation 1169/2011, an increase in uptake of allergen training courses<sup>45</sup> specialised for the hospitality industry is expected. These programs are specially suited for the industry to give the workers of those organisations information on the correct way to handle dishes for consumers with food allergies, labelling food allergen information and handing it correctly (Fevorama 2014). It is anticipated that these training programmes will further increase, as the audits inspection on the establishments increase as well.

#### 7.4 Conclusion

Unfortunately, all the kitchen requirements vary depending on the EU Member State and its hygiene regulations. Understanding the probability of cross contamination can help improve the facilities method in dealing with such requests.

---

<sup>45</sup> Courses that give the proper preventive measures and handling of allergens.

## 8 Operationalisation and Results

### 8.1 Operationalisation of the study

In order to answer the research questions five, six and seven, a questionnaire was designed, which was distributed to four- and five stars hotels in the selected research countries. Specifically, the questionnaire was addressed to the hotel's food and beverage managers. The aim was to gather their professional opinion or projections of the impact of Regulation EU 1169/2011 Article 44 on the hotel industry.

The questionnaire was designed with an operationalisation of points that were taken from the literature analysed. Most of points were formulated from HOTREC's position and advice. In addition, points regarding the welfare and number of people with food allergies were derived from the Impact Assessment Report and EAACI (EU, 2008) (EAACI, 2014). Table 2 shows in detail how the questionnaire was operationalised. The Table relates the research questions with the conclusions derived from the literature. The Table also includes variables to assess the points in the statements that were used in the questionnaire.

The questionnaire was designed with Google Drive. A version of it can be found in the ANNEX. The first part of the questionnaire comprised initial questions (e.g. in which country is the hotel located? And how many stars does the hotel have?), which help to categorise the respondents, according to the research study case. The second part of the questionnaire contained the main 12 statements that were operationalised in Table 2. A final section for further comments was included so respondents could provide extra feedback. The responses to the questionnaire were analysed using the SPSS programme.

Table 2 Questionnaire variables and operationalisation.

	Research Question	Point in literature	References	Variables	Statements
5	Will these national measures lead to unsafe food or misleading consumers?	<p>“The risk of cross-contamination is unfortunately unavoidable in restaurants, where chefs have to prepare at the same time, in the same kitchen, with limited working areas, various dishes containing commonly-used ingredients, which may be potential allergens.”</p> <p>“Know that the vast majority of the allergens are resistant to digestion and heat treatment and that a dish or part of a dish may contain several different allergens.”</p>	<p>(HOTREC, 2011)</p> <p>(HOTREC, 2014)</p>	Preventive Minimise usage	Your kitchen staff will manage to minimise allergen cross-contamination.
		<p>“Oral information offers much more safety for people with food allergies than written information.”</p> <p>“All restaurants need to develop a standard and verifiable internal procedure/policy on how to respond to consumer requests about allergen information (this includes training the staff to implement this procedure).”</p>	(HOTREC, 2014)	Listing Information Service	<p>The food and beverage managers will manage to list all allergens on the menu card.</p> <p>The staff serving the dishes are able to provide allergic consumers with detailed allergen information.</p>
		<p>“Contrary to its objective, this Regulation could lead to give consumers the false impression that they can be fully protected from allergens”.</p>	(HOTREC, Feb 2010 )	False impression	The chance of giving a false impression as to allergens

				Amount	will increase due to improper oral allergen information.
5.1	Possible lead to the use of pre-packed foods?	“The implementation of this new obligation will be a real challenge for restaurants, as it will pose a threat to the use of fresh food in restaurants.”	(HOTREC, 2014)	Amount Change of menu	The necessity of allergen labelling will decrease the amount of times a restaurant changes its menu.
		“Staying in business will only be possible by Cutting on the variety of dishes offered. Using pre-packed and pre-labelled ingredients instead of fresh products from the daily market.”	(HOTREC, 2008)	Damage amount	The labelling regulation will push the industry to use more pre-packed foods instead of non-pre-packed ones.
6	What is the effect of the variation of national measures regarding article 44 on the hospitality industry	“At least 1 out of every 20 children has had one or more food allergies.” “Easier for consumers to read the information, especially information that is related to the safety of the product, such as durability date or to health aspects, such as allergens. Avoidance of products that can cause anaphylactic shock is expected to be helped by the quality and legibility of the allergen risk labelling.”	(EAACI, 2014) (EU, 2008)	Range amount	The amount of food allergic customers will increase in restaurants because of the improved allergen labelling.
		“Everyone has to eat! Tourists are no exception. Most tourist behavioural studies show that eating out is the first or second activity for tourists when they are away from home. For this reason, there is increased recognition of the role that food plays in the tourist experience and the potential opportunities for maximising economic and regional development benefits.”	(OECD Studies on Tourism Food and the Tourism Experience, 2012)	Amount Marketing leadership	The consideration of allergic consumers’ needs will give European hotels in regard of food service a worldwide marketing advantage.
7	How does the variation of national				

		<p>“The continuous use of fresh food and the regular change of recipes/dishes of the day in restaurants. These features are the true real added value of the European gastronomy and they should not be endangered”.</p>	<p>(HOTREC, 2014)</p>	<p>Cuisine Marketing Tourists Attraction Usage</p>	<p>Traditional cuisine in hotels is used as part of tourism marketing.</p> <hr/> <p>The European hospitality is known for the use of food bought daily in the local market.</p>
--	--	--	-----------------------	--	---



## 8.2 Results

In this Chapter, the results of the questionnaire are described with the analysis, which was performed by calculating the mean and standard deviation through the SPSS Program. The questionnaire was sent to 40 hotels in Madrid, Spain; Paris, France; Rome, Italy; and 20 hotels in Dublin, Ireland. The amount was reduced in regard to Ireland 20 hotels as are fewer four- or five star hotels in the capital city, and Dublin is the largest city in the country. The locations were chosen on the basis that the cities have many hotels. Furthermore, they are the most touristic cities in those selected countries. Therefore, they are the most affected by customer satisfaction in regard of food allergies information. Consequently, the total number of hotels surveyed with the questionnaire amounted to 140. The results were collected within four weeks' time.

The collected results were: 10 from France, 6 from Ireland and 7 from Spain. Unfortunately, there were only two responses from Italy. One was discarded, as it contained many of one type of answers only<sup>46</sup>. Also, four of the results from other countries were discarded for the same reasons as Italy: two from Ireland and two from Spain. Therefore, five results were discarded with the addition of the remaining Italian response, which could not be used in the analysis.

### 8.2.1 Hotel characteristic results

The questionnaire featured five hotel characteristic questions. These included: country of the hotel; star rate; hotel size; affiliation with a chain and most important the way of allergen information is declared. 63.2% of responses were from four star hotels and 36.8% were from five star hotels. Most hotels (68.4%) were small size hotels with a maximum of 150 rooms. Furthermore, most of the hotels that responded to this questionnaire were part of a chain (63.2%).

Regarding to the allergen declaration method: 36.8% of hotels overall provide a separated menu and 31.6% chose to add a sentence in the menu<sup>47</sup>. To be more specific, in France, the results showed that 40% chose to add the sentence in the menu, whereas 30% chose to have a separate menu. In Ireland, there was a split between listing the allergens in the menu

---

<sup>46</sup> The answers were all strongly agree, this indicates that the respondent did not give attention to his/her answers.

<sup>47</sup> See section 5.5.2.

and having a separate menu of allergen content. For Spain, 40% of hotels chose to add a sentence in the menu and 40% chose to have a separate menu. For further details, see Table 3.

**Table 3 Allergen information method.**

	Type of Allergen Information		Frequency	Valid Percent
France	Valid	A	4	44.4
		PS	3	33.3
		PG	2	22.2
		Total	9	100.0
Ireland	Valid	L	2	50.0
		PS	2	50.0
		Total	4	100.0
Spain	Valid	L	1	20.0
		A	2	40.0
		PS	2	40.0
		Total	5	100.0

L List the allergens in all menus. A Add sentence in menu "if you have any allergies please inform the waiter". PS Provide separate menus with allergen content. PG Provide a sign in the restaurant "for further information contact the waiter". 1 strongly agree, 2 agree, 3 neither agree nor disagree, 4 disagree, 5 strongly disagree.

### 8.2.2 Statements results

The results of the 10 statements were analysed using the SPSS program Version 2.2. Analysis of the results was performed by calculating the mean and standard deviation. The mean helped to elucidate and understand the main choices of the respondents that were stated in the questionnaire to assess the probable effect of allergen labelling.. The standard deviation was used to see how far the variations<sup>48</sup> were from the main, which helps determine the accuracy of the results. The lower the standard deviation is, the more accurate and comprehensive the results are. For further details, see Table 4.

The results were separated according to the expected influence. They were divided into two categories. The first were the statements that measure the effect of the regulation 1169/2011 on the hotel industry. The second was how hotels cuisine affects the tourism industry from a marketing perspective. Furthermore, the results were explained from an

<sup>48</sup> The variations in this context means how far the different choices chosen by the hotels from the mean.

overall perspective with the addition of each country's approach to these statements. For an overall analysis chart, see Figure 3.

**Table 4 Mean and Std Deviation of the results of Q1-Q10.**

		Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
Over All	Mean	1.78	1.94	2.00	2.64	3.22	3.25	2.36	2.38	2.11	2.00
	Std. Deviation	0.91	0.84	0.97	0.99	1.35	1.43	1.16	1.09	1.27	1.10
France	Mean	1.90	2.10	2.40	2.77	2.88	2.87	2.50	2.60	2.22	2.20
	Std. Deviation	0.99	0.87	0.96	0.66	1.45	1.55	1.08	1.07	1.30	1.31
Ireland	Mean	2.25	2.00	1.66	1.75	4.00	3.75	2.25	2.00	1.75	1.25
	Std. Deviation	0.95	1.15	1.15	0.50	1.15	1.89	1.89	1.00	1.50	0.50
Spain	Mean	1.20	1.60	1.40	3.25	3.20	3.50	2.20	2.20	2.20	2.20
	Std. Deviation	0.44	0.54	0.54	1.50	1.30	0.57	0.83	1.30	1.30	0.83

Q1 your kitchen staff will manage to minimise allergen cross contamination. Q2 the food and beverage managers will manage to list all allergens on the menu card. Q3 the staff serving the dishes are able to provide allergic consumers with detailed allergen information. Q4 the chance of giving a false impression as to allergens will increase due to un-proper oral allergen information. Q5 the consideration of allergic consumer's needs will give European hotels in regard of food service a worldwide marketing advantage. Q6 the necessity of allergen labelling will decrease the amount of times a restaurant changes its menu. Q7 the labelling regulation will push the industry to use more pre-packed foods instead of non-pre-packed ones. Q8 the amount of food allergic customers will increase in restaurants because of the improved allergen labelling. Q9 Traditional cuisine in hotels is used as part of tourism marketing. Q10 the European hospitality is known for the use of food bought daily in the local market. 1.00 strongly agree, 2.00 agree, 3.00 neither agree nor disagree, 4.00 disagree, 5.00 strongly disagree.

