

# **Efficiency of Public-Private Co-regulation in the Food Sector: the French Voluntary Agreements for Nutritional Improvements<sup>a</sup>**

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# **Efficiency of Public-Private Co-regulation in the Food Sector: the French Voluntary Agreements for Nutritional Improvements**

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## **Abstract:**

*This article analyzes co-regulation as a policy instrument that makes it possible to achieve synergy between public support and private efforts in the food sector. Our objective is to demonstrate the interest and the limits, as well as the conditions of the effectiveness of this instrument, through the analysis of the French voluntary agreements for nutritional improvements. We compared our interpretation of the French model for political action on the nutritional quality of the food offer to the results of our assessment of the agreements. We observed a gap between the political aspirations declared, the model designed and the actually trajectory that was followed: this public intervention is a response to the seriousness of the problem but not to its urgency. This analysis deals with two key dimensions of the modification of the offer by voluntary commitments: the intrinsic quality of the commitments and the part of the overall offer covered by these commitments. Should we attempt to minimally improve a large part of the offer or, instead, to try to obtain a radical improvement that may only involve a small part of it? We attempt here to provide new insights into this question.*

**Keywords:** Voluntary Agreements; Nutrition Policy; Voluntary Commitments; Public-Private Coregulation; Nutritional Environment; Quality of Food Offer; Charter Network; Charters of Voluntary Commitments for Nutritional Improvements; Obesity; Overweight

**JEL categories:** I18, D22

## Introduction

In industrialized countries, the imbalance between overly abundant dietary intake and the energy requirements of the population actively contribute to the determinism of non-communicable chronic pathologies<sup>1</sup> that are one of the major public health issues today (Hercberg and Tallec 2000). Among these diseases, obesity and overweight are on the rise in industrialized countries as well as throughout the world, even if obesity and malnutrition co-exist in many developing countries.

When analyzing debates on anti-obesity policies, two main approaches can be identified (Kersh and Morone 2005; Kersh 2009). On the one hand, there is the approach that has been dominant for a long time now that attempts to modify the behavior of individuals by focusing on political actions that target factors such as the improvement of knowledge, intentions, attitudes, motivations and tastes (Chandon and Etile 2010). On the other hand, there is the more recent and more ecological (in the Anglo-Saxon sense of the word) approach that considers obesity as the result of an unhealthy and obesogenic food environment (Kersh 2009; Swinburn, Egger, and Raza 1999) and that recommends intervening at the level of the individual's environment. Some authors feel that if the public considered obesity as the result of environmental factors, it would be more open to obesity prevention policies (Oliver and Lee 2005), which is a way of underlining the complementarity of the terms of this debate.

On the basis of these two approaches, public authorities would have two possible action levers in terms of nutritional policies: targeting individuals and their behavior (how they eat, what type of exercise they do) and/or targeting the environment (foods proposed, available exercise opportunities, urban planning, etc.) Actions on the food demand and offer can be classified, respectively, according to these two levers.

Among the interventions on food demand, we can include public actions based on information and education such as, for example, "guides to healthy eating, encouraging a healthy diet or an active life style through the media, advertising campaigns or interventions in schools, the workplace, in club networks or community centers" (Basdevant et al. 2006). Food labeling, including logos, is also considered as a support tool for promoting information policies (Etiévant et al. 2010)<sup>2</sup>. Research has not yet shown itself to be conclusive concerning the favorable effects on the nutritional quality of consumption choices of public actions on demand. This does not mean that public health measures based on information and education should be disregarded. However, they are insufficient because they offer a relatively limited impact potential for public authorities that must be supplemented by other means (Brownell et al. 2010; Brownell 2005).

In recent years, we have seen the emergence in many countries of public initiatives aimed at modifying the nutritional quality of the offer, targeting product characteristics and sales outlets, marketing actions and advertising. As early as the beginning of the 2000s, the British government engaged in negotiations with the food industry, which were quite difficult at the time, to reduce the salt content in processed foods (Jourdain-Menninger and Lignot-Leloup 2003). Food industry practices have also been criticized as have been their products for contributing to a poor diet, leading to overweight and obesity (Kersh and Morone 2002; Nestle 2002; Ludwig and Nestle 2008; Brownell and Horgen 2004). Even though some firms have implemented self-regulating policies to improve nutritional quality, these approaches are limited and their results are often mixed (Sharma, Teret, and Brownell 2010). Some authors consider that the solution to chronic illnesses linked to diet partially lies in innovation in the food industry and would thus encourage partnerships between the private and public sectors (Yach et al. 2010). Voluntary agreements are an example of these partnerships.

We analyze the factors that underlie the performance of voluntary agreements to improve the nutritional quality of the food offer. Our aim is to show the interests and the limits, as well as the

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<sup>1</sup> For example, cancer, cardio-vascular disease, osteoporosis, obesity, etc. Obesity itself is also one of the determining factors in the development of some diseases such as cardiovascular pathologies, type-2 diabetes, some cancers of the digestive system, etc.

<sup>2</sup> For a critical review of the literature concerning the effects of political actions on the food demand, the reader is referred to the collective appraisals "Obésité" (Basdevant et al. 2006) and the expert report, "Comportements alimentaires" (Etiévant et al. 2010).

conditions of the effectiveness of co-regulation, in the food sector. To do this, we analyze French voluntary agreements for nutritional improvement (hereafter referred to as charters). This system of voluntary agreements was launched by the French government in 2007 within the framework of the French National Nutrition and Health Program established in 2001.

We first focus on research on policy interventions relative to the food offer and on the different instruments of regulation of the offer, characterizing them on the basis of two elements: the degree of supervision of the approach and the relevance of the knowledge put into practice. We then describe the French charter system and how it operates, and analyze the profile of the signed charters. Too often judged on the basis of the sole criterion of the number of agreements signed, we established performance indicators to build our own evaluation of the system and of the charter approach. We show that a gap exists between the political aspirations declared, the model designed and the actual path taken. We then show how this gap can be explained by factors linked both to the design and the implementation of the system. Our analysis deals with two key dimensions of the modification of the offer by voluntary commitments: the intrinsic quality of the commitments and the part of the overall offer covered by the signed agreements. It raises an essential question in terms of voluntary agreements concerning the food offer: Should we attempt to minimally improve a large part of the offer or, instead, try to obtain a radical improvement that may only involve a small part of it, in the hope that the rest of the offer will follow as a result of the phenomenon of peer pressure between the economic actors? In other words, how can we reconcile the level of requirement imposed on the economic actors with the level of commitment to the approach on the part of these actors? Finally, we formulate some proposals aimed at stimulating the current public trajectory.

## Description of the method used

### *Choice of the case studied*

Co-regulation actions in relation to the offer are developing in other ways in other European countries as well. Some countries such as Italy, Spain and Belgium have begun to encourage unions in the agri-food sector to address these issues. For example, Italy, within the framework of its *Guadagnare salute* program, signed collective agreements to reduce the salt content in bread and in a type of pasta (gnocchis) with bakers' associations and pasta manufacturers, respectively. Within the framework of its Nutrition, Physical Activity, and Prevention of Obesity Strategy (NAOS), Spain succeeded in decreasing the salt content in bread through an agreement with the baking sector that surpassed the initial promises made by professional stakeholders in the sector. Agreements related to marketing and advertising have also been signed. Regardless, these agreements are rare within each country and involve a limited number of sectors and nutrients. Moreover, they are not the object of a formal control procedure with specific rules established by the government beforehand. In other words, the approaches do not correspond to a general model but are based on fragmentary, occasional, insystematic actions. The purpose of these remarks is not to judge the effectiveness of these agreements beforehand but, instead, to point out their most obvious differences in relation to charters. Precursors among the voluntary agreements in the European food sector, the French agreements are unique in that they are the object of a procedure of control, validation, follow-up and evaluation that is clearly laid out beforehand and that is the same for all of the candidates. Each agreement includes the possibility of undertaking improvements concerning several aspects of the nutritional quality of the offer at the same time (composition, size of portions, organization of sales outlets, etc.), as well as several nutrients at the same time (lipids, sugar, fibers, etc.). The content of the agreements is based on proposals by economic actors who may participate in a collective capacity as well as in an individual capacity.

### *Qualitative approach*

Our qualitative analysis is based on the interview method (Kvale and Brinkmann 2009), the analysis of documents and note-taking in the field. Guided interviews with open questions that we have conducted can be considered as a succession of centered, semi-directive interviews (Romelaer 2005). We obtained and analyzed two types of data. The first type concerns primary data gathered (i) during 30 interviews of two to three hours, recorded and transcribed, with actors mandated by the government who participated in these nutritional policy actions, public and private food and nutrition experts,

actors from industry, the mass market sector, professional and syndicated food associations, etc.; and (ii) during public presentations, working group meetings in which we participated, informal discussions, etc. The second type deals with secondary data taken from written sources (particularly the texts of agreements that were signed and made public, as well as in private and public documents, news articles and research papers) and audiovisual documents (presentations, interviews conducted by third parties).

## Public intervention on the food offer: a promising avenue in terms of public health

Public and private sector efforts were traditionally concentrated on information policy (Golan and Unnevehr 2008), assuming that the problem lay in consumer behavior and, therefore, the necessity to inform them about their choices (Kersh and Morone 2005). However, an alternative vision of the problem gradually arose as a result of the development of diseases linked to diet: “many dietary choices are predetermined or influenced by market forces that are beyond the control of individual consumers” (Golan and Unnevehr 2008). As of that time, it became obvious that the problem no longer depended on consumer decisions alone, but on the nutritional environment as well. “The underlying notion is that choices must be made, but the environment affects the content of choice.” (Brownell et al. 2010). For Kersh & Morone, the dissemination of misleading information by the food industry about their products could contribute to this change in perspective, as was the case for the tobacco industry in the United States (Kersh and Morone 2005).

Scientific studies concerning political interventions intended to modify the quality of the consumer's nutritional environment are less frequent than research on modifications of consumer behavior. Studies aimed at creating an environment favorable to physical activity and healthy diet present promising results (Basdevant et al. 2006). Among these studies, some focus on modifications of food composition in order to modify the nutritional quality of the offer, and on their impacts in terms of public health.

At the end of the 1990s, some scientific studies had already shown the positive effects of modifying the quality of the offer on public health. For example, Swinburn et al. reported that a decrease of 1% in the average fat content of fried potatoes would reduce the average annual fat consumption of New Zealanders by a third of a kilo per capita (Swinburn, Egger, and Raza 1999). More recent studies have revealed the beneficial effects of public and private strategies leading to modifications of the composition of foods in order to improve the quality of the offer. These analyses are particularly focused on the decrease of salt content (Girgis et al. 2003; Thomson 2009) and trans fatty acids (Unnevehr and Jagmanaitė 2008; Saunders et al. 2008; L'Abbe et al. 2009; Ricciuto, Lin, and Tarasuk 2009; Ratnayake et al. 2009) and on the increase in fiber content (Mancino, Kuchler, and Leibtag 2008).

Combris et al. simulated the effects in France of an improvement in the content of the major macronutrients in some food categories (Combris et al. 2011). They observed a wide variability of nutritional quality within each food category. Moreover, it appeared that products with lower nutritional quality would lead to large modifications in the quantity of nutrients on the market and, as a result, to changes in the level of nutrients consumed by individuals. The simulations produced by this study suggest potential positive effects in terms of public health of an intervention on the offer based on the reformulation of the content of several macronutrients, which would not significantly affect taste or production costs.

How then can the nutritional quality of the food offer be modified? Among the panoply of available tools, which ones could be implemented to most effectively express this potential?

## Intervention instruments for modifying the food offer

Three ways to regulate the food offer found in the literature aim at directly improving the nutritional quality of foods by modifying their composition<sup>3</sup>. They include direct regulation or “command and control regulation”, self-regulation and co-regulation between public and private actors. We have characterized them on the basis of two elements: the degree of supervision of the approach and the relevance of the knowledge mobilized.

Command and control regulation of the content of industrial trans fatty acids (ITFA) in different parts of the world reveals the interest in this type of intervention. In the United States, for example, a 2003 ruling of the Food and Drug Administration (FDA) made it mandatory to indicate the quantity of ITFA per serving on the nutrition label of packaged products as of 2006. This regulatory response led to increased public awareness of the ITFA content in foods and led some cities and states to take measures to limit ITFA content in restaurant foods (Eckel et al. 2007). The New York City Board of Health was the first to require certain types of restaurants to reduce artificial trans fats to less than 0.5 g per serving by July 1, 2008. This regulation had an impact on some 20,000 restaurants and 14,000 food service suppliers (Unnevehr and Jagmanaite 2008). Another example is that of Denmark where ITFA allowed in processed or restaurant foods was limited to 2% in 2004. However, as explained by Unnevehr and Jagmanaite (Unnevehr and Jagmanaite 2008), ITFA are an undesirable component with no nutritional or sensory function, and that can be quite simply reduced or eliminated from a recipe, which is not the case for other nutrients targeted by nutritional policies. Given the large number of food categories and the variety of products in each category, a general regulation would be inappropriate. On the other hand, a specific regulation per type of product would be practically unfeasible and probably impossible to enforce, given the large number of specificities and the extensive control measures that would have to be implemented. It would nevertheless be possible to target some specific nutrients in specific products, i.e., salt content in bread (Girgis et al. 2003). However, in the majority of cases, the public authorities would be faced with a lack of relevant technical information specific to each type of product and, moreover, specific to each type of product per manufacturer. This major constraint suggests that despite the strong supervisory framework provided by the regulation, the reformulation of foods would be practically unfeasible without the input of knowledge from the private sector. This argument introduces the two other types of intervention in which the role of the private sector is essential: self-regulation and co-regulation.

Self-regulation is in keeping with the trend towards corporate social responsibility (CSR) that includes the acceptability of a firm's activities and the integration of the firm into society. Within this framework, in addition to contributing to finding solutions to social problems, the firm would aim at avoiding the application, in the end, of more limiting measures on the part of the government. For some authors, self-regulation strategies could lead to the convergence of the interests of consumers, businesses and the government, but there is much debate surrounding these issues<sup>4</sup>. Some authors stress the limits of self-regulation (Wilde 2009; Lang 2006), for example the small number of participants in improvement efforts as well as the low level of these efforts is particularly striking. This situation could be explained by the existence of contradictions between market logics, business interests and expectations in terms of health (Harris et al. 2009; Hawkes 2007; Pomeranz and Brownell 2008; Pomeranz et al. 2009; Seiders and Petty 2004; Stanley and Daube 2009). For Sharma et al. beyond the motivation of the food industries to establish a self-regulation strategy, compliance with a certain number of rules is essential if self-regulation is to succeed (Sharma, Teret, and Brownell 2010). These rules emphasize the need for the industry to establish objectives to be reached on scientific bases and collectively, with the help of a group of independent actors (scientists, representatives of NGOs, parties involved in global governance), to report to the public and to be controlled, evaluated and monitored by global governing institutions. Despite the possibility for firms to mobilize relevant knowledge, they may fail in their voluntary self-regulation approach if there is no strict supervisory structure. If the government provides the structure, the public and private actors then fall within a co-regulation approach.

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<sup>3</sup> Improvement of the nutritional composition of products is a key aspect of the charter system.

<sup>4</sup> Head to head between S. Sugarman and S. Pramming in BMJ (Sugarman 2008; Pramming 2008).

Within a co-regulation approach, the government gives firms the right to play a legitimate role in the improvement of public health. At the same time, the government, through its supervisory structure, gives itself the right to guide and control firms' actions when they attempt to solve social problems. This is a way for the government to "channel" or "stimulate" motivations to make improvements, while helping these firms to avoid the danger of falling into practices exclusively intended to protect and/or to help advance their interests at the expense of those of the consumer. As in the case of self-regulation, the government recognizes that the firms are in a better position to determine which actions to choose in order to be compatible with economic and technological constraints. However, there is "nothing more deceptive than an alleged adjustment of interests without the framework that structures it and establishes its limits" (Lascoumes 1994). Voluntary agreements thus make it possible to reconcile the mobilization of relevant knowledge with compliance to public rules. Finally, within a co-regulation situation, the government has the possibility to go even further by giving itself the means to learn from the private actors in order to capitalize knowledge that it could eventually mobilize, for example, in certain cases, to establish a direct regulation.

## **French National Nutrition and Health Program**

The French National Nutrition and Health Program (hereafter referred to as PNNS) was implemented in December 2000 for a period of five years (2001-2005)<sup>5</sup>. It is coordinated by the Ministry of Health, in conjunction with government authorities responsible for agriculture and fisheries, consumption, youth and sports, national education and research. The budget allotted to this program positions it as one of the most well endowed of all those managed by the French Directorate General for Health, and some of its components have been incorporated into French public health plans and programs by pathology, e.g., diabetes, heart disease and cancer (Amson and Bas-Theron 2003) and by the law concerning public health policy (n°2004-806 of 9 August 2004). The second phase of the program was launched in 2006 and is known as PNNS2 (2006-2010)<sup>6</sup>, an extension and an expansion of PNNS1. The launching of the third phase, PNNS3 (2011-2015), took place in July 2011 (MS 2011). For a description of the PNNS, the reader is referred to the work of Serge Herberg et al. (Herberg, Chat-Yung, and Chauliac 2008).

This policy acts simultaneously on the food demand and on the food product offer. In its first phase, the PNNS (2001-2005) mainly focused on actions concerning information, orientation and education of the consumer in order to develop balanced dietary behavior and adapted physical activity, and to produce consumer recommendations<sup>7</sup>, while the objectives concerning the offer remained just words rather than being translated into tangible actions. In the second phase (2006-2010), actions related to the demand continued (campaigns to promote and disseminate nutritional recommendations for consumers, nutritional education in schools, etc.), whereas actions concerning the offer became effective, particularly through the French collective and individual voluntary charter network. Actions concerning the offer and the demand are continuing in the third phase (2011-2015).

## **The French voluntary charter network for nutritional improvement**

In France, the possibility offered to economic operators (EOs) in the food sector to sign voluntary agreements with the government, known as "charters of voluntary commitments for nutritional improvement", is one of the key actions launched within the framework of the PNNS. These EOs may be firms that produce, process or distribute food for human consumption or feed for animals<sup>8</sup>. They may belong to the agro-food industry, the retail sector, the mass catering sector or the agricultural production sector. They may also be a brand distributor or a professional or interprofessional organization or association.

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<sup>5</sup>(MS 2001).

<sup>6</sup>(MS 2006)

<sup>7</sup> "The first PNNS (2001-2006 (sic)) established a base of nutritional references that is now the official French reference frame" (extracted from the PNNS2 (MS 2006)). It consists of nine consumption benchmarks that are given in the appendix of the PNNS2 (MS 2006).

<sup>8</sup> The committee responsible for drawing up the reference model used the definition of a food sector firm given in EC regulation n°178/2002.

Charters can be classified in the category of "management-based regulation" (Coglianese and Lazer 2003; Sugarman and Sandman 2007). In this type of co-regulation, public authorities propose a contractual framework and encourage firms to propose plans to improve the nutritional quality of products, committing themselves to "inputs" (e.g., salt, fat or sugar content, etc.). The plans proposed are made public, but in the event of the non-compliance with the commitments made by the firms, there is no prescribed sanction.

We present below the elements that make up the charter network and its operation. We consider, like Foucault that a network is the system of relations that can be established between heterogeneous elements such as public declarations, institutions, rules, regulatory decisions, laws, administrative measures, scientific statements and proposals, all with a strategic function (Foucault 1994).