## Effect on hotels competitiveness

**Q1 The kitchens' staff will manage to minimise allergen cross contamination** (Table 1 and Annex 2).

The results shows a mean of 1.78, with a standard deviation of 0.91 (Table 2). An overall response of 47.4% strongly agreed to this statement, and 31.6% only agreed. 5.3% disagreed with the statement.

In France, 40% have strongly agreed with this statement and another 40% only agreed. However, in Ireland, 25% have strongly agreed to the statement and 25% only agreed, nevertheless, 50% of the hotels have neither agreed nor disagreed. Moreover, in Spain, 80% of the hotels strongly agreed to this statement.

**Q2 The food and beverage managers will manage to list all allergens even ingredients not commonly added in menus (Table 2 in Annex 2).**

The results were 1.94 mean, with a standard deviation of 0.84 (Table 2). An overall response 86.4% of agreement, in which 36.8% strongly agree and 31.6% agree. However, 31.6% did neither agree nor disagree with the statement.

To be specific in France, 40% of neither agreed or disagreed with the variation of 60% agreeing with the statement. In Ireland, the results were split in half with 50% strongly agreeing and 50% neither agreeing nor disagreeing with the statement. In the case of Spain, the results were different in the sense that most of the hotels agreed (40% strongly agreeing and 60% agreeing) to their capability of listing the allergens in the menus.

**Q3 The staff serving the dishes can provide allergic consumers with detailed allergen information (Table 3 in Annex 2).**

The statement results have a mean of 2.00, with a standard deviation of 0.97 (Table 2). The overall response was 38.9% strongly agreeing with the statement, and 27.8% neither agreeing nor disagreeing. Also, 5.6% disagreed, and 5.3% did not answer this statement.

In France, 40% (the majority of the results) neither agreed nor disagreed, with only 30% agreeing, nor 20% strongly agreeing with the statement. For Ireland, 66.7% strongly agreed with the statement, and 25% didn't give an answer. In regard of Spain, 60% of strongly agreed and 40% agreed that there serving staff will be able to provide the correct allergen information.

**Q4 The chance of giving false impression will increase due to in-proper oral allergen information (Table 4 and Annex 2)**

Results of statement analyses showed the mean to be 2.64, with a standard deviation of 0.99 (Table 2). The overall response was 47.1% agreed with the statement and 29.4% neither agreed nor disagreed. Also, 11.8% disagreed with this statement, and 10.5% refused to answer this statement, thus, making this statement a controversial statement for the hotel industry.

The France 55.6% of neither agreed or disagreed with the statement and 11.1% have disagreed with this statement. In Ireland 75% have agreed with the statement. For Spain 47.1% agreed with the statement and 50% have disagreed with the variation of 25% disagreeing and 25% strongly disagree.

**Q5 The necessity of allergen labelling will decrease the amount of times a restaurant changes their menu (Table 5 Annex 2).**

The mean was 3.22, with a standard deviation of 1.35 (Table 2). On an overall basis, 38.9% of neither agreed or disagreed with the statement, and 27.8 % strongly disagreed.

In France, 44.4% neither agreed nor disagreed with the statement, and 22.2% strongly disagreed that listing allergens would give a marketing advantage. In Ireland, the results were split in half with 50% neither agreeing nor disagreeing, and 50% strongly disagreeing with the statement. For Spain, the results were 40% agreeing and 20% disagreeing and 20% strongly disagreed with this statement.

**Q6 The regulation will push the industry to use more pre-packed foods (Table 6 Annex 2).**

The results display a mean of 3.25, with a standard deviation of 1.43 (Table 2). Overall the responses were 31.3% neither agreeing nor disagreeing with the statement. Moreover, 18.8% disagreed and 25% strongly disagreed that the regulation would affect the amount of times a menu is changed. Also, 15.8% left the statement unanswered, thus, making this statement the most unanswered in the whole questionnaire.

For France, 37.5% neither agreed nor disagreed with the statement, however 25% of hotels strongly disagreed, and 20% did not answer. For Ireland, 50% of strongly disagreed with the statement, and 25% strongly agreed plus 25% agreed. In Spain, 50% of neither agreed or disagreed, and 50% of disagreed with the statement, leaving 20% not answered.

**Q7 The amount of food allergic consumers will more frequently attend restaurants because of the allergen labelling (Table 7 Annex 2).**

The mean of the results was 2.36, with a standard deviation of 1.16 (Table 2). On an overall approach, 26.3% have strongly agreed, and 31.6% have agreed with the statement. Moreover, 10.5% have disagreed, and 5.3 have strongly disagreed with the statement.

To be specific France, 30% of neither agreed or disagreed with the statement, with 30% agreed and 20% disagreed with the statement. For Ireland, 50% strongly agreed, nonetheless 25% strongly disagreed. In Spain, 40% agreed and 40% neither agreed nor disagreed that the allergen labelling would increase the use of pre-packed foods.

**Q8 The respect of allergenic consumer's needs will give European hotels in regard of food service a worldwide marketing advantage (Table 8 Annex 2).**

The results show a mean of 2.38, with a standard deviation 1.09 (Table 2). An overall percentage show that 55.5% agreed with this statement (22.2% strongly agreed and 33.3% agreed), however 5.6% disagreed with the statement. Also, 33.3% of neither agreed nor disagreed.

In France, 50% of agreed with the statement, and 40% of neither agreed nor disagreed, although 10% strongly disagreed. For Ireland, 66.6% agreed (33.3% strongly agree and 33.3% agree) agreed to the statement, with 33.3% neither agreed nor disagreed. In Spain, 40% strongly agreed to the statement and 20% of agreed, however 20% disagreed with the notion that the labelling regulation would increase the number of customers with food allergies.

## Effect on tourism

### Q9 Traditional cuisine in hotels is used as part of tourism marketing (Table 9 Annex 2).

The mean was 2.11, with a standard deviation 1.27 (Table 2). An overall 66.6% (44.4% strongly agreed and 22.2% agreed) agreed with the statement. However, 11.1% disagreed and 5.6% strongly disagreed with the statement.

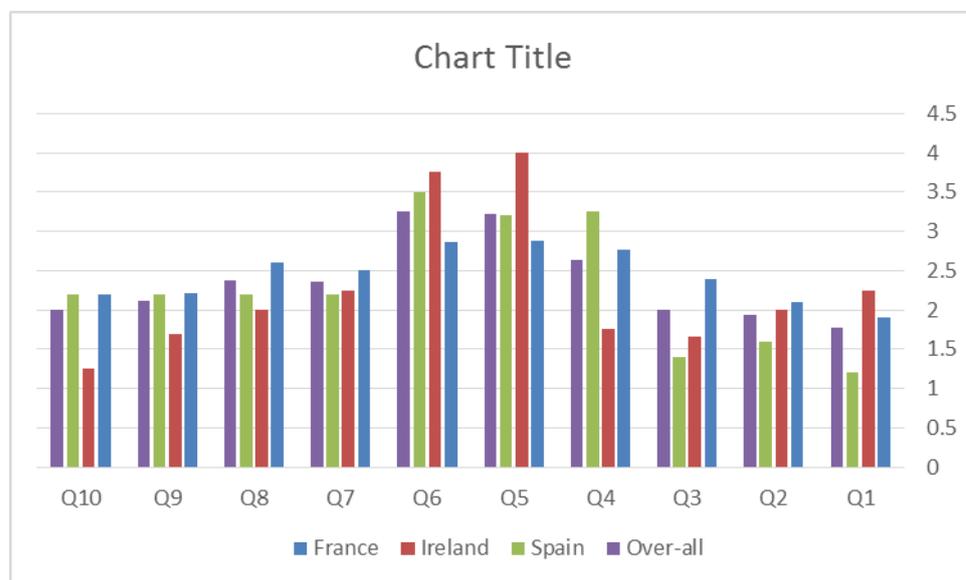
For French hotels, 60% (30% strongly agreed and 30% agreed) agreed with this statement. In Irish hotels, 75% of strongly agreed to the statement. In Spanish hotels, 40% strongly agreed to the statement, plus 20% neither agreed nor disagreed, and 20% disagreed that traditional cuisine is used as a marketing feature for European tourism.

### Q10 European hospitality is known use of fresh food bought in the daily market (Table 10 Annex 2).

The mean was 2.00 with a standard deviation 1.10 (Table 2). An overall answer of 42% strongly agreed with this statement. Also, 26.3% of neither agreed or disagreed with the statement, and 5.3%strongly disagreed.

For French hotels, 40% strongly agreed and 20% agreed, furthermore 30% neither agreed nor disagreed. Irish hotels, 75% strongly agreed to the statement. On the other hand, in Spanish hotels, 60% agreed to the statement, and 40% neither agreed nor disagreed that the use of fresh food is the future for hospitality in European tourism.

Figure 3 Statements analysis of the results mean.



1 Strongly agree. 2 Agree. 3 Neither agree nor disagree. 4 Disagree. 5 Strongly disagree.

Figure 3 illustrates all of the mean results for statements 1 to 10 in the questionnaire. Furthermore, the results from an overall perspective and specifically from the perspective of hotels in France, Ireland and Spain. Whereas 1 is strongly agree, 2 agree, 3 neither agree nor disagree, 4 disagree and 5 strongly disagree

## 9 Discussion

This section discusses and interprets the findings of this research, and its limitations. The discussion includes the variations in the results of the questionnaire, and the limitations associated with this research.