#### *A reference guideline and a committee responsible for charter validation*

To lay the operational groundwork for this action, an expert committee was empowered by the government to draw up a reference guideline capable of helping operators in the food sector to establish charters. This guideline also proposes orientations on possible means to be used for verification, validation and information about these commitments. This committee was made up of representatives from government agencies, professional and interprofessional organizations in the food sector, firms, consumer organizations, and from the French National Food Council (CNA), scientists specialized in nutrition, food technology and economics, and representatives from AFSSA<sup>9</sup> and INRA. A charter validation committee was created, in keeping with the recommendations of this guideline. It consists of scientists who are known and recognized in their field and is organized into four thematic colleges that are competent in the areas of nutrition, food technology, economics and marketing and sector economy. Each member signed a public disclosure statement. With the support of the Ministries of Agriculture, Health and Consumption, as well as the CNA, this committee is responsible for examining charter proposals, verifying their compliance with the reference guideline, and negotiating, if the case may be, its contents, and then giving their approval in the name of the government. The secretariat is operated by the Ministry of Health that is, as a result, the coordinator of this committee and of the overall charter network.

The reference guideline stipulates that these charters can be assigned to only one EO (individual charter) or to a collective EO (collective charter). In the official texts, the second case is explicitly preferred by the government "in order to involve the maximum number of operators and to increase the impact of public health" (MS 2006).

#### *Charters for nutritional improvement*

The aim of these charters is to improve the diets of the population in general, including disadvantaged populations. They therefore focus on the objectives defined by the PNNS for the population as a whole, on the consumption of salt and simple sugars, total lipids, saturated fatty acids, complex carbohydrates and fibers, and fruits and vegetables. The approach is progressive in that it is the effort that counts and not the level reached. "On principle, no product is excluded" from this progressive approach (MAAP 2007). Commitments can target the evolution of the nutritional composition of products, as well as sales conditions and consumption categories. They concern both nutritional composition and the quantities consumed. The reference guideline recognizes four possible areas of intervention: nutritional composition of existing products, creation of alternative products, product consumption (frequency, quantity, population, target) and "complementary" intervention areas (actions within a firm, support for research, etc.). Sub-areas have been defined for each area (Table 1).

These areas are not hierarchized. Nevertheless, if there is no commitment in terms of nutritional composition, the applicant must give reasons for this. According to the principle of retroactivity, commitments may concern improvements in progress or already made, subsequent to the launching of PNNS2. The validation of a charter is conditional on its significance, i.e., "that it covers a sufficient share of the applicant firm's products or a sufficiently large share of the profession represented by the

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<sup>9</sup> French Food Safety Agency, that now goes under the name of ANSES (French National Agency Responsible for Food Safety, the Environment and Work) since 2010.



organization that proposes the charter"<sup>10</sup>. Two other conditions can be added to this condition for admissibility. One concerns the presentation of the charter in compliance with the pre-established reference guideline. The other deals with the establishment of a calendar with the dates when commitments will be completed (MAAP 2007). According to the fairness principle included in the reference guideline, nutritional improvements that are the subject of commitments "must not affect the accessibility of products, particularly by an excessive increase in their prices" (MAAP 2007). According to the same principle, all of the segments of the product line must benefit from nutritional improvements. Each proposed charter is analyzed and presented to the validation committee by four of its members (one per college). The committee can ask for additional information from the candidate and organize a meeting with him and/or consult with the appropriate scientific experts. After discussion of the application, the validation committee issues its opinion on the proposed charter and decides whether or not to accept it. A letter signed by the president of the validation committee is then sent to the applicant to inform him of the committee's decision. If the charter is not accepted, the letter will include the reasons. It will suggest the necessary modifications to be carried out by the applicant so that the charter can be accepted if it is submitted once again. The time between the reception of a charter demand by the committee and the notification of the applicant as to its decision must be as short as possible. According to the reference guideline, it should not exceed two months, except in the event that the application requires other elements and complementary opinions. In practice, the application process usually takes longer. As an incentive to commit, the government gives approved firms the possibility of making their commitment to a "nutritional improvement approach encouraged by the government" known to the public, according to a very precise procedure.

The reference guideline specifies that this progressive and experimental approach is open to eventual adjustments.

Table 1. Areas and sub-areas of intervention for PNNS charters.

INTERVENTION AREA	INTERVENTION SUB-AREA
Nutritional composition of existing products	Nutritional characteristics, particularly modifications in the formulation aimed at reducing the content of salt, simple added sugar and total lipids Formulations other than those mentioned above Drawing up menus
Creating alternative products	Development of alternative products
Product consumption (frequency, quantity, target population)	Reduction of serving size Increase in the consumption of fruits and vegetables Organization of sales outlets Development of communication and information at sales outlets and outside of sales outlets Marketing, advertising and sales promotion
"Complementary" areas	External actions Internal actions

Source: MAAP, MINEFI, MS 2007

<sup>10</sup> In general, at least two-thirds - in volume, in turnover or in promotional expenses - of the products, or two-thirds of the members in the case of a professional or interprofessional organization (MAAP 2007).

### *Controlling compliance with commitments*

Commitment objectives must be precise, measurable, dated and controllable. According to the monitoring principle in the reference guideline (MAAP 2007), the signatory to the charter must transmit the results of the annual assessment of his commitments to the validation committee and to the Food Quality Observatory (Oqali). Taking the updating principle into account, a charter can be modified at the request of the signatory economic actors who are, moreover, held responsible to inform the validation committee every time that they consider that they cannot fulfill a commitment. The government, on its part, can request the modification or even the abandonment of the charter. This flexibility and the absence of sanctions in the case of non-compliance with the commitments do not mean that the government releases itself from commitment follow-up or assessment. The control of each signed charter, the means of verification of compliance with commitments as well as independent third parties responsible for carrying out this control are proposed by the signatory firms or signatory firm collectives to the charter validation committee (verification principle). Independent third parties are paid by signatory EOs. The government thus delegates its control function but may demand an official control in the case of an obvious misappropriation of a charter.

### *Monitoring the impacts on offer quality by the Food Quality Observatory*

The government uses Oqali to monitor the global implementation of commitments and to assess their impact on the global food offer (monitoring principle). This observatory was established at the beginning of 2008 by the Ministries of Agriculture, Health and Consumption, and its implementation was entrusted to INRA and AFSSA, in partnership with professionals and consumer associations. Its objective is to monitor the evolution of the nutritional quality of products (nutritional composition, serving size, nutritional information on packages, etc.), while taking socio-economic characteristics into account (consumption data, prices, market segments, etc.). This base is enriched with data from product manufacturers, some of whom may be charter signatories, with data from product packaging, with analyses of nutritional composition, and with databases on new products. One of Oqali's objectives is to keep the validation committee, third parties and signatories informed by providing them with analyzed data. The methodology used by Oqali has been progressively built and is formalized when it is drawn up in public reports. For a description of the Oqali, the reader is referred to the work of Menard et al. (Menard et al. 2011).

### *Thematic work reflection groups*

The charter network is completed by thematic working groups that bring together a wide range of actors and partners (representatives of producers, manufacturers, retailers, mass catering actors, consumers, AFSSA, INRA, government agencies, etc.), coordinated by the Directorate General for Food of the French Ministry of Agriculture. Their aim is to contribute, through this collective endeavor, to building a reflection platform to develop charters, mainly collective, by the EOs. Two thematic working groups, one on carbohydrates and the other on lipids, were established in September 2005 and September 2007, respectively. A third group devoted to salt was established more recently. Their missions are: to establish an accurate overview on the basis of existing data in order to create a common knowledge base that is shared by all of the participants; to determine the range of possibilities for making nutritional improvements, taking the constraints to which economic actors are subjected into account (technological, regulatory, organoleptic, economic, etc.); and to identify concrete actions to be implemented, particularly in the form of collective charters.

## **Charters signed within the PNNS framework**

### *Profile of signed charters*

Since February 2007, that is, some five years after they were launched, 30 charters have been validated and signed (MS 2012). Among the 30 charters, we can distinguish 26 individual charters, 24 of which were signed by manufacturers and two by distributors, plus four collective charters.

We can observe a strong predominance of individual compared to collective charters. The majority of the firms committed individually are involved in processing. The same is true for collective charters, of which only one is focused on a sector. The two distributors committed individually did so primarily

as processors<sup>11</sup>, i.e., for the manufacturing of their retailer brands. In general, the agricultural production link is almost absent among the signatories. Retailers are poorly represented in terms of their core activity. This situation suggests that, because of this, the key to nutritional innovation in foods is in the processing link, and that contributions made at other levels of the sector do not appear to be decisive.

Among the individual charters, 11 were signed by major groups for one or several of their brands or firms (e.g., Danone for Taillefine, Nestlé for Herta, Maggi, Cereal Partners France and Produits de nutrition infantile (Infant nutrition diversification products)) in four different charters. Fifteen individual charters were signed by independent, generally large firms. Small and medium-sized firms were virtually absent. Within the signatories of four collective charters, three professional unions and a French non-profit association can be distinguished from among the signatories.

Among the collective charters, that of the Fruit Section of the FIAC-ADEPALE (processed fruits) was signed by five firms that represent 64.5% of the sector and 69.9% of the union and that belong to the same level of the sector: processing. As for the charter signed by the FICT (cured meat products), in addition to the processors, there are two distributors since they belong to the union. Another situation is that of the UNIJUS (non-alcoholic soft drinks) charter. It was signed by a fraction of the professional organization: fruit processors, packers, distributors and importers. Brokers or suppliers of raw materials were excluded because they would not play a major role in the evolution of market products. In contrast, for the Bleu-Blanc-Cœur charter, the signatory non-profit association (whose mission is to organize animal production that integrated nutritional concerns) is counting on the involvement of "all of the actors of the food chain, from the linen producer to the final consumer". The four collective signatories all existed before the charter was signed, i.e., the members of the collective did not come together with the intention of presenting a common charter. Negotiations between collective members to arrive at a charter proposal were primarily focused on the level of improvement but not on the means necessary to achieve it. The member firms of the signatory collectives committed to issues that they could address with knowledge that they already possessed or that they were capable of producing themselves. The charters did not encourage exchanges of knowledge between firms, as was the case for the voluntary agreements in the automobile sector concerning the environment (Aggeri, Lefebvre, and Hatchuel 1995).

Table 2 sums up the main characteristics of the 30 signed charters. Only four propose commitments in the four eligible areas. All of the charters are committed to improvements in the area of nutritional composition. The majority of the charters include commitments on salt (25) and lipid (24) content, 11 are committed to decreasing the content of simple sugars, and four to increasing the content in complex carbohydrates, obviously depending on the characteristics of the products concerned by the charter. Twenty-three charters make commitments in the area of consumption, the majority of which (17) concern an improvement in labeling, generally of group 2 (15 charters)<sup>12</sup>. Some ten charters are committed to new products or those to be produced in the future, either for the creation of nutritionally-improved "alternative products", or via the commitment to integrate nutritional criteria into products to be produced in the future. Three charters address the question of the decrease in serving size, but none of the promises made concerning this subject have reached the status of a formal commitment. Some 20 charters propose commitments in complementary areas. They are mainly internal and deal with the improvement of the nutritional quality of the food of the signatory's employees.

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<sup>11</sup> Only one of the distributors, Casino, is committed in a distributor capacity, but only for an annual event for the "fruit and vegetable" department and for in-store nutritional balance awareness actions.

<sup>12</sup> The group 2 label displays the energy value: quantity of proteins, carbohydrates, sugars, lipids, saturated fatty acids, food fibers and sodium (Conseil des Communautés Européennes 1990).

Table 2. Comparison of the main characteristics of 30 signed PNNS charters

Signatory's name. Date and year of signature	Individual or collective charter	Type of economic operator	Type de product	Areas								
				Nutritional composition						Complementary		
				Salt	Simple sugars	Lipids	Fibers	Other nutrients	Integration of nutritional criteria in new products	Consumption	Internal	External
St Hubert (1/08)	I	F	FS	x		L				x	x	x
Orangina Schweppes (7/08)	I	F	NASD	x	x							x
Marie (7/08)	I	F	PDCA	x		L	x				x	x
Unilever France fats (7/08)	I	F	FS	x		L			x	x	x	
Taillefine (7/08)	I	B of Danone	DP		x	T		x			x	
Paul (11/08)	I	F	BP-S	x		T	x			x	x	
Findus (7/09)	I	F	PDCA	x		T,L			x	x	x	
Maggi (1/09)	I	B of Nestlé	PDCA	x		T			x		x	x
Herta (1/10)	I	B of Nestlé	CMP	x		T,L			x			
Davigel (1/10)	I	E	PDCA	x	x	T,L				x	x	
P'tit Louis (2/10)	I	B of Bongrain	DP	x		T		x		x	x	
Lesieur (2/10)	I	B of SAIPOL	FS	x		L		x			x	x
Mac Cain (4/10)	I	F	PDCA	x		L				x		x
Fleury Michon (7/10)	I	F	CMP	x		L				x		
Henaff (11/10)	I	F	CMP	x		T,L			x	x	x	
CPF (12/10)	I	B of Nestlé	BC	x	x		x				x	x
Kellogg's (12/10)	I	F	BC	x	x		x			x	x	x
Kiri (5/11)	I	B of Bel	DP	x		T				x	x	
La Vache qui Rit (5/11)	I	B of Bel	DP	x		T		x		x	x	
Uncle Ben's (5/11)	I	B of Mars	PDCA	x							x	
Thiriet (6/11)	I	F	PDCA	x	x	T,L				x	x	
Nestlé Infant Nutrition(11/11)	I	B of Nestlé	BIF	x	x	L					x	x
Mars chocolate (1/12)	I	B of Mars	C			T,L						
MerAlliance (1/12)	I	F	PDCA	x		L			x			
Casino (7/08)	I	R	MP	x	x	T,L			x	x		
Scamark (2/09)	I	R	MP	x	x	T,L				x	x	
FIAC-ADEPALE (7/08)	C	PO	PF	x							x	
Bleu Blanc Cœur(11/08)	C	A	PEO3			L				x		
Unijus (11/09)	C	PO	NASD	x	x					x		
FICT (12/10)	C	PO	CMP	x		T			x	x		

Notes:

PDCA = Prepared dishes and cooking aids; CMP = Cured meat products; DP = Dairy products; FS = Fats, sauces; BC = Breakfast cereals; NASD = Non-alcoholic soft drinks; BP-S = Bakery products and snacks; BIF = Baby and infant foods; PF = Processed fruits MP = Miscellaneous products (for Casino, it covers all of its food products with the exception of certain specified products; for Scamark, it is for cereals, pastries, cereal bars, dairy desserts, NASD) C = Confectionary; PEO3 = Products enriched in omega 3 fatty acids; x = Economic operator committed in this area; T = Economic operator committed to lipid content; L = Economic operator committed to lipid quality; F = Firm; R = Retailer; B of... = brand of (name of the firm); PO = Professional organization; A = Association; I = Individual charter; C = Collective charter.

As an example, Table 3 sums up the commitments made by a manufacturer in the charter that he signed with the government. Most of the commitments made by this manufacturer are in the eligible area, "nutritional composition". Within this area, proposed improvements concern the decrease of salt, simple sugars and lipids content, the improvement of the quality of the fatty acids used (a decrease in saturated and trans fatty acids and an increase in unsaturated fatty acids) and the increase in fiber content. The categories of products to be improved, final measurable objectives, the time necessary to fulfill the commitments, as well as follow-up methods, are also defined.

Table 3. Commitments included in the charter of the Marie firm

Area	Commitment	Improved products	Dates	Follow-up method	Final measurable objective
Nutritional composition of products	To pursue the reduction of salt content by an average of 22% on...	...categories: prepared foods, quiches, tarts pies and pizzas...	... between 2005 and 2010.	Laboratory analyses to quantify sodium content	Decrease of: 20% on prepared foods; 25% on quiches, tarts and pies; 20% on pizzas
	To decrease the content in saturated fatty acids to the benefit of mono unsaturated fatty acids and omega 3 fatty acids by replacing sunflower oil with rapeseed oil in...	...all products concerned by the charter ... (exhaustive list in the public version of the charter)	... July 2008 to end of 2010.	Control of the type of oil used and therefore purchased from suppliers.	Use of rapeseed oil instead of sunflower oil in Marie factories.
	To continue to optimize the fat quality by decreasing the trans fatty acid content of...	... its products (crusts for quiches, tarts and pies), thanks to the control of its raw materials...	... July 2008 to end of 2010.	Control of the type of margarine used and its trans fatty acid content.	Incorporation of margarine with a maximum content of 2% trans fatty acids.
	To increase the fiber content of its crusts by 13% using T80 flour for...	...its references for frozen pizzas, frozen family-size tarts and fresh individual and family-size pies...	... July 2008 to end of 2010.	Percentage of references using only T80 flour.	100% of the Marie brand frozen pizzas and tarts and fresh tarts are made using T80 flour.
Intervention on product consumption	To indicate the nutritional values of group II (dir. CEE90/496) on the label of...	...100% of its products and on the Internet site...	... July 2008 to end of 2010.	Not indicated in the public version of the charter.	100% of the references: have type II nutritional labels, their nutritional information can be found on the Internet site. Dieticians available at call centers.
Related areas	To support research			Not indicated in the public version	Not indicated in the public version

Source: data published on the Website of the French Ministry of Health (<http://www.sante.gouv.fr/les-chartes-d-engagements-de-progres-nutritionnels.html>)

The texts of the charters and interviews with the EOs reveal that for some firms, nutritional improvement initiatives began long before the PNNS2 through more or less formalized actions. Companies like Unilever, Danone and Nestlé had already undertaken nutritional improvement measures and created their own in-house nutritional quality reference guidelines. For example, Unilever established a nutrition enhancement program (NEP) to assess the integrality of products produced by the company in order to improve them when necessary and technically possible. Improved products that comply with international nutrition recommendations are identified by the logo "My choice". Unilever decided to share the NEP with other companies, which is why their method is in the public domain today (Nijman et al. 2006). For those companies that were already "initiated" to nutrition improvement, the charter network would only have strengthened or perhaps even legitimized their approaches. Most of the signatories show an anteriority in terms of nutritional efforts in relation to the PNNS by indicating the date of the beginning of their nutritional improvement measures that include a wide and heterogeneous range of very different types of actions (development of a strategic advertising logo, improvement of product composition, establishment of a quality approach, educational measures, development of an in-house charter, support for nutritional research, etc.), initiated sometime before the launching of the PNNS. For example, Davigel SAS (frozen

products) claims to have undertaken a "nutrition, health and well-being" approach within its quality system some 30 years ago, but it was in 1998 that it established its first nutritional composition improvement approach aimed at reducing the fat content of breaded fish batter.

For other firms, the network may have played a role in triggering nutritional improvements or by encouraging the systematization of improvements carried out in an unsystemized way until then.

Some signatories explain what the charters represent for them. For firms, such as Findus, the official commitment allows them the possibility of disseminating information about nutrition. For yet others, such as Davigel SAS or Fleury Michon, the official commitment in the charter represents the opportunity "of making its initiatives known and going even further" or "confirming its sincerity and the perennial character" of the company's approaches, respectively. For St. Hubert, the commitment is a means for assuming its responsibility as an industrial actor. Commitment charters are seen by some firms as a means to motivate the firm as a whole (St Hubert, Orangina-Schweppes, Lesieur), of federating teams (Marie) and/or of mobilizing partners and suppliers around a project (Scamark). For the associates of Bleu-Blanc-Cœur, the commitment is "a beginning of recognition of their efforts", as well as a "hope for the future of their products".

Some signatories link their nutritional improvement approaches to environmental issues (e.g., Scamark) or to sustainable development (e.g., Casino) or corporate social responsibility approaches (e.g., McCain).

#### *Direct impacts of the charters on offer quality*

Two studies were carried out to assess the impacts of these charters. The aim of the first one (Oqali 2010a) was to assess, from a theoretical point of view, the potential impact that charters may have on the nutritional intake of French consumers by varying the share of consumption of nutritionally-improved products. According to this study that was applied to 15 charters, there are significant variations in relation to the total daily reference intakes for sugar, fiber, lipids, sodium and vitamin D (Table 4) under two conditions. The first is that the commitments are respected for all of the products in the same category on the market. The second is that each adult consumer is totally faithful (100%) to the nutritionally-improved products. According to this study, the impact of the charters depends on the size of the consumption factor, the number of nutritionally-improved foods available on the market, and the extent of the improvement effort on nutrient contents for a given food. The aim of the second study (Oqali 2010b) was to quantify the proportion of products concerned by the charters and their impact on the volume of nutrients put on the market. In contrast to the first study, this one focused on products and volumes that are actually improved following the signing of a charter, without extrapolating the improvements to other products in the same category. In the end, compliance with the commitments in the 15 charters considered would produce an estimated decrease of nutrients on the market of at least 11,727 tons of sugar-added sugar, 3,475 tons of lipids, 2,193 tons of saturated fatty acids, 223.4 tons of sodium, and an increase of 12 tons of fiber (Table 5).