### 9.1 Results of the questionnaire

The results of the questionnaire are perceptions of the probable impact article 44 paragraph 1 on the hotel industry competitiveness, thus are not fully applicable to the industry. Unfortunately, the results are not reliable, as the response rate was low. Also, a variation is clearly seen in the results, this is associated with the low amount of results and small size sample. Thus, this section will discuss the reasons for the existing variation in regard to the hotel characteristics and statements answers.

#### 9.1.1 Hotel characteristic

The questionnaire was sent to four- and five star hotels in the capitals of the chosen Member States in this research. However, no Italian hotels responded to the questionnaire, apart from one. This is probably due to the language barrier, as some of the hotels did not understand what allergens are (i.e. did not recognise the English word). At the time of distributing the questionnaire, Italy was in its high season of tourism, so hotels were busy with customers that probably did not have time to answer the questionnaire. Most of the hotels in Rome are owned by families not chains. Therefore, the hotels are more centralised in their management. Answering a research questionnaire is done only by the owner of the hotel.

In regard to star classification, most of the answers were from four star hotels (63.2%). This is because five 5 star hotels are bigger and have more management staff. This is an important factor, as an email would be more easily 'lost' in a five-star hotel, because of the size of the management. Furthermore, most of the answers were part of chains (68.4%), because chains are not are not centralised in their management. For example, Italian hotels did not respond, as the authority for answering questionnaires lies with the hotel owner.

Most of the hotel respondents were of small sized hotels, which is normal in Europe, as most of the hotels are located in cities with older infrastructure. Thus, they would not have large facilities such as buildings and kitchens, as they would need more space.

#### 9.1.2 Statements

Unfortunately, the answers are reliable, as is the danger of small sample sizes and low response rate. The variation is due to several factors, mainly the limitation of language. Therefore, the results are considered inconclusive. A variation between statements answers exists especially questions 1, 2, 3 4, and q7, as they differ between agreement with the statements and remaining neutral (see Table 4).

**Q1 The kitchens staff will manage to minimise allergen cross contamination.**

Hotels indicated that they will manage to control allergen cross-contamination, with an overall (47.4%) strong agreement. This is because in the kitchen, chefs and the food and beverage managers have higher practice. As they direct the implementation of hygiene requirements, and managed former requests on allergens before the implementation of EU 1169/2011.

**Q2 The food and beverage managers will manage to list all allergens even ingredients not commonly added in menus.**

The results showed that hotels believe that the food and beverage managers, will manage to accurately list the allergen content of the hotels dishes, which (36.8%) strongly agreed and (31.6%) agreed. As mentioned in the previous statement, the food and beverage managers are well-equipped and highly practiced in listing the allergens properly.

**Q3 The staff serving the dishes can provide consumers with food allergies with detailed allergen information.**

In the questionnaire results, (56.8%) of hotels believed strongly that their serving staff would provide their customers with accurate allergen information. This is because the hotels market themselves to as an excellent luxury service, therefore their staff should manage special requests, such as allergens. However, (31.6%) remained neutral, as they could not predict the ability of their staff in this matter. It is still early to speculate on this issue.

**Q4 The chance of giving false impression will increase due to in-proper oral allergen information.**

Answers for this statement (42.1%) agreed and 26.3% were neutral, with a mean (2.64) and a standard deviation of 0.99, which is close to neutral. The statement contradicted the answers of the previous statements, and several hotels preferred not to answer it. A probable explanation for this is the language barrier, as statement 4 was a negative statement, meaning if it was in line with the initial three statements, the probable answer would be to disagree.

The answer of question 4 implies a chance of miss communication between waiters and the kitchen staff. Chefs and food and beverage managers will manage to control the allergens, however, communication between the waiter and customer is done separately. Thus, the chef and the food and beverage managers, will not take the order as this is done by waiters, which usually do not have sufficient practice in regard of allergen content. Furthermore, under a lot of pressure in high seasons with orders from each table, they can easily miscommunicate with customers.

**Q5 The necessity of allergen labelling will decrease the amount of times a restaurant changes their menu.**

In answering the statement, hotels did not think allergen labelling would be effective (mean was 3.22 and (31.6%) disagreed). This is because the hotels focus on quality, as they are a

luxury service industry. Moreover, hotels believe that their facilities will manage to control the allergen cross-contamination. Correspondingly, hotels must change the menu annually, in order to guarantee that customers do not become bored with the food (Siguaw and Enz 2007). It also helps the hotels to keep their certifications, as it emphasises the uses of seasonal food.

**Q6 The regulation will push the industry to use more pre-packed foods.**

The results of the questionnaire showed that hotels remained neutral in answering this statement ( mean 3.25). This can be interpreted a contradiction with the rest of the statements answers. However, this is connected with the structure of the hotels. In some instances, hotels rent out their spaces for restaurants to reduce the burden of food costs. They also often purchase sweets and cakes from local bakers, as an additional method to reduce costs. Therefore, some hotels already use some pre-packaged foods, and it is too early to predict the demand.

**Q7 Consumers with food allergies will more frequently attend restaurants because of the allergen labelling.**

Most hotels remained neutral with this statement, as they believe that it will not have an effect on customer numbers or frequency of visit. This is probably it still early to see an effect, because of the late implementation of the regulation, whether by hotels or local Authorities (i.e. late official decrees).

**Q8 The respect of allergic consumer's needs will give European hotels a worldwide marketing advantage with regard to food service.**

In contradiction with the previous statement, hotels do agree that from a worldwide perspective the Regulation will create positive effect on the image of European hospitality. This is because hotels believe that international tourists appreciate the stringent EU food information laws. Tourists with food allergies in particular will feel much more confident with ordering food.

**Q9 Traditional cuisine in hotels is used as part of tourism marketing.**

Most hotels agreed with this statement (mean 2.11). This because most tourists love to experience local culture, and food is one of these methods. The statement is further analysed in Chapter 10.

**Q10 European hospitality is known to use of fresh food bought in the daily market.**

The results showed that most hotels agreed on the European hospitality reputation of using fresh ingredients, as the mean was 2.00. The statement is further analysed in Chapter 10.

## 9.2 Limitations

This section will discuss the limiting factors of this research. The factors are divided to four limitations: Article 44; implementation; questionnaire; and quantitative research.

The implementation of Article 44 of EU 1169/2011 is the limiting factor in itself, because of late decrees in EU Member States. This is supported by the responses to the questionnaire, as some hotels were not aware of the method to be implemented in their country.

The questionnaire's main limiting factor was that the number of results were low. A sample size of 16% of the total hotel industry is required for the results to be representative of the whole industry. Moreover, the questionnaire was performed in the high season, which limited the number of results, as food and beverage managers were too busy to answer. Unfortunately, having most of the answers from chain hotels limits the answers too, as a large numbers of hotels are not part of chain. Language was a major limiting factor, as most of hotels didn't understand the specifics of the statements, which was shown in the variation of the answers of the questionnaire.

Having a quantitative research rather than qualitative limits this research, as a more qualitative research would have provided valuable inputs. The quality of the input reduces the variation of the answers. As interviews would happen face and face, that could give a lot of valuable input and explain things that are maybe not understandable by the interviewed person.

Another limiting factor is that it's too early since introduction of the Regulation for hotels to speculate what is the probable effect will be. Therefore, they do not see the importance of the questionnaire, because they don't see the probable effect as yet. This is because the Member States decrees were only recently introduced (see sections 5.1, 5.2, 5.3 and 5.4).

## 10 Conclusion and recommendations

This section answers the research questions. It analyses the allergen listing effect of Article 44 EU 1169/2011 Paragraph 1 on the competitiveness of the hotel industry in the four chosen Member States infrastructure<sup>49</sup>, through the probability of damaging the use of fresh foods and local cuisine. Also, it examines the effect of the regulation on the tourism competitiveness.

### 1. What is the hospitality industry structure, specifically hotels?

The main findings show that the hospitality business is a very complex industry, with food playing an important role in generating profits for these types of business. The detailed responses of participants to this question can be found in Section 3.5.

### 2. What legislation regulate the hotel industry?

As any business, the hotel industry is influenced by the corporate law in the EU. Also, food regulations play a role in effecting this industry as it is considered a food operator. The answer of this question can be seen in detail in Section 2.3.

### 3. What does Article 44 Regulation EU 1169/2011 require?

It requires an accurate listing of the allergen content in the kitchen, whilst maintaining preventive measures for allergen contamination (see Section 4.5).

### 4. What national measures are adopted in Member States regarding Article 44 Paragraph 1?

The first effect of Article 44 on the hospitality industry is how it's implemented in the EU Member States. The methods chosen by the Member States to declare and enforce Article 44 are not harmonised on a European level. Another variation between Member States concerns allergen control measures. Therefore, this section will discuss the compliance of hotels with Article 44, and the best method for allergen declaration.

#### Compliance behaviour

Article 44 implementation depends highly on the compliance of hotels. This also depends upon the tools used by the Member States to enforce allergen labelling. The tools stated in Section 6.1 show a variation in audits and fines between Member States.

The audit is an important tool to help guarantee implementation of allergen labelling within the industry. However, having a different auditing system between Member States will have an impact on the hotel industry competition. Considering the variation in time, the performance of audits will differ, as some Member States have audits twice a year and some can be once in every three years. The three year audits in France depend on the compliance history of the establishment (see Section 6.1). Consequently, if a hotel has a good history of compliance, they will not have an audit until the next three years or more. Therefore, hotels have the possibility of not implementing the article for the next two to three years, unless a complaint is issued against them.

---

<sup>49</sup> See section 1.6.2.2.

Furthermore, administering small amounts of fines could be a strategy for hotels, to reduce the regulation implementation costs by taking the chance of being fined. In that case, hotels in Spain and France would have this option.