Despite the contingent nature of the results linked, to a large extent, on the many hypotheses on which these studies are based, their results suggest an interest in the significant improvement of the composition of the offer, particularly when there is support for the demand.

Table 4. Total daily average dietary intakes, both reference and for the total fidelity scenario per nutrient, for adults

Nutrient	Total average daily dietary reference intakes (g/day+)	% of INCA2 foods affected (% of corresponding INCA2 consumption)	Total dietary intakes for "total fidelity" scenario (g/day+)	Variation in intakes in % (scenario "total fidelity"/reference)
Sugars	95	13.9% (9.0%)	91.0**	-4.2
Fibers	17.5	2.2% (4.8%)	17.9*	2.3
Total lipids	89.3	16.5% (8.5%)	87.1**	-2.5
Saturated fatty acids	36.4	2.0% (0.2%)	36.4	-0.2
Trans fatty acids	2.3	3.8% (0.4%)	2.3	-1.4
Sodium	2967.9	13.8% (11.3%)	2737.6***	-7.8
Calcium	914	0.3% (0.1%)	914.7	0.1
Vitamin D	2.6	0.7% (0.7%)	2.8***	8.3

Notes:

+ = total average daily intakes in g/day except for calcium (mg/day), sodium (mg/day) and vitamin D ( $\mu$ g/day).

\* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$  = significant difference between reference intakes and intakes with nutritional improvements.

Source: Oqali, 2010a.

Table 5: Assessment of the impacts of charters on the volume of nutrients put on the market

Nutrient		Impact of the charters on the volumes of nutrients put on the market (t/year)		Sectors concerned
		Low range	High range	
Sugars	Total impact	-11,727	-13,062	Non-alcoholic soft drinks, fruit juices and nectars, syrups, breakfast cereals, industrial cookies and cakes, cereal bars, industrial bread-making, ultra-fresh dairy products, processed fruits.
	reformulation	-10,435	-11,770	
	"market structure"	-1,292	-1,292	
Lipids	Total impact	-3,475	-4,225	Cold cuts, industrial cookies and cakes, cereal bars, industrial bread-making, prepared canned foods, fresh prepared foods, frozen products, crackers, fat spreads, cheeses.
	reformulation	-3,464	-4,204	
	"market structure"	-11	-21	
Saturated fatty acids	Total impact	-2,143	-2,179	Fat spreads, fresh prepared foods, frozen foods, food oils.
Fibers	Total impact	12	12	Fresh prepared foods, frozen foods.
Sodium	Total impact	-223	-239.5	Cold cuts, fresh prepared foods, prepared canned foods, frozen products, crackers, industrial bread-making, soups, cheeses, condiments.

Source: Oqali, 2010b

#### *External evaluation of the effectiveness of the network*

The PNNS2 text (MS 2006) provided for an external evaluation at the end of the program (2010) of the effectiveness of the measures implemented. This external evaluation was entrusted to the French General Inspectorate of Social Affairs (IGAS), as provided for in the text of the program, and to the General Council on Food, Agriculture and Rural Areas (CGAAER). The voluntary commitment

charters of the economic actors were qualified by this mission as an important action among those for which the PNNS2 was a triggering, contributing or enhancing factor. Nevertheless, the results obtained were considered to be insufficient. In terms of the "methodology and the action philosophy", the charter network is considered to be a real innovation by the external evaluation mission. However, the latter considers that "few charters were signed" and that the network "did not live up to its expectations" (Jourdain-Menninger et al. 2010).

## **Which assessment for the charter network?**

Generally speaking, and beyond the external assessment, most of the criticisms made of the network agree on the small number of charters signed<sup>13</sup>. We come back to this point here and provide other indicators of success that we used to build our own assessment of the network.

### *Number of charters signed*

At first glance, 30 charters signed in five years seems little. In fact, the number of charters signed and the rate at which they were signed casts doubts on the possibility of eventually fulfilling the government's aim that was to "reach a maximum number of operators" (MS 2006).

However, we can ask the question of little in relation to what? Is the number of charters signed a relevant indicator for the assessment of the network? What significance should be given to this indicator within an innovative and experimental network based on voluntary participation?

The high level of standards imposed could have discouraged certain economic actors from filing an application. Our interviews revealed that this worked in two ways. On the one hand, the high level of nutritional requirements discouraged certain companies capable of making improvements, but of limited scope. On the other hand, some companies capable of making technical improvements that corresponded to the nutritional requirements – therefore, the big groups – declared that they did not have the means necessary to put together the application package (very time- and labor-intensive and requiring a high level of expertise). For example, a large international group, well positioned to committing itself because it was already highly involved in the nutritional improvement of different products, told us that it had filed only one application due to the lack of time required to prepare other ones. This problem also and especially arose in relation to small and medium-sized companies that are poorly represented in the network. Nevertheless, this low adherence cannot be considered as an indicator of the lack of interest of EOs for the network. For example, in June 2011, 27 charters were signed, but the number of applications filed at the time was 43, i.e., 40% of the approaches proposed were not validated (and among those, some ten were abandoned)<sup>14</sup>.

The official texts (initiation document of the PNNS2 (MS 2006) and reference guideline(MAAP 2007)) do not specify either a measurable objective or a formalized indicator for the assessment of the charter network. The PNNS coordinators interviewed explained that it is the general objective of the program that should be evaluated. For them, the only interest of an action is its contribution to this general objective. They say that they are satisfied with the number of charters signed and emphasize the fact that effectiveness is a function of the existing window of opportunities. These actors consider that more time is required to have a bigger impact on the volume of offers. They explain that there are many charters being prepared since the process is so complex, and they see this as a measure of the seriousness of and the respect for the requirements imposed by the government.

Given the experimental nature of the network, we lack the means at this time to make a final judgment on this point. We consider that other factors should be taken into consideration.

### *Nutritional level of the commitments*

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<sup>13</sup> For example, we can find this criticism in the discussion of the initiation of actions to improve the offer within the framework of the French National Food Program (PNA), launched by the Ministry of Agriculture in 2010 (MAAP 2011)

<sup>14</sup> Data provided by one of the network's coordinators.



Our analysis of the charters reveals substantial commitments<sup>15</sup>, i.e., the operators' commitments were non-negligible in terms of the nutritional effort proposed. It also reveals that the improvements in composition proposed by the operators cover all of the eligible nutrients (given that they depend in large part on the type of product concerned) and that the proposals meet the requirements concerning the part of the offer covered by the charter.

The "proposal-negotiation-validation" process that leads to the signature of a charter seems to have contributed to this result. In this process, the point of departure, crystallized in the initial application, consists of prior knowledge and the constraints of the economic actors (technological, economic, organoleptic, sanitary). On the basis of this first proposal, a "personalized" negotiation takes place, with several back-and-forth discussions possible between the validation committee and the EO. This process acts as a strong filter to ensure that the commitments are accepted when they are significant and realistic. The possibility of proposing commitments "subject to conditions" (updating principle) also encourages the EOs to propose more ambitious commitments since they have the possibility of modifying their content or the level of the initial objective in the future if the motives to justify the change are valid (updating principle in the reference guideline). For example, Orangina-Schweppes is committed to improving the composition of soft drinks without alcohol if the improved products are validated by consumer tests. In this way, the network has contributed to dissuading, filtering or improving poorer quality proposals. The validation committee has in fact been criticized for pushing quality requirements to the extreme by considering that certain proposals to improve composition are insufficient despite the fact that they concern large volumes (Jourdain-Menninger et al. 2010). In the search for a compromise between the level of nutritional quality of a charter (assessed primarily on the basis of improvements in product composition) and the global volumes concerned by improvements, the strategy deliberately chosen by those responsible for the implementation of the network was therefore to give priority to quality aspects.

#### *Accessibility of improved products*

To our knowledge, there has been no quantitative assessment of the distribution of these improvements between the different categories of the population or of the impacts of nutritional improvements on product price as of this time. Our analysis reveals that the promised improvements are distributed across the product range. In other words, within a charter, improvements are not reserved just for the high end of the product range. We consider that the inclusion of this criterion as one of the conditions for eligibility of a charter was a determining factor for it to be complied with by each EO. Moreover, we observed that a very small minority of signatories explicitly commit themselves to questions of price. This aspect, considered as sensitive in the relationship between the government and the EOs, took a back seat when the applications were examined. Nevertheless, according to the experts consulted, no price increase is linked to nutritional improvements. Finally, limited level of adhesion is a way of negatively affecting the population's accessibility to improved products since only a small volume of products benefit from improvements.

#### *Fulfilling commitments*

According to the government that has confidential information, the commitments made by the EOs within the framework of the charters were fulfilled. The cases where the initial objectives had to be modified by the EOs with the agreement of the validation committee remain exceptional and even anecdotal. This suggests that the flexibility provided by the agreements, e.g., in the form of commitments "subject to condition", can be used correctly and judiciously by the economic actors. The very in-depth assessment of the charters, their public and publicized signature, and the availability of their content on an official site are all factors that may have contributed to the fact that the commitments were fulfilled. This compliance is even more meaningful since no sanction was planned in the case of non-compliance.

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<sup>15</sup> In order to analyze the nutritional level of the commitments, we particularly focused on improvements in the nutritional composition of the products, which is, as we have already seen, the central aspect of the charter network.