The current compliance behaviour can be seen through the answers of the questionnaire. Hotels who responded to the questionnaire were asked what kind of allergen information method they apply. Therefore, in case of Ireland, the compliance behaviour was accurate, as 50% chose to list the allergens in the menu and 50% chose to have a separate menu. In France 44% of hotels chose to add in the sentence in the menu and 33% provided a separated menu, which is accurate according to the recent decree and implemented measures. However, in Spain only 40% chose to provide a separate menu and 40% chose to add a sentence to the menu (see Table 4). This contradicts with the Royal Decree, which means that hotels in Spain will have a low compliance. The effect of Article 44 will only be seen on the long run, because of the compliance behaviour and the late official decrees of local authorities.

#### **5. Will these national measures lead to unsafe food or mislead consumers? or possibly lead to the increased use of pre-packaged foods?**

##### **Unsafe food**

The probability of giving a false impression to the customer when ordering his/her food has confused the hospitality industry. Most of the hotels remained neutral in answering statement 4.

The first notion to consider is that staff serving the food is not necessarily highly educated, and most of them will take it as a second job. Correspondingly, in pressured circumstances of high season the overgrowth of work can be damaging, as they will not manage to be cautious of the orders of customers. This notion presents a limitation in implementing the regulation, thus a written method will cover this aspect.

##### **Damage on quality**

The usage of pre-packed foods is still important notion on the damaging effect on the European cuisine. However, the answers of the questionnaire were mainly mutual, with a possibility for franchises to implement to save costs. This has to do with the possibility that is set as a strategy to reduce costs. Thus, this notion will not damage the quality in hotels, as their standards are focused on quality.

#### **6. What is the effect of the variation of national measures regarding Article 44 on the hospitality industry marketing competition?**

The regulation has a positive and negative effect. It can be considered positive through the increase number of customers that might visit the hotel, specifically customers with food allergies. It can be considered negative, as it implementing Article 44 is likely to create extra costs for hotels. There is also, a probability of damaging some of the quality and variety in European cuisine.

On the positive side, hotels will attract more people, as consumers with allergies will have greater confidence to visit hotels, knowing that their needs for proper information are

satisfied. However, this notion contradicts with the answers of the questionnaire, as hotels stated that labelling allergens would not influence the number of customers. However, since the regulation has just been effected, it is too early for hotels to see that. Another positive effect in this regard is hospitality reputation, as it will improve the EU's image for catering for consumers with food allergies. This increase will be more visible in the number of visitors from outside the EU, as they will feel that their special dietary needs are taken care of.

On the negative side, hotels will bear the high costs of implementing the regulation. Thus, some hotels will risk the chance of fines, as audits times will occur in some Member States once or twice a year. This encourages hotels to postpone the implementation of allergen labelling to save the additional costs associated with changing menus. In addition, it will require training for chefs and kitchen staff with a positive ethical system for managing the cross-contamination of allergens (see Section 7.2). This presents a 'double-edged sword', as the effect of the regulation will be costly for the implementation of this regulation but will increase the amount of customers.

The effect of the regulation on the competitiveness of hotels between MS in attracting international tourists. The most important notion, is whether the industry will use more pre-packed foods and implement a standardised production method, which are answered in question 5. Unfortunately, the results of the questionnaire were not reliable, and the answers shows hotels neither agreeing or disagreeing with the probable damage on cuisine. This can be that hotels are more focused on customer satisfaction, making hotels more willing to bear the additional costs and risks of public liability. Another notion is it is still early for hotels to see the probable effect, especially with the late official decrees.

As the regulations have been so recently implemented with late decrees, understanding the impact will not be fully possible until later. Also, the competitiveness will not affect the cuisine, as it is part of the heritage of the country, but the impact will be on infrastructure. This damage to infrastructure will happen in the long run, since the implementation of the Regulation has just started. Likewise, hotels will possibly manage the allergen information without damaging their cuisine, but not small size establishments. This is because hotels aim to provide quality and customer satisfaction.

### **Small businesses**

The businesses most affected by Article 44 in the hospitality industry are likely to be small restaurants and cafes, as hotels have large facilities. Therefore, hotels are more equipped to handle special consumer needs, such as avoiding food allergens. Furthermore, hotels have larger budgets and use systematic management plans, such as HACCP. Moreover, four- and five star hotels are a luxury service industry, which means that customer service is the most important factor for their business. Thus, these hotels deal in advance with special requests in allergen content, which is not the case for small sized businesses.

## **7. How does the variation of national measures effect the tourism competition between Member States?**

As cuisine is an important part of hospitality, and hospitality is an important part of tourism, the damage to this infrastructure will be damaging on the tourism experience. Thus, this section discusses the influence of the European gastronomy on the tourism experience. Moreover, it discusses how allergen labelling will affect the competitiveness of the EU tourism industry competitiveness with regard to infrastructure and marketing.

The effect on tourism experience is very important, as tourists like to experience the culture, rather than seeing it (Richards). Something that the European hospitality has, which is also apparent in answers to statement 9 in the questionnaire, is a reputation in excellent cuisine. Statement 10 ( use of freshly produced products from the daily market) is an important factor in the European hospitality. This is in line with the results of the questionnaire, as the hotels agreed with this statement. Therefore, any damage to the use of fresh foods from the daily market will damage the tourism experience. This is something that HOTREC estimates by the probable increase in using pre-packed foods (see Section 1.1.4.1), which is in line with the answers of statement 7.

Damage on small hospitality business is an important notion, as local authorities need it to be able to serve their tourism experience, meaning restaurants, small businesses and cafés. This notion is important, as businesses would further use pre-packed foods, as a cost-saving strategy. In the long run, this will damage the tourism infrastructure and will reduce the possibility to serve the cultural experience to tourists. HOTREC estimates that the damage could force some businesses to close down, due to loss of their competitive advantage in local cuisine. Furthermore, the damage will be higher on small businesses, as they might not be able to list and control allergens properly. This is an important notion, as each country needs an effective number of small businesses, which is restaurants and cafés that can provide local cuisine to the tourists.

Another factor in competitiveness is marketing, as the answers of statement 10 agrees that the quality of European hospitality, is a major marketing tool for tourism all over the world. Thus, a damage in the infrastructure and quality of local hospitality businesses, will damage Member States touristic marketing advantage.

## **8. What are the solutions that diminish the negative effects that might occur from Article 44 on the hotels?**

### **Policy option**

To increase the quality of service, guarantee consumer safety, and to minimise the damaging effects of Regulation EU 1169/2011 Article 44 Paragraph 1, a policy option is needed. The policy option could be an alteration of Paragraph 2 in Article 44. By replacing EU Member States' option to choose the method of allergen declaration with a recommended declaration method, which is evaluated between the EU and the stakeholder, would enable the hospitality industry to rely on a standardized method. A policy option is suggested by analysing the four implemented methods in section 5.5, which gives the best and worst methods to be implemented.

## **Worst and best methods**

In all four methods, the probability of cross-contamination of food allergens is still high, as the hospitality industry is not a standardised industry. Thus, the chance of contamination will always be possible. Nonetheless, in analysing what is the best and worst allergen labelling method, consideration must be given to the costs of implementing, so that the hospitality industry will not generate loss. The best example of this consideration is the Italian method, as it gave the industry the option to choose their method. However, this can be damaging, as some business are not aware of the outcome of the implemented method. Therefore, analysing the four implemented methods by MS, each had its advantages and disadvantages.

Listing the allergens in the menu would be the worst option, as it will blind the waiter and the customer from the hidden cross-contamination. Also, the consumer will feel that he is completely safe, when ordering his food without considering the possibility of cross-contamination.

Adding a sentence in the menu is the most flexible and easy allergen labelling method for hotels to implement. Also, it takes into regard the severity of the customers' allergy, as it will create an extra caution in preparing their food. In providing a sign in the establishment, the method might be not as visible as adding a sentence in the menu, since s the customer always sees the menu before ordering, thus, reading the sentence clearly.

Consequently, the best option is a combination of adding a sentence and having a separate menu. Adding a sentence in the menu will encourage dialogue between the waiter and the customer. Therefore, the customer will be aware of the probable hidden allergens and the possibility of cross-contamination in the kitchen. Moreover, the combination of methods will emphasise how severe<sup>50</sup> the customers' allergies are and provide an assurance through written information available in the separate menu. Consequently, a combination appears to be the best method to implement in hotels, without restricting the industry and giving the customer a safer option when dining in the hotel.

### **10.1. Suggestions for further studies**

Suggestions for further studies is be to implemented in a quantitative research on this regard. Furthermore, focusing on small businesses in the hospitality industry as the effect will be more damaging or more seen on them. Also, there is a need to study the effect of the regulation on the supply chain as franchises and hotels use more prepacked foods of focus will be needed on the suppliers' compliance behaviour. Furthermore, in further studies the language requirements must be also kept in mind specially when checking several member states. Also, a consumer study on the prospective. The technical research is needed and risk assessment analysing the cross-contamination probability will be also highly regarded and esteemed.

---

<sup>50</sup> The level of hypersensitivity, as severe allergic people have reactions to small traces of the allergen.