### *Ripple effects that are difficult to assess*

We observed that the commitments included in a charter, whether it be individual or collective, have an impact on actors other than the charter signatories. We call this the domino effect whose nutritional, economic and social impact should not be neglected. Even if a charter is individual, it mobilizes much more than just the signatory EO. In fact, signatories make commitments that have repercussions on other levels of the production chain and on other actors such as, for example, suppliers of raw materials or processed products that contribute to the composition of the final product (Table 6). A particular case is that of the retailer sector for the production of its retailer brands. For example, the Casino group, signatory of a charter, "works today with more than 450 food suppliers of which some are small companies"<sup>16</sup>. This means of subcontracting on the part of the retailer leads to a multiplier effect of its own nutritional improvement commitments on the manufacturers that produce the retailer brand products concerned by these commitments. It goes hand-in-hand with the role of innovation catalyzer played by the retailer in relation to certain retailer brand suppliers, and particularly small companies. The latter would perhaps not have undertaken nutritional improvement measures if the retailer had not integrated nutritional requirements into the selection criteria of the responses to the bid offers. Finally, in addition to the impacts of the charters on actors other than the signatories, we can also mention impacts on products developed by the same signatories but not within the scope of the charter. The commitment to improve a product can lead to improvements of other products of the signatory firm for which no commitment was made. For example, this would explain the case of Marie, the company that committed to replacing sunflower oil with rapeseed oil. This manufacturer has indicated that "other products not within the framework of the charter will also be concerned by this change in nutritional composition, in this case, crepes whose filling and batter contain oil".

Table 6. Impact of commitments made by the signatories at other levels of the production chain and in relation to other actors. Domino effect.

<b>Functions of the production chain or actors concerned</b>	<b>Type of impact</b>
Distribution on processing	Bid calls followed by specifications – Awareness, information – Source of innovation for suppliers' suppliers (forums)
Processing on distribution	Commitments related to national brands have an effect on retailer brands
Processing and distribution on the production of raw materials	Type of raw materials required and characteristics of fresh products
Processing on processing (processor supplier)	On processed ingredients that are part of the final product
Processing on the restaurant sector	Nutritional improvement of the offer proposed to the restaurant sector
Processing and/or distribution on consumers, health professionals, company employees, patients, journalists, research	Information, training, education, medical advice.

Finally, we can advance the hypothesis that the charter network motivated firms to self-regulate themselves with respect to nutrition. This could be interpreted as a type of unofficial adherence to the network that would allow firms to prepare themselves, without making an official commitment, to an eventual regulation that would be even more limiting. As a result of this tacit adherence, the EOs would find themselves in a better position compared to their competitors to address possible evolutions in the demand or pressure from interest groups to improve nutritional quality. This hypothesis could be tested with Oqali data.

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<sup>16</sup> Casino charter (MS 2012).

According to this analysis, to assess the impact of charters, it would first be necessary to situate the charter network in its context in order to define the limits of the system concerned by the impact of improvements. In other words, to define assessment indicators, it is necessary to carry out a global description of the system concerned by the overall changes caused by the network, i.e., to take the real second-order effects and outcomes that a public policy can lead to into account (Easton 1974; Duran 2010) whether they be positive or negative.

#### *Temporality and stabilization of public-private exchanges*

This global and systemic assessment goes hand-in-hand with an evaluation of the time required, e.g., how much time is considered reasonable to "reach a maximum number of operators"? Analysis of the charter network as it exists today in France reveals a particularly long time frame and a slow time step for the nutritional improvement of the offer. However, we must remember that one of the specificities of contractual policies is the integration of a time dimension (Lascoumes, Benghozi, and Robert 1989). Time is a factor in the preparation of charters, negotiations prior to their validation, in the flexibility that will make it possible to take eventual variables (price, consumer reactions) into account, in the progress of nutritional improvements, in the research process that underlies innovation, in the idea of emulation between firms, etc. The mobilization of a contractual and voluntary policy instrument attempts to integrate the approach into a long-term strategy. The role of negotiations between the public authorities and the EOs becomes a means to stabilize exchanges and to integrate technical changes into the agreements. Negotiation, in addition to fixing measurable goals, is also a "relational" system that "maintains and renews communication and exchange practices inasmuch as it introduces objective changes" (Lascoumes, Benghozi, and Robert 1989).

### **An ambitious network but out of phase with the urgency of expectations**

The lack of experience and the low availability of research on voluntary agreements in the area of nutrition may explain why criticism has focused on the number of agreements signed. With our extended approach, we took other aspects into account and highlighted new impacts of the network, some of which are difficult to measure.

Our interpretation of the charter approach reveals a network:

- that is demanding in terms of the nutritional performance of each commitment,
- in which the committed actors keep their promises,
- that is integrated into a long-term strategy,
- that is responsive to questions of the accessibility of products targeted by a charter,
- with effects on other products and on other actors than those directly concerned by the voluntary agreements, but...
- whose adhesion rate is too slow given the urgent nature of the problem of diseases linked to diet, the control of which it is supposed to contribute to.

The charter network would therefore address the seriousness of the problem but not its urgency. What were the limits of the model for political action on the offer set out in the PNNS that meant that the adhesion rate, and with it, accessibility to improved products for the largest number of people possible, were considered to have fallen short of the expectations? What stood in its way? Was it a gap between the model planned and the one implemented by the actors in the field? What occurred so that a model designed to lead to the signature of a large number of collective commitments instead produced individual agreements, with a rate of adherence considered to be inadequate by external reviewers?

In order to provide elements to answer these questions, we propose a description of the model for political action on the offer set out in the PNNS. We then attempt to identify the factors responsible for the observed gap between the intentions as stated in the official texts and the results obtained in the field.

## Our interpretation of the French model for political action on the nutritional quality of the food offer

According to our interpretation after analysis of the texts, interviews and official speeches, the model for political action on the nutritional quality of the food offer (Fig. 1) designed by the French government is based on the following three general assumptions:

- 1) **Consumers will not substantially transform their food choices in view of an improvement in their diets.** Despite the measures implemented concerning the demand, their commitment is insufficient and remains so even if they are aware of nutritional recommendations. Research in sociology has shown and explained this phenomenon, observed, in particular, in intermediate, low-income and precarious social classes (Régnier 2009) within which the frequency of obesity continues to increase in France;
- 2) **EOs will not spontaneously make nutritional improvements on the global offer in general and without affecting the accessibility of improved products.** Beyond the motivations of food firms to self-regulate themselves (Sharma, Teret, and Brownell 2010), self-regulation may be hindered by the fear of losing market shares. In fact, modifications implemented may alter the organoleptic quality and/or the costs of products, leading to price increases or the decrease in margins, for example (Golan and Unnevehr 2008). The government considers that nutritional improvements developed spontaneously by firms will not be sufficient to reach its public health objective. The public authorities consider that to improve the nutritional quality of the standard offer, in a general way and without changing its price (so that it is accessible to everyone), they most actively intervene to promote the participation of EOs;
- 3) **The government does not massively intervene on the markets, at least not in the beginning:** (i) not with an economic policy of taxing or subsidizing certain products; (ii) nor with a technical policy that would fix the standards that could perceptibly modify the characteristics of products on the markets (in terms of prices, organoleptic characteristics and nomenclature). The government has neither sufficient knowledge (Aggeri, Lefebvre, and Hatchuel 1995)<sup>17</sup> nor the means necessary to regulate and administer in these areas. Its lack of clear vision and its inability to assess the possibilities of the evolution of companies runs the risk of establishing measures that are unrealistic, not accepted and, as a result, not followed (Barde 1992). The food sector is characterized by a wide diversity of products and processes, and classic means of intervention do not appear to be adapted, except for certain nutrients and specific products. The government does not have the material means necessary for either the establishment or the control of such measures. As a result of this absence of direct intervention on the markets, the government also expresses its intention of maintaining the variability of the food offer.

On the basis of these three assumptions and according to our interpretation, the French government designed an action model whose target is the nutritional improvement of the offer by means of voluntary commitments to nutritional improvements, particularly collective ones. We propose a stylized representation of this model (Fig. 1):

- 1) **A framework and rules established by the government.** The purpose of this framework is to encourage EOs (individually but especially collectively) to make commitments on nutritional improvements formalized by the signature of the voluntary agreements with the government. In addition, the government determines the rules with regard to the EOs: (i) by providing a structure for their actions in the form of a reference guideline to be adhered to; and (ii) by determining the acceptable level of effort proposed, without establishing it beforehand, but rather through the acceptance or rejection of commitment proposals made by the EOs.
- 2) **Follow-up of the impacts from private efforts** on the nutritional quality of the offer. This involves highlighting (i) the efforts of each signatory and their contribution to the

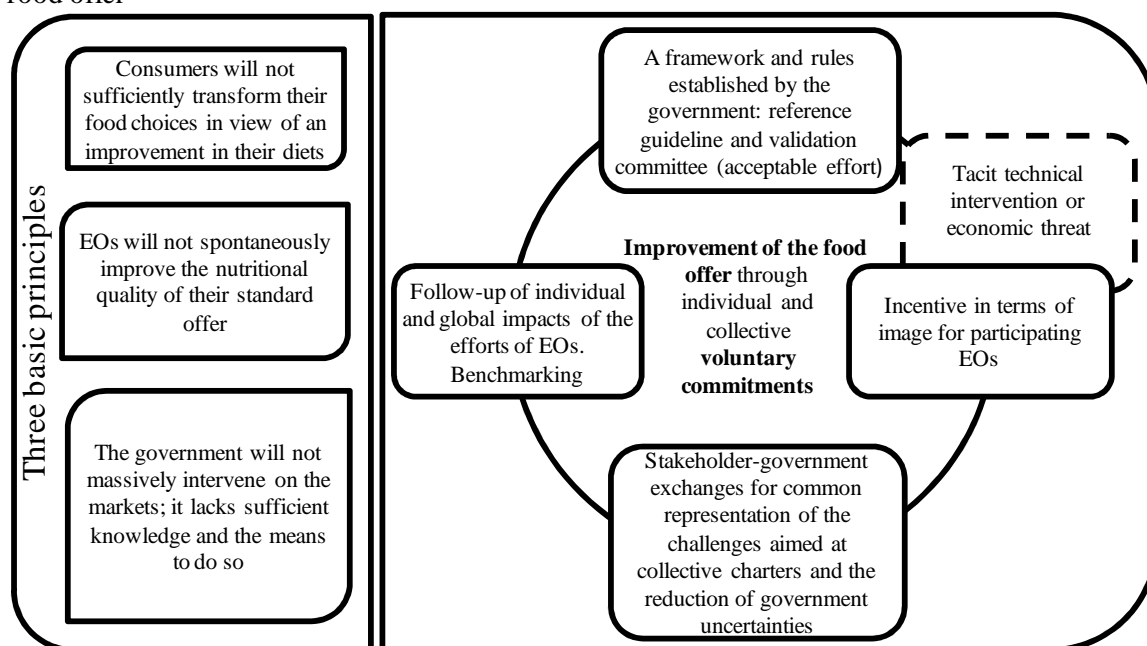
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<sup>17</sup> These authors show the importance of knowledge in the development of a regulation based on the definition of an "operational theory" of the regulation.

improvement of the quality of the global offer, as well as (2) the impact of the overall charter network on the improvement of the offer. The Oqali observatory is responsible for this follow-up. The aim of highlighting the impacts of private efforts is to create an emulation mechanism between firms.