## References

- (SANCO), DG. 2008. General Audit Spain – 2008 Final Report. Brussels: European Commission.
- Abbot, Jaclyn Maurer, Carol Byrd-Bredbenner, and Darlene Grasso. 2007. "“Know before You Serve” Developing a Food-Allergy Fact Sheet." *Cornell Hotel and Restaurant Administration Quarterly* 48 (3):274-283.
- AESAN. 2005. "Principios de higiene y manipulación segura de alimentos." Aesan.msssi.gob.es Accessed May. [http://aesan.msssi.gob.es/AESAN/web/rincon\\_consumidor/subseccion/principios\\_higiene.shtml](http://aesan.msssi.gob.es/AESAN/web/rincon_consumidor/subseccion/principios_higiene.shtml).
- Amoruso, Giovanna. 2015. "Etichettatura degli alimenti." ONB.it Accessed March. <http://www.onb.it/2015/03/09/etichettatura-degli-alimenti/>.
- Anibarro, B, FJ Seoane, and MV Mugica. 2007. "Involvement of hidden allergens in food allergic reactions." *Journal of Investigational Allergology and Clinical Immunology* 17 (3):168.
- Blanchfield, J Ralph. 2001. "Good Manufacturing Practice: Dealing With Food Allergens in Ingredients. Food Processing, Retailing and Foodservice1." *Foodservice Research International* 13 (2):119-132.
- BOE. 1983. Real Decreto 1945/1983, de 22 de junio, por el que se regulan las infracciones y sanciones en materia de defensa del consumidor y de la producción agro-alimentaria. In *BOE-A-1983-19755*, edited by Presidencia del Gobierno. Madrid Agencia Estatal Boletín Oficial del Estado.
- BOE. 2011. A todos los que la presente vieren y entendieren Sabed: Que las Cortes Generales han aprobado y Yo vengo en sancionar la siguiente ley. In *11604*, edited by Jefatura Del Estado. Madrid: Boletín Oficial Del Estado.
- BOE. 2015. Real Decreto 126/2015, de 27 de febrero, por el que se aprueba la norma general relativa a la información alimentaria de los alimentos que se presenten sin envasar para la venta al consumidor final y a las colectividades, de los envasados en los lugares de venta a petición del comprador, y de los envasados por los titulares del comercio al por menor. In *2293*, edited by Ministerio De La Presidencia. Madrid Boletín Oficial Del Estado.
- Bosselman, Robert. 2007. "Managing Food and Beverage Operations in Lodging Organizations." In *Hotel Management and Operations* 235-299. Hoboken, New Jersey: John Wiley & Sons Inc.
- BRC. 2013. BRC Guidance on Allergen Labelling and the Requirements in Regulation 1169/2011. edited by British Retail Consortium. London: BRC.org.uk.
- Commission, European. 1992. Proposal for a Regulation of the European Parliament and the Council on the provision of food information to consumers. Brussels: Commission of the European Communities.
- Delga, Carole. 2014. Carole DELGA annonce les modalités d’information du consommateur sur la présence d’allergènes dans les denrées alimentaires. In *019*, edited by De L’Industrie Et Du Numerique Aupres Du Ministre De L’Economie. Paris: Economie.gouv.fr.
- DG(SANCO). 2010. Official Controls Put in Place by the Competent Authorities. In *Final Report of a General Audit Carried Out in France in 2010*. Brussels: European Commission.
- DG(SANCO). 2014. Evaluate the Control Systems Related to Protected Designation of Origin (PDO), Protected Geographical Indications (PGI) and Traditional Specialities Guaranteed (TSG) for Agricultural Products and Foodstuffs. In *Final Report of an*

- Audit Carried Out in Italy from 16 June 2014 to 27 June 2014.* Brussels: European Commission.
- Dongo, Dario. 2011. *The Food Label*. Edited by Roberto La Pira. Rome: Ilfattoalimentare.it.
- Dongo, Dario. 2015. "Il Ministero dello sviluppo economico aggiunge incertezza al vuoto normativo in cui si trovano tutti gli attori della filiera." *ilfattoalimentare.it* Accessed March. <http://www.ilfattoalimentare.it/sanzioni-ministero-sviluppo-economico.html>.
- Duan, Jingyun, Yanyun Zhao, and Mark Daeschel. 2011. Ensuring food safety in specialty foods production. Corvallis, Or.: Extension Service, Oregon State University.
- Dyson, John. 2014. "The New Food Information Regulations." Institute of Hospitality Accessed May. [https://www.instituteofhospitality.org/Publications/Insight\\_e-newsletter/2014\\_news/may/sussex\\_pdfs/4\\_john\\_dyson](https://www.instituteofhospitality.org/Publications/Insight_e-newsletter/2014_news/may/sussex_pdfs/4_john_dyson).
- EAACI. 2014a. Up to 17% of the European population could suffer some kind of food allergy.
- EAACI. 2014b. "Which foods may cause allergy? ." EAACI.org Accessed October <http://www.eaaci.org/food-allergy/foods-causing-allergy/1884-which-foods-may-cause-allergy.html> .
- EC. 2000. White Paper on Food Safety.
- ECC-Net. 2009. Classification of Hotel Establishments Within the EU.
- EFSA, and NDA Panel. 2014. "Scientific Opinion on the evaluation of allergenic foods and food ingredients for labelling purposes." *EFSA Journal*. doi: 10.2903/j.efsa.2014.3894.
- Enz, Cathy. 2015a. "Franchising in the Hospitality Industry." Cornell University Accessed March. <https://www.youtube.com/watch?v=gwH6UpV5D1A>.
- Enz, Cathy. 2015b. "Strategy in the Hospitality Industry." Cornell University Accessed March. [https://www.youtube.com/watch?v=cM03Snydx\\_g](https://www.youtube.com/watch?v=cM03Snydx_g).
- FAO. 1985. "CODEX General Standard for the Labelling of Prepackaged Foods." FAO.org Accessed June. <http://www.fao.org/docrep/005/y2770e/y2770e02.htm>.
- Favorama. 2014. "Curso Alergenos En Las Empresas De Hosteleria." Favorama.com Accessed February. <http://www.favorama.com/curso-alergenos-empresas-hosteleria.html>.
- FIBE. 2004. *Manuale di Corretta Prassi Operativa*. Rome: Federazione Italiana Pubblici Esercizi.
- FSAI. 2009. "European Communities (Food and Feed Hygiene) Regulations 2009." FSAI.ie Accessed May. [https://www.fsai.ie/uploadedFiles/SI432\\_2009.pdf](https://www.fsai.ie/uploadedFiles/SI432_2009.pdf).
- FSAI. 2014. "Allergen Information: for non-PrePacked Food." FSAI.com Accessed March. <http://raireland.wpengine.com/wp-content/uploads/2015/01/Allergen-Information-for-Non-prepacked-Food-FINAL.pdf>.
- FSAI. 2015. "Food Safety Issues In The Catering Sector." FSAI.com Accessed May. [https://www.fsai.ie/faq/food\\_safety\\_catering.html](https://www.fsai.ie/faq/food_safety_catering.html).
- FVO. 2015. "About Us." European Commission Accessed January. [http://ec.europa.eu/food/food\\_veterinary\\_office/index\\_en.htm](http://ec.europa.eu/food/food_veterinary_office/index_en.htm).
- Harper, David. 2008. *Valuation of Hotels for Investors*. second ed. New York: Routledge.
- HOTREC. 2006. HOTREC comments To the DG SANCO Consultative Document of February 2006 on Labelling: Competitiveness, Consumer Information and Better Regulation for the EU. In *Food*, edited by HOTREC. Bruselles: HOTREC.com.
- HOTREC. 2008. HOTREC remarks on the Commission proposal for a Regulation of the European Parliament and the Council on the provision of food information to consumers. In *Food*. Bruselles: HOTREC.com.
- HOTREC. 2010. Letter to Spanish Council Presidency. In *Food*. Bruselles: HOTREC.com.
- HOTREC. 2011a. "Agenda for a Sustainable and Competitive European Tourism." HOTREC.com Accessed February.

- [http://www.hotrec.eu/Documents/Document/20110909163114-Tourism-Agenda for competitive and sustainable tourism.pdf](http://www.hotrec.eu/Documents/Document/20110909163114-Tourism-Agenda%20for%20competitive%20and%20sustainable%20tourism.pdf).
- HOTREC. 2011b. "Copyright." HOTREC.com Accessed February. <http://www.hotrec.eu/policy-issues/copyright.aspx> .
- HOTREC. 2011c. "Discrimination Beyond the Workplace." HOTREC.com Accessed February. [http://www.hotrec.eu/documents/document/20110909130253-social affairs-discrimination beyond the workplace.pdf](http://www.hotrec.eu/documents/document/20110909130253-social%20affairs-discrimination%20beyond%20the%20workplace.pdf).
- HOTREC. 2011d. "ECO-Label for Tourist Accommodation Service." HOTREC.com Accessed February. [http://www.hotrec.eu/documents/document/20110912121140-1168-environment-eco-label for tourist accommodation service.pdf](http://www.hotrec.eu/documents/document/20110912121140-1168-environment-eco-label%20for%20tourist%20accommodation%20service.pdf).
- HOTREC. 2011e. "Enterprise policy." HOTREC.com Accessed February. <http://www.hotrec.eu/policy-issues/enterprise-policy.aspx>.
- HOTREC. 2011f. "European Statistics on Tourism." HOTREC.com Accessed February. [http://www.hotrec.eu/Documents/Document/20110913101543-Statistics - Regulation 2011.pdf](http://www.hotrec.eu/Documents/Document/20110913101543-Statistics-Regulation%202011.pdf).
- HOTREC. 2011g. "Food labelling: Member States' position threatens the use of fresh food in hotels and restaurants." HOTREC.com Accessed October [http://www.hotrec.eu/Documents/Document/20110623193647-food labelling-member states position threatens the use of fresh food in hotels and restaurants.pdf](http://www.hotrec.eu/Documents/Document/20110623193647-food%20labelling-member%20states%20position%20threatens%20the%20use%20of%20fresh%20food%20in%20hotels%20and%20restaurants.pdf).
- HOTREC. 2011h. "Health." HOTREC.com Accessed February. <http://www.hotrec.eu/policy-issues/health.aspx>.
- HOTREC. 2011i. "Hospitality Skills Passport - Launch." HOTREC.com Accessed February. <http://www.hotrec.eu/policy-issues/social-affairs/hospitality-skills-passport---launch.aspx>.
- HOTREC. 2011j. "Internal market." HOTREC.com Accessed February. <http://www.hotrec.eu/policy-issues/internal-market.aspx>.
- HOTREC. 2011k. "Introduction." HOTREC.com Accessed February. <http://www.hotrec.eu/policy-issues/introduction.aspx> .
- HOTREC. 2011l. "Tourism." HOTREC.com Accessed February. <http://www.hotrec.eu/policy-issues/tourism.aspx>
- HOTREC. 2012a. "EU Diet Platform." HOTREC.com Accessed February. [http://www.hotrec.eu/Documents/Document/20120328150255-Health-Diet-Platform-09 - new version - March 2012.pdf](http://www.hotrec.eu/Documents/Document/20120328150255-Health-Diet-Platform-09-%20new%20version-%20March%202012.pdf).
- HOTREC. 2012b. "Fire Safety." HOTREC.com Accessed February. [http://www.hotrec.eu/Documents/Document/20120410175108-Fire safety in hotels - April 2012.pdf](http://www.hotrec.eu/Documents/Document/20120410175108-Fire%20safety%20in%20hotels-%20April%202012.pdf).
- HOTREC. 2012c. "Nutrition Strategy." HOTREC.com Accessed February. [http://www.hotrec.eu/Documents/Document/20120328150313-Health-Nutrition-Strategy-09 - new version - March 2012.pdf](http://www.hotrec.eu/Documents/Document/20120328150313-Health-Nutrition-Strategy-09-%20new%20version-%20March%202012.pdf).
- HOTREC. 2012d. "Package Travel Legislation." HOTREC.com Accessed February. [http://www.hotrec.eu/Documents/Document/20120411120708-Package Travel Directive - update April 2012.pdf](http://www.hotrec.eu/Documents/Document/20120411120708-Package%20Travel%20Directive-%20update%20April%202012.pdf).
- HOTREC. 2012e. "Timeshare." HOTREC.com, Last Modified 2012 Accessed February. [http://www.hotrec.eu/Documents/Document/20120410174336-Timeshare-update April 2012.pdf](http://www.hotrec.eu/Documents/Document/20120410174336-Timeshare-update%20April%202012.pdf) .
- HOTREC. 2013. HOTREC position on the implementation of the Food Information to Consumer Regulation. In *Food*. Brussels: HOTREC.com.
- HOTREC. 2014a. "Facts and figures. Hotrec Web site." HOTREC.com Accessed October. <http://www.hotrec.eu/about-us/facts-figures.aspx> .