- 3) **An incentive in terms of image for participating firms.** In order to make the charter network more attractive, the government gives firms the possibility of making their commitment known to the public. They can therefore use their efforts towards nutritional improvement to boost their image. On the other hand, no coercive measure will be levied in the event of non-compliance with the commitments. The government did not officially formulate a regulatory threat (or the threat of a future regulation). Nevertheless, the nutritional tax is always present, even in the background, in reflections and debates about nutritional policies. Projects to tax sweetened drinks (2007) and products with excessive fat or sugar content (2008) were presented to the French senate. In 2007, the senators had voted for the creation of a tax of 1% on sweetened drinks that did not get past a joint committee. The government then decided to present a report to parliament on the relevance and the feasibility of a nutritional tax. In this report (Hespel and Berthod-Wurmser 2008), experts from IGAS and the French Inspectorate-General for Finance (*Inspection Générale de Finances*) estimated that an increase in food taxes could be justified, particularly on the basis of the existing indirect value-added tax (VAT). At the same time, they pointed out the practical and political difficulties of this approach. Within a context of austerity and appeal to the collective effort to increase tax revenues, a "contribution on drinks containing added sugars" took effect in January 2012. It taxes fruit juices that contain added sugar, sweetened water and soft drinks. Even if public opinion seemed to consider that the only aim of this tax was to fill the government's coffers by financing the French National Health Insurance Fund for Employees (SNBR 2011; MINEFI 2012) and the agricultural sector, it served as a precedent that makes the tacit tax threat more credible.
- 4) **A common representation of stakes built by and with the concerned actors that allows the government to reduce its uncertainties.** Finally, this model integrates forums of cross exchanges and learning (Hatchuel 1994) between representatives of professional organizations, partners concerned by questions of nutrition and the government. This takes the form of voluntary working groups whose role it is to accompany participants in the development of collective charters. Within these groups, the actors participate in a process of collective construction of a common representation of the challenges, the constraints and the flexibility available for improving nutritional quality. Technological and organoleptic constraints, as well as those linked to cost, image, etc. of each one become common knowledge, shared by the economic actors, interest groups and the government. The validation committee is also a forum for crossed learning between experts. Through these forums, the government provides itself with the means for its own learning process on nutrition-related issues. According to Lascoumes et al. voluntary agreements are an instrument of law (Lascoumes, Benghozi, and Robert 1989; Lascoumes 1994). They must be seen as a transition phase in a more global process that can lead to a legal framework. This knowledge could therefore be mobilized by the government in the future, to readjust the charter network over time, as well as to establish other means of intervention than those based on voluntary actions alone.

Figure 1. Our interpretation of the French model for political action on the nutritional quality of the food offer



Notes:

Eos = Economic operators

## Obstacles standing in the way of the dynamics of the charter network

Between the "declared political aspirations" at the root of the model for action and the results obtained, the overlapping is not complete. What are the factors responsible for this gap? We identified three of them that are linked to the design of the network as well as to its implementation. We present them below, in no particular order.

### *A poorly adapted incentive*

Firms are naturally prone to develop innovation projects on differentiated segments on which they can make a surplus value. However, investing in innovation when there is no differentiation possible may lead to considerable commercial risk, especially if there is no guarantee that these innovations correspond to a market demand. A company may change the organoleptic quality of a product, taking the risk that its regular consumers will no longer be willing to pay, in which case it would lose its share of the market.

In order for a company to improve the nutritional quality of its products, the result should be acceptable from the economic point of view. This acceptability can also be the result of indirect effects that a company expects, for example, its integration, through its nutritional improvements, into a sustainable development approach or one of corporate social responsibility, etc. Sanctions or the threat of the establishment of another more limiting policy instrument can also encourage firms to undertake voluntary approaches (David 2004). Sanctions are absent in the charter network and if the threat of the application of another instrument exists, it is not explicitly laid out and is therefore not totally credible (Segerson and Miceli 1998; Krarup 2001).

By giving the possibility of making their commitment public, the government hoped to incite the EOs to improve their standard offer and to reward them for their efforts, considering that if it offered nothing in exchange, they would have no reason to join the network. In fact, some firms explained their refusal to make their commitment public in terms of strategy and the image of their products (consumers could then say: "so, your products were not up to nutritional standards before?"). Several firms found that the commitment was more interesting in relation to legitimizing in-house approaches

in progress or to be undertaken, rather than in relation to consumers. Moreover, some EOs ask if they could mention that they participated in a "nutritional" approach and not a "nutritional improvement approach". Also, the incentive offered by the government seems to be poorly adapted to counteracting the commercial risks incurred by product change. Moreover, this mention may contribute to the consumer's confusion. On the one hand, it is independent of the level of effort involved. On the other, as a result of the halo effect (Thorndike 1920), the consumer can interpret it as a guarantee of the good nutritional quality intrinsic to the product and not as the participation in a quality improvement approach. It would seem possible that for this same reason, the validation committee experts hesitated to validate a charter in some cases<sup>18</sup>. These cases concern foods that, despite the improvements proposed, will always remain too rich in those nutrients whose consumption it would be desirable to reduce. As a result of this incentive, can all foods then be considered in the same way in relation to nutritional improvement efforts, as indicated in the reference guideline? Moreover, how obvious would it be for the consumer to choose between a product undergoing improvement with the mention, "brand committed to a nutritional approach encouraged by the government (PNNS)" or another that does not carry this mention, especially if the latter has already been nutritionally improved in the past (before the PNNS2) and if, in absolute terms, it has a better nutritional profile than the first. In this case, we are led to believe that the most relevant choice would be made by informed consumers who will always refer to the label and who know how to interpret it. Such an incentive would therefore strengthen the interest of carrying out complementary actions on the offer and on the demand. Finally, the improvement effort thus made known to consumers could lead, through a "license" effect (Khan and Dhar 2006; Sachdeva, Iliev, and Medin 2009) (Sachdeva, Iliev, and Medin 2009) to a higher consumption of the product and, therefore, the nutrients to be limited.

The choice of an incentive in the broader sense (mentions, sanctions, threats, etc.) is therefore an essential factor. The incentive must be adapted to the specific situation in which the agreement network will be established and to the aims that underlie these agreements.

#### *An ineffective follow-up of the impact of charters on the global offer*

We also observe that firms, signatory or not, ask Oqali to rate their products in terms of nutritional quality in relation to those of their competitors. For firms in the food sector, the follow-up of the offer quality, ensured by Oqali, has become a strategic tool, both for benchmarking and as an incentive to improve their products. In order for these analyses to be possible, several of these firms voluntarily transmit their data to Oqali. Paradoxically, the majority of the signatory economic operators did not transmit annual statements of nutritional improvements of products concerned by the commitments to Oqali, as provided for in the reference guideline. This situation stands in the way of the emulation mechanism, considered to be a key factor in adhesion to the network, especially for individual charters. They deprive the charter validation committee of elements that would increase the transparency and the objectivity of its work. It makes certain aspects of the network opaque to potential candidates and third parties responsible for reviewing applications. Last but not least, it makes it difficult to measure the impacts of the network on the nutritional and socio-economic characteristics of the offer.

#### *A shortage of collective approaches*

Few agreements were signed after completion of the work of the thematic groups, and among the small number of collective applications submitted, there were a number of proposals that were not followed up. It should however be mentioned that these groups constitute the only action intended to promote collective commitments within the network, which is probably due to the fact that the collective agreements were introduced into the texts at the request of the Ministry of Agriculture, whereas the Ministry of Health had only provided for individual agreements. In fact, the Ministry of Health, responsible for the implementation of the charter network, counts on emulation and competition. It considers that it is the individual agreements that will make it possible to go further in terms of nutritional improvement. Its position is that to sign only collective agreements would mean

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<sup>18</sup> See the report of Jourdain Menninger et al.: "The difficulty for nutritionists on the committee to accept the idea that only nutritional improvement is welcomed by the charter, even if it involves products considered in the beginning as "fatty, salty or sweet" (Jourdain-Menninger et al. 2010).

relinquishing part of the effort that could have been made by some firms within the collective. It considers that the firm that determines the level of collective effort is the one that will make the smallest contribution to improvement. The limit of this reasoning can be found in the organoleptic constraints that can hinder the most ambitious individual approaches, even if they are progressive. When changes in nutritional composition are collective, the risk of an eventual decrease in the interest of consumers for non-improved products is lowered since modifications are more generalized and their progressivity coordinated. The lack of interest of firms for the collective charters could also be due to the fact that firms do not really need to work together to find solutions to the technical challenges facing them in terms of the improvement of the nutritional quality of their products. They would not be in a situation of shared radical uncertainties (Aggeri, Lefebvre, and Hatchuel 1995) where the synergy of efforts would make it possible to end a deadlock and make better and faster progress. Firms seem to have the means to advance independently in the area of nutrition, and this is even more true when the diversity of the processes responsible for similar products can be a factor that limits the interest for common and generalized solutions. Moreover, for those firms capable of improving their products, the individual agreement is a means of promoting a competitive asset while maintaining a trade secret. Finally, collective agreements are more difficult to establish than individual agreements because it is necessary to mobilize and coordinate several different entities. If we add the limited efforts intended to promote collective agreements to what was just said, as well as the high level of requirement in relation to the commitments, we can perhaps explain the predominance of individual agreements.