- HOTREC. 2014b. "Hotrec position on the implementation of the Food Information." HOTREC.com Accessed October  
<http://www.hotrec.eu/Documents/Document/20131112151439-D-1113-401-AW-Food Information to Consumers- HOTREC position on implementation - Final.pdf> .
- HOTREC. 2014c. "Welcom to the Hotelstars Union." Hotelstars.eu Accessed January.  
[http://www.hotelstars.eu/index.php?id=about\\_us](http://www.hotelstars.eu/index.php?id=about_us).
- Houghton, John, and Pascal Tremblay. 1994. "The structure of hospitality: a cultural explanation of industrial diversity." *International Journal of Hospitality Management* 13 (4):327-346.
- Huggett, AC, and C Hischenhuber. 1998. "Food manufacturing initiatives to protect the allergic consumer." *Allergy* 53 (s46):89-92.
- INRS. 2007. "Conception des Cuisines de Restauration Collective." INRS.fr Accessed May.  
<http://www.umih.fr/export/sites/default/.content/media/pdf/guides-inrs/ed6007.pdf>.
- Jareño, Nina. 2015. "Los españoles y la seguridad alimentaria ". Interempresas.net Accessed March. <https://www.interempresas.net/Alimentaria/Articulos/134750-Los-espanoles-y-la-seguridad-alimentaria.html>.
- Jones, Louise. 2014. "Title." *Nut Mums*, March.
- JORF. 2015. Décret n° 2015-447 du 17 avril 2015 relatif à l'information des consommateurs sur les allergènes et les denrées alimentaires non préemballées. In 0092, edited by Legi France. Paris Journal officiel de la République Française.
- Key, Green. 2012. "An ECO-Label For Leisure Organisations ". Green-key.org Accessed March. <http://www.green-key.org/menu/criteria/hotels/green-key-hotel-application-form-2012-2015-hotels.pdf>.
- Kirsch, Stéphanie, Séverine Fourdrilis, Rowan Dobson, Marie-Louise Scippo, Guy Maghuin-Rogister, and Edwin De Pauw. 2009. "Quantitative methods for food allergens: a review." *Analytical and bioanalytical chemistry* 395 (1):57-67.
- Kumar, Sameer, and Erin M Budin. 2006. "Prevention and management of product recalls in the processed food industry: a case study based on an exporter's perspective." *Technovation* 26 (5):739-750.
- Maleki, Soheila J, Wesley A Burks, and Ricki M Helm. 2006. *Food Allergy*. Washington ASM Press.
- Meulen, Bernd van der. 2011. "Informed Choice: Presentation of Food Product." In *European Food Law Handbook*, edited by Bernd van der Meulen and Menno van der Velde. Wageningen: Wageningen Academic Publishers.
- Mills, ENC, E Valovirta, C Madsen, SL Taylor, S Vieths, E Anklam, S Baumgartner, P Koch, RWR Crevel, and L Frewer. 2004. "Information provision for allergic consumers—where are we going with food allergen labelling?" *Allergy* 59 (12):1262-1268.
- Motala, Cassim. 2014. "Food Allergy." Worldallergy.org Accessed October.  
[http://www.worldallergy.org/professional/allergic\\_diseases\\_center/foodallergy/](http://www.worldallergy.org/professional/allergic_diseases_center/foodallergy/).
- Nebel, Eddystone C. 2007. "Organizational Design." In *Hotel Management and Operations* edited by Denney G. Rutherford and Michael J. O'Fallon. New Jersey: John Wiley & Sons Inc.
- Nutricion, Hosteleriay. 2014. "Para Una Completa Informacion y Asesoramiento, Recomendamos Contactar Con Su Asociacion De Hosteleria." Hosteleriaynutricion.com Accessed March.  
<http://www.hosteleriaynutricion.com/index.html>.
- O'neill, John W, and Anna S Mattila. 2006. "Strategic Hotel Development and Positioning The Effects of Revenue Drivers on Profitability." *Cornell Hotel and Restaurant Administration Quarterly* 47 (2):146-154.

- Olmos, Gabriel Héctor Carmona. 2012. "Hospitality competitiveness measurement system." *Journal of Global Business and Technology* 8 (2):29-37.
- Pira, Roberto La. 2014. "Ecco come sarà il nuovo D.lgs 109/92 dopo l'entrata in vigore del regolamento 1169/2011. Un'anticipazione della norma commentata da Aurelio Trevisi." *Ilfattoalimentare.it* Accessed March. <http://www.ilfattoalimentare.it/decreto-legislativo-109-92-1169-2011.html>.
- Porter, Michael E. 2008. *Competitive strategy: Techniques for analyzing industries and competitors*: Simon and Schuster.
- RAI. 2015. "Allergens on Your Menu." Restaurants Association of Ireland Accessed March. <http://www.rai.ie/allergens/>.
- Richards, G. *An overview of food and tourism trends and policies*: OECD Publishing.
- Shiring, Stephen B, William R Jardine, and Richard J. Mills. 2001. *Introduction to Catering: Ingredients for Success*. Albany Cengage Learning.
- Siguaw, Judy, and Cathy Enz. 2007. "Best Practices in Food and Beverage Management." In *Hotel Management and Operations*, edited by Denney Rutherford and Michael O'Fallon, 253-264. Hoboken, New Jersey: John Wiley & Sons Inc.
- Spiteri, Reno. 2015. "Food allergy law must be enforced." *timesofmalta.com*. <http://www.timesofmalta.com/articles/view/20150215/health-fitness/Food-allergy-law-must-be-enforced.556149>.
- Strate, Robert, and Clinton Rappole. 2007. "Strategic Alliances Between Hotels and Restaurants." In *Hotel Management and Operations*, edited by Denney Rutherford and Michael O'Fallon, 265-281. Hoboken, New Jersey: John Wiley & Sons Inc.
- Union, Hotelstars. 2015. "Classification Criteria 2015-2020". Hotelstars.eu Accessed February. [http://www.hotelstars.eu/fileadmin/download/kriterien/Hotelstars\\_Union-Classification\\_Criteria\\_2015-2020.pdf](http://www.hotelstars.eu/fileadmin/download/kriterien/Hotelstars_Union-Classification_Criteria_2015-2020.pdf).
- UNWTO. 2014. *Tourism Highlights*. edited by UNWTO. Madrid World Tourism Organization.
- Voedingscentrum. 2014. "Wet Voedselinformatie". Voedingscentrum.nl Accessed October. <http://www.voedingscentrum.nl/encyclopedie/wet-voedselinformatie.aspx>.
- Walley, Joan. 1970. *The Kitchen in Catering*. Third ed. London: Constable and Company LTD
- Webstaurantstore. 2015. "Food Allergy Safety Products." Webstaurantstore.com Accessed February. <http://www.webstaurantstore.com/article/21/food-allergy-safe-products.html>.

## European Union legislation

**Commission Decision (2009/578/EC)** of 9 July 2009 establishing the ecological criteria for the award of the Community eco-label for tourist accommodation service. OJ L 198/57, 30.7.2009.

**Council Directive 79/112/EEC** of 18 December 1978 on the approximation of the laws of the Member States relating to the labelling, presentation and advertising of foodstuffs for sale to the ultimate consumer. OJ L 33 / 1, 8.2.79.

**Council Directive 90/314/EEC** of 13 June 1990 on package travel, package holidays and package tours. OJ L158/59, 23.6.90.

**Directive 2000/13/EC** of the European Parliament and of the Council of 20 March 2000 on the approximation of the laws of the Member States relating to the labelling, presentation and advertising of foodstuffs. OJ L 109/29, 6.5.2000.

**Directive 2003/89/EC** of the European Parliament and of the Council of 10 November 2003 amending Directive 2000/13/EC as regards indication of the ingredients present in foodstuffs. OJ L 308/15, 25.11.2003.

**Directive 2006/123/EC** of the European Parliament and of the Council of 12 December 2006 on services in the internal market. OJ L376/36, 27.12.2006.

**Regulation (EC) No 178/2002** of the European Parliament and of the Council of 28 January 2002 laying down the general principles and requirements of food law, establishing the Food Safety Authority and laying down procedures in matters of food safety. OJ L 31/1, 1.2.2002.

**Regulation (EC) No 852/2004** of the European Parliament and of the Council of 29 April 2004 on the hygiene of foodstuffs. OJ L 139/1, 30.4.2004.

**Regulation (EU) No 691/2011** of the European Parliament and of the Council of 6 July 2011 on European environmental economic accounts. OJ L 192/1, 22.7.2011.

**Regulation (EU) No 1169/2011** of the European Parliament and of the Council of 25 October 2011 on the provision of food information to consumers, amending Regulations (EC) No 1924/2006 and (EC) No 1925/2006 of the European Parliament and of the Council, and repealing Commission Directive 87/250/EEC, Council Directive 90/496/EEC, Commission Directive 1999/10/EC, Directive 2000/13/EC of the European Parliament and of the Council, Commission Directives 2002/67/EC and 2008/5/EC and Commission Regulation (EC) No 608/2004/78. OJ L 304/18, 22.11.2011.

## ANNEX 1 Hospitality Regulations

### EU hotel legislation

#### Direct

Direct legislation in this context is legislation that is specifically formulated for the hotel industry. The current direct legislation for the hospitality industry focuses on consumer affairs and social affairs in regard of employment.

#### Consumer affairs

The consumer affairs that directly influence the hospitality industry are timeshare, package travel legislation and fire safety. Timeshare<sup>51</sup> is one of the hospitality industry's growing features (HOTREC 2012e). Another type of consumer affairs is package travel legislation, specifically Council Directive 90/31/EEC<sup>52</sup> which focuses on package holidays. The objectives of the Directive is to ensure consumers protection by harmonising the liability in tours and package deals (HOTREC 2012d). The last is fire safety with an EU recommendation that establishes four goals to achieve safer hotel structure against fire. The objective is to reduce the risk of fire and prevent flames from spreading. Also, it is to guarantee an easy fire escape route for all of the residents of the hotel (HOTREC 2012b).

#### Social affairs

For social affairs, legislation focuses on employment specifically the European hospitality skills passport. The passport is tailor-made with the help of organisations, such as HOTREC and EFFAT<sup>53</sup>. Basically the passport is a tool to develop and facilitate between jobseekers and the hospitality employers to overcome distance and language barriers (HOTREC 2011i).

#### Non direct

The non-direct legislation that influences the hospitality industry in Europe has also been derived from HOTREC's website. The legislation can be categorised into three parts: corporate legislation; tourism; and food and health. The key focus of this section is to emphasise the most influential legislation and exceptions given to the hospitality industry in these laws.

---

<sup>51</sup> This type possessions is a way for customers to own a piece of a vacation property that can be used once a year on a regular basis.

<sup>52</sup> Council Directive 90/314/EEC of 13 June 1990 on package travel, package holidays and package tours.

<sup>53</sup> the European Federation of Trade Unions in the Food, Agriculture and Tourism sectors.

## **Corporate legislation**

Hotel businesses are considered private companies in the EU legal classification. Therefore, the enterprise policies of the EU especially for private companies are applicable to hotels (HOTREC 2011e).

Copyright is a major concern for the hotel industry. The most important aspects in copyright for hotels is intellectual property, as hotels use this for protection of trademarks and designs (HOTREC 2011b).

Social affairs is another important legislative act for the European hotels, as the industry employs millions of workers (HOTREC 2011k). One of these aspects is the discrimination beyond the workplace, which is very important, as hotels are a service industry. Therefore, there must be no discrimination towards workers and most important guests in regard of sex, disability or religion (HOTREC 2011c).

Lastly, the internal market is also of relevance to the hospitality industry, as the EU institutions focus on further regulating it from the perspective of services. This influences the hospitality sector in general, as it establish the freedom to provide services in other Member States (HOTREC 2011j). Furthermore, Directive 2006/123/EC<sup>54</sup> is a major concern, as it mentions hotel classification as a major concern to further clarify the points on the provisions and classification points. This is important as classification sets specific rolls for food service in hotels star rating.

## **Stars classification**

For the stars division or classification, it is of key importance to firstly determine the quality of the service being served in the hotel. Therefore, there are certain requirements for a hotel to acquire a specific number of stars (O'neill and Mattila 2006). The requirements differ according to the country governing the regulations. This is because hotel chains are involved in different laws from diverse countries (Enz 2015a). The more stars the hotel acquires the more high-quality service it provides. With regards to food services, the more stars the hotel acquires the more emphasis will be on quality and special services to make the customer feel special and satisfied (Nebel 2007).

---

<sup>54</sup> Directive 2006/123/EC of the European Parliament and of the Council of 12 December 2006 on services in the internal market.

As previously mentioned, the classification structure is very important, whether property type or service style. In regard of food service, it is considered of key importance, as it defines the complexity and outlets of food service since that should be provided in the hotel.

The stars classification in Europe consists of schemes that are set on national- or regional level. Furthermore, some of the schemes are administered by non-governmental associations such hotel associations or unions. Moreover, the schemes are not compulsory in some of the Member States, and can be made by the national authority. The schemes are designed to protect the consumer and give them proper knowledge on the hotel establishments and its services, which is seen in Table 1 in Annex 1 (ECC-Net 2009).

The European Commission further regulates the internal market through legislation for the service industries in the EU (Directive 2006/123/EC). This notion has started the Hotelstars union, which is a harmonised stars classification scheme. The scheme is designed to be implemented in all of the EU Member States and other European countries outside the EU (Union 2015). Some of the details for the Hotelstars union can be seen<sup>55</sup> in Table 1 in Annex 1.

Table 1 Star classification:

Country	Amount of stars	Lounge minimum size	Room minimum size*	reception	Reception staff language	Food service	other
France	4*	70m <sup>2</sup>		24 hours	French + 1EU official language		
	5*	90m <sup>2</sup>	24m <sup>2</sup>	24 hours	French + English+ 1 foreign language	24 hours	Offer one optional service <sup>1</sup>
Ireland	4*	NA	18m <sup>2</sup>	8am – 23pm <sup>2</sup>	English + 1EU official language	7am-22pm	Special dietary meals available
	5*	NA	23m <sup>2</sup>			24 hours	
Italy <sup>3</sup>	4*	50 m <sup>2</sup>	NA	At least 12hours	Multilingual service, no specification	16 hours	NA
	5*	75 m <sup>2</sup>	NA	24hours		24 hours	NA
Spain	4*	NA	16 m <sup>2</sup>	NA	Spanish + English	NA	NA
	5*	NA	17 m <sup>2</sup>	24 hours		24 hours	NA

<sup>55</sup> [http://www.hotelstars.eu/fileadmin/download/kriterien/Hotelstars\\_Union-Classification\\_Criteria\\_2015-2020.pdf](http://www.hotelstars.eu/fileadmin/download/kriterien/Hotelstars_Union-Classification_Criteria_2015-2020.pdf)

Hotelstars	4*	NA	Room size are made on point level.	16 hours	NA	14 hours	NA
	5*	NA		24 hours	NA	24 hours	NA

\*size of double room only. 1 optional service includes swimming pool spa massage tennis hairdresser fitness centre. 2 minimum working hours' time. 3 the list is general and can deafer from one region to another.

In Table 1, most of the EU Member State schemes include specific minimum sizes of hotel rooms and lounges. Moreover, some indicate a specific amount of language requirements for the front office staff (ECC-Net 2009). However, the food and beverage services is similar in all the countries, which is set as 16 hours for four stars and 24 hours for five stars. Table 1 shows the variation between four- and five star hotels and between Member States. This is important, as it indicates the capability to cope with Regulation 1169/2011.

## ANNEX 2 SPSS Analyses

**Table 1: Your kitchen staff will manage to minimise allergen cross contamination.**

In which country is your hotel based?			Frequency	Valid Percent
France	Valid	Strongly agree	4	40,0
		Agree	4	40,0
		Neither agree nor disagree	1	10,0
		Disagree	1	10,0
		Total	10	100,0
Ireland	Valid	Strongly agree	1	25,0
		Agree	1	25,0
		Neither agree nor disagree	2	50,0
		Total	4	100,0
Spain	Valid	Strongly agree	4	80,0
		Agree	1	20,0
		Total	5	100,0
Over all	Valid	Strongly agree	9	47,4
		Agree	6	31,6
		Neither agree nor disagree	3	15,8
		Disagree	1	5,3
		Total	19	100,0

**Table 2: The food and beverage managers will manage to list all allergens on the menu card.**

In which country is your hotel based?			Frequency	Valid Percent
France	Valid	Strongly agree	3	30,0
		Agree	3	30,0
		Neither agree nor disagree	4	40,0
		Total	10	100,0
Ireland	Valid	Strongly agree	2	50,0
		Neither agree nor disagree	2	50,0
		Total	4	100,0
Spain	Valid	Strongly agree	2	40,0
		Agree	3	60,0
		Total	5	100,0
Over all	Valid	Strongly agree	7	36,8
		Agree	6	31,6
		Neither agree nor disagree	6	31,6
		Total	19	100,0

**Table 3: The staff serving the dishes are able to provide allergic consumers with detailed allergen information.**

In which country is your hotel based?			Frequency	Valid Percent
France	Valid	Strongly agree	2	20,0
		Agree	3	30,0
		Neither agree nor disagree	4	40,0
		Disagree	1	10,0
		Total	10	100,0
Ireland	Valid	Strongly agree	2	66,7
		Neither agree nor disagree	1	33,3
		Total	3	100,0
Spain	Valid	Strongly agree	3	60,0
		Agree	2	40,0
		Total	5	100,0
Over all	Valid	Strongly agree	7	38,9
		Agree	5	27,8
		Neither agree nor disagree	5	27,8
		Disagree	1	5,6
		Total	18	100,0

**Table 4: The chance of giving a false impression as to allergens will increase due to un-proper oral allergen information.**

In which country is your hotel based?			Frequency	Valid Percent
France	Valid	Agree	3	33,3
		Neither agree nor disagree	5	55,6
		Disagree	1	11,1
		Total	9	100,0
Ireland	Valid	Strongly agree	1	25,0
		Agree	3	75,0
		Total	4	100,0
Spain	Valid	Agree	2	50,0
		Disagree	1	25,0
		Strongly disagree	1	25,0
		Total	4	100,0
Over all	Valid	Strongly agree	1	5,9
		Agree	8	47,1
		Neither agree nor disagree	5	29,4
		Disagree	2	11,8
		Strongly disagree	1	5,9
		Total	17	100,0

**Table 5: The consideration of allergic consumer's needs will give European hotels in regard of food service a worldwide marketing advantage.**