As a result, the action model followed by actors responsible for the implementation of this policy deliberately distinguishes itself from the one provided for in the reference guideline. This raises an essential question: should we target a small, generalized improvement or should we set our stakes on a bigger improvement that affects only a small part of the offer in the hopes that, as a result of emulation, the rest of the offer will follow? How can we reconcile the requirement level with the level of adhesion?

## **How to reconcile the requirement level with the level of adhesion**

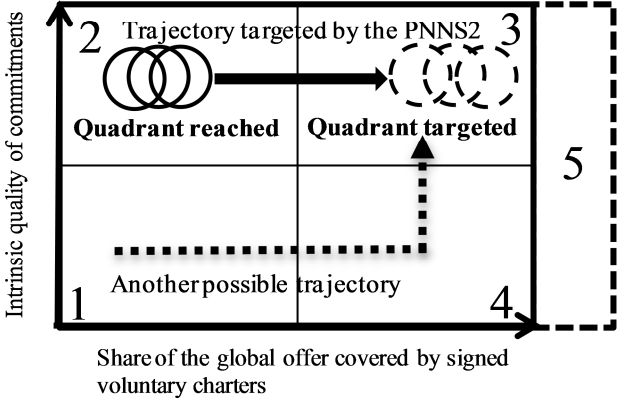
Modification of the quality of the offer by voluntary nutritional improvement commitments concerns two key dimensions: (1) the quality intrinsic to the commitments; and (2) the share of the global offer covered by signed commitment charters. This latter dimension can be assimilated to the number of agreements signed, even if it may vary depending on the competition structure of the sector and on the individual or collective character of the charter. Interactions between these two dimensions can be illustrated by a diagram of the four main quadrants (Fig. 2). They represent as many situations as possible in the commitment process and make it possible to trace the different improvement trajectories of the offer. Section 5 of the diagram represents the part of the offer that is not necessary to modify because it corresponds, for example, to traditional recipes or to festive foods. Taking quadrant 2 as a departure point, the aim of the French charter network is to progressively shift to quadrant 3, i.e., to obtain a large number of commitments, collective or individual, of high nutritional quality. A constant of this trajectory is the high level of requirements in terms of nutrition, as well as for the preparation of the application. This last aspect, far from being negligible, turned out to be an impediment for the submission of applications.

An alternative trajectory (Fig. 2) would have been to target a gradual increase in commitments that were less ambitious in terms of quality in order to obtain a large volume of the offer related to nutritional improvements, even of a limited scope (shift from 1 to 4). The second stage of this trajectory would have been the gradual increase of the quality of commitments on the part of the EOs, shifting from 4 to 3 or remaining in an intermediate shared position between quadrants 4 and 2 if some of the EOs did not improve the quality of their commitments above a certain level. We could have hoped for this type of trajectory if the signature of the collective charters had been presented to the EOs as a condition for signing more demanding individual charters with a specific mention at a later date. We believe that it is possible that the leading firms could act as a driving force so that their sector could collectively reach a minimum level of improved nutritional quality and sign a collective charter. These leaders would be guided by two motivations. On the one hand, they would want to differentiate themselves by signing more demanding individual charters. In this case, the question still remains as



to which incentive should be offered to allow the leaders to distinguish themselves. On the other hand, they would try to avoid any possible negative fallout on the sector's image incurred by the delay in terms of nutritional quality. This ripple effect propagated by the leading firms through professional organizations could also come about through the modification of the “usage code”<sup>19</sup> or the creation of an MQS (Minimum Quality Standard). Improvement would then be generalized and perpetuated. It is possible that at the end of this process, the number of potential candidates for the signature of more demanding individual charters would increase since some EOs, initiated despite themselves to the nutritional improvement approach, would perhaps discover a strategic interest. This reasoning nevertheless remains hypothetical.

Figure 2. Possible trajectories for the improvement of the nutritional offer through voluntary commitments



- Notes:
- 1 – Small number of commitments with low nutritional quality
  - 2 – Small number of commitments with high nutritional quality
  - 3 – Large number of commitments with high nutritional quality
  - 4 – Large number of commitments with low nutritional quality
  - 5 – Part of the offer that does not necessarily need to be modified (traditional recipes, festive foods, etc.)

Reasoning in terms of a trajectory leads to the question of the presence of elements that could act as positive ripple factors of these voluntary agreements based on emulation. We have identified two of them, which can be double-edged in practice. On the one hand, there is the commitment of leader groups in the food sector. In the charter network, candidates may be operators of a brand. This allows major groups to sign agreements by brand. Should the public authorities consider that the participation of a leader group in the network can have a positive ripple effect, even if this adhesion represents a small volume in relation to the group's total offer? Or, on the contrary, can a very limited commitment on the part of the leader group be interpreted by potential adherents as an action to save face and pretend to do what is expected by the public authorities? Should the public authorities sustain this means of adhesion for the major groups? Or, on the contrary, should they revise it by requiring these EOs to commit themselves as a group or, at least, for several of their brands (for example, set out conditions on the ratio between the proposed adhesion volume and the group's potential adhesion volume).

On the other hand, the principle of retroactivity to encourage adhesion can be found among the elements that may act as positive ripple factors, particularly in relation to exemplary actions. The case of the signatory, Bleu-Blanc-Cœur, well illustrates this approach. Bleu-Blanc-Cœur is an association

<sup>19</sup> Usage code or code of practice is a non-binding document offering a general framework for recommendations whose purpose is the adoption of uniform measures by the sector to which it is addressed. It contains general recommendations concerning practices and operations that must be implemented in the aim of reaching fixed objectives (Definition of the Food and Agriculture Organization of the United Nations).

whose mission is to organize animal production sectors that integrate nutritional concerns for consumers by providing plant-based feed for animals that is rich in omega 3 fatty acids. In these signed charters, the commitment of this association particularly focuses on the breakdown of what it has already accomplished. Would taking advantage of retroactivity to introduce exemplary approaches such as that of Bleu-Blanc-Cœur or to increase the number of signed agreements act as a positive ripple factor for competitors? Or, on the contrary, would the network be discredited in the eyes of potential candidates and consumers that may see this as just a way for the signatory to take advantage of a situation. Should retroactivity be considered as a windfall effect or as a just public recognition for an effort already made and that will remain "on the record" or "acquired" as the result of a charter and that, moreover, could be an inspiration to other firms?

This brief discussion casts light on the difficulties of the public authorities to identify clear signals to be sent to EOs to create positive dynamics within adhesion trajectories.

## **Conclusion and perspectives**

In the current situation, how can we accelerate the rate of adhesion to the network while reconciling nutritional performance and the volumes concerned? How can we stimulate the current trajectory? It seems that collective agreements should have a more significant place within the charter network at this stage.

An essential point for the development of collective agreements lies in the improvement of the government's knowledge concerning the flexibility available in each sector to identify "product category-nutrient" couples for which improvements are not particularly restrictive and may even be very simple. Work carried out with professionals in thematic groups and sector-related reports drawn up by Oqali take account of the nutritional improvement possibilities of products in certain sectors. A closer look at this work would make it possible, for example, to re-evaluate improvement possibilities of a more limited scope from the point of view of the resulting nutritional quality, but that would affect large volumes of the offer considering the number of operators ready to participate in such an endeavor. In the same way, experiences carried out in other countries and analyzed contingently would provide sources of knowledge to be mobilized.

The government could create "model" groups of voluntary firms with heterogeneous characteristics within certain sectors, with whom it could build the foundation for collective charters. On the basis of the experience of a "model" group, and after confirmation of the feasibility of improvement, the government could put pressure on all of the firms within the sector to make it evolve in the direction of the PNNS. In the same spirit, it would be necessary to think about revising and relaxing the rule, as recommended by Jourdain-Menninger et al., that established the proportion of members of an organization, either professional or interprofessional, necessary to enter into a collective agreement (Jourdain-Menninger et al. 2010). Even with a downward revision of these proportions, significant volumes of the offer could be improved.

As we have already mentioned, the difficulties involved in preparing an application for submission can be an obstacle to adhesion. The government could assist the EOs in this preparation. For example, it could facilitate the logistics, offer training to firms or groups of firms, or provide them with facilitators. Partnerships with local government agencies could be considered to move ahead on this point. Those responsible for the PNNS, warned by the EOs, are well aware of this obstacle that they had underestimated in the beginning. To remedy this problem, assistance to small and medium-sized firms for developing charters is included in the PNNS3, but the means are not specified.

We consider that the obligation for each signatory to transmit annual statements of the nutritional improvements of products concerned by the commitments to Oqali should be obligatory. This would make it possible to evaluate the direct impact of these improvements and to contribute to the positive emulation cycle while taking full advantage of it.

Concerning the mention given as an incentive, a revision appears difficult at this stage. In contrast, an evaluation of the use made by the signatories of the mentions demanded would be desirable. This "inventory" would make it possible to assess the real interest of this incentive, the possible necessity of modifications to be introduced and the impacts that they could have on the charters already signed.

The French network appears to be original and exceptional in relation to several points that we have analyzed. In the absence of experiences that could provide reference points to which we could refer, as well as measurable objectives established beforehand, the reference point used to judge the success or failure of the network is the expectations that it generated. These expectations were not fulfilled for many of the actors involved. While taking the specific time frame of this type of instrument into account, we consider that the urgency of health problems linked to diet forces us to reflect on the optimization of the adhesion rate and, particularly, on the increase of collective commitments. If nothing is done at this level, this action runs the risk of losing political support. We have made proposals on measures that could be undertaken at this stage.

Among the more general knowledge that we have drawn from this experience is that a voluntary agreement must not just be considered as an objective in itself but as a contribution to the improvement of the quality of the global offer. As a result, such a network must be thought out in terms of a trajectory