In which country is your hotel based?			Frequency	Valid Percent
France	Valid	Strongly agree	2	22,2
		Agree	1	11,1
		Neither agree nor disagree	4	44,4
		Strongly disagree	2	22,2
		Total	9	100,0
Ireland	Valid	Neither agree nor disagree	2	50,0
		Strongly disagree	2	50,0
		Total	4	100,0
Spain	Valid	Agree	2	40,0
		Neither agree nor disagree	1	20,0
		Disagree	1	20,0
		Strongly disagree	1	20,0
		Total	5	100,0
Over all	Valid	Strongly agree	2	11,1
		Agree	3	16,7
		Neither agree nor disagree	7	38,9
		Disagree	1	5,6
		Strongly disagree	5	27,8
		Total	18	100,0

**Table 6: The necessity of allergen labelling will decrease the amount of times a restaurant changes its menu.**

In which country is your hotel based?			Frequency	Valid Percent
France	Valid	Strongly agree	2	25,0
		Agree	1	12,5
		Neither agree nor disagree	3	37,5
		Strongly disagree	2	25,0
		Total	8	100,0
Ireland	Valid	Strongly agree	1	25,0
		Disagree	1	25,0
		Strongly disagree	2	50,0
		Total	4	100,0
Spain	Valid	Neither agree nor disagree	2	50,0
		Disagree	2	50,0
		Total	4	100,0
Over all	Valid	Strongly agree	3	18,8
		Agree	1	6,3
		Neither agree nor disagree	5	31,3
		Disagree	3	18,8
		Strongly disagree	4	25,0

Total	16	100,0
-------	----	-------

**Table 7: The labelling regulation will push the industry to use more pre-packed foods instead of non-prepacked ones.**

In which country is your hotel based?			Frequency	Valid Percent
France	Valid	Strongly agree	2	20,0
		Agree	3	30,0
		Neither agree nor disagree	3	30,0
		Disagree	2	20,0
		Total	10	100,0
Ireland	Valid	Strongly agree	2	50,0
		Agree	1	25,0
		Strongly disagree	1	25,0
		Total	4	100,0
Spain	Valid	Strongly agree	1	20,0
		Agree	2	40,0
		Neither agree nor disagree	2	40,0
		Total	5	100,0
Over all	Valid	Strongly agree	5	26,3
		Agree	6	31,6
		Neither agree nor disagree	5	26,3
		Disagree	2	10,5
		Strongly disagree	1	5,3
		Total	19	100,0

**Table 8: The amount of food allergic customers will increase in restaurants because of the improved allergen labelling.**

In which country is your hotel based?			Frequency	Valid Percent
France	Valid	Strongly agree	1	10,0
		Agree	4	40,0
		Neither agree nor disagree	4	40,0
		Strongly disagree	1	10,0
		Total	10	100,0
Ireland	Valid	Strongly agree	1	33,3
		Agree	1	33,3
		Neither agree nor disagree	1	33,3
		Total	3	100,0
Spain	Valid	Strongly agree	2	40,0
		Agree	1	20,0
		Neither agree nor disagree	1	20,0
		Disagree	1	20,0

Over all	Valid	Total	5	100,0
		Strongly agree	4	22,2
		Agree	6	33,3
		Neither agree nor disagree	6	33,3
		Disagree	1	5,6
		Strongly disagree	1	5,6
		Total	18	100,0

**Table 9: Traditional cuisine in hotels is used as part of tourism marketing.**

In which country is your hotel based?			Frequency	Valid Percent
France	Valid	Strongly agree	3	33,3
		Agree	3	33,3
		Neither agree nor disagree	2	22,2
		Strongly disagree	1	11,1
		Total	9	100,0
Ireland	Valid	Strongly agree	3	75,0
		Disagree	1	25,0
		Total	4	100,0
Spain	Valid	Strongly agree	2	40,0
		Agree	1	20,0
		Neither agree nor disagree	1	20,0
		Disagree	1	20,0
		Total	5	100,0
Over all	Valid	Strongly agree	8	44,4
		Agree	4	22,2
		Neither agree nor disagree	3	16,7
		Disagree	2	11,1
		Strongly disagree	1	5,6
		Total	18	100,0

**Table 10: The European hospitality is known for the use of food bought daily in the local market.**

In which country is your hotel based?			Frequency	Valid Percent
France	Valid	Strongly agree	4	40,0
		Agree	2	20,0
		Neither agree nor disagree	3	30,0
		Strongly disagree	1	10,0
		Total	10	100,0
Ireland	Valid	Strongly agree	3	75,0
		Agree	1	25,0
		Total	4	100,0
Spain	Valid	Strongly agree	1	20,0
		Agree	2	40,0
		Neither agree nor disagree	2	40,0
		Total	5	100,0
Over-all	Valid	Strongly agree	8	42,1
		Agree	5	26,3
		Neither agree nor disagree	5	26,3
		Strongly disagree	1	5,3
		Total	19	100,0
Over all	Valid	Strongly agree	8	42,1
		Agree	5	26,3
		Neither agree nor disagree	5	26,3
		Strongly disagree	1	5,3
		Total	19	100,0

## ANAAX 3 Questionnaire

Dear participant my name is Majed AlMuhanna and I am a master student in Wageningen University in the Netherlands. My master research investigates the effect of allergen labelling on the menus served in your establishments. This questionnaire aims to understand the allergen labelling effect by reviewing the opinion of food and beverage managers or PR.

The mandatory allergen labelling for non-prepackaged foods is part of the European Union new food information law, which is effective since 13 December 2014 (Regulation EU 1169/2011). The hospitality industry will be affected article 44. The article requires that consumers must be informed about the allergenic substance of the food being served in the hospitality industry, particularly as to 14 allergenic substances.

The questionnaire consists of 10 statements and will only take 10 minutes maximum. Your answers will remain anonymous, and the data collected will only be used for the purpose of this thesis. Please answer to these questions, by indicating your approval or disapproval on a scale of 5 (strongly agree, agree, neither agree nor disagree, disagree, strongly disagree).

### First, Hotel characteristic:

1. In which country is your hotel based?	France	Ireland	Italy	Spain

2. How many stars does your hotel hold?	4 stars	5 stars

3. What is your hotel's capacity size?	Small 0-150 rooms	Medium 151-400 rooms	Large over 400 rooms

4. Is your hotel part of a hotel chain?	Yes	No

5. Which allergen information measures have you implemented in your hotel?
List the allergens in all menus.
Add sentence in menu " if you have any allergies please inform the waiter"
Provide separate menus with allergen content.
Provide a sign in the restaurant "for further information contact the waiter"

**Second, main statements:**

(Strongly agree, agree, neither agree nor disagree, disagree, strongly disagree).

1. Your kitchen staff will manage to minimise allergen cross contamination.	Strongly agree	agree	neither agree nor disagree	disagree	strongly disagree

2. The food and beverage managers will manage to list all allergens on the menu card.	Strongly agree	agree	neither agree nor disagree	disagree	strongly disagree

3. The staff serving the dishes are able to provide allergic consumers with detailed allergen information.	Strongly agree	agree	neither agree nor disagree	disagree	strongly disagree

4. The chance of giving a false impression as to allergens will increase due to un-proper oral allergen information.	Strongly agree	agree	neither agree nor disagree	disagree	strongly disagree

5. The consideration of allergic consumer's needs will give European hotels in regard of food service a worldwide marketing advantage.	Strongly agree	agree	neither agree nor disagree	disagree	strongly disagree

6. The necessity of allergen labelling will decrease the amount of times a restaurant changes its menu.	Strongly agree	agree	neither agree nor disagree	disagree	strongly disagree

7. The labelling regulation will push the industry to use more pre-packed foods instead of non-prepacked ones.	Strongly agree	agree	neither agree nor disagree	disagree	strongly disagree

8. The amount of food allergic customers will increase in restaurants because of the improved allergen labelling.	Strongly agree	agree	neither agree nor disagree	disagree	strongly disagree



## ANNEX 4 Allergens

Table 1: Listed allergens specified in Annex 2 of EU Regulation 1169/2011:

Food Item	Specifics	Details	Exception
Cereals	Wheat, rye, barley, oats, spelt, kamut.	Cereals containing gluten. Any hybridised strains of these.	Wheat-based glucose and dextrose syrups. Glucose syrups based on barley. Cereals used for making alcoholic distillates, including ethyl.
Crustaceans		Any products or by-products made from it.	
Eggs		Any products or by-products made from it.	
Fish		Any products or by-products made from it.	Fish gelatine used as carrier for vitamin or carotenoid preparations. Fish gelatine or Isinglass used as a refining agent in beer and wine.
Peanuts		Any products or by-products made from it.	
soybeans		Any products or by-products made from it.	Fully refined soybean oil and fat. Natural mixed tocopherols (E306), natural D-alpha tocopherol, natural D-alpha tocopherol acetate, and natural D-alpha tocopherol succinate from soybean sources. Vegetable oil derived phytosterols and phytosterol esters from soybean sources. Plant ester

		produced from vegetable oil sterols from soybean sources.
Milk		Any products or by-products made from it (including lactose). Whey used for making alcoholic distillates including ethyl alcohol of agricultural origin. Lactitol.
Nuts,	Almonds, hazelnuts, walnuts, cashews, pecan nuts, Brazil nuts, Pistachio nuts, Macadamia- or Queensland nuts.	Any products or by-products made from it. Nuts used for making alcoholic distillates, including ethyl.
Celery		Any products or by-products made from it.
Mustard		Any products or by-products made from it.
Sesame		Any products or by-products made from it.
Sulphur dioxide and sulphites		At concentrations of more than 10 mg/kg or 10 mg/litre in terms of the total SO <sub>2</sub> , which are to be calculated for products as proposed ready for consumption or as reconstituted according to the Instructions of the manufacturers.
Lupine		Any products or by-products made from it.
Molluscs		Any products or by-products made from it.

It is obligatory for food operators and the hospitality industry to indicate use of any of the food items in this list. Furthermore, they must list all food products that use these allergenic

components. Additionally, the law applies to the usage of them in food products (e.g. cheese is a milk by-product). In addition, Food operators must list these allergens, even if the final product is changed in its physical or chemical form (FSAI 2014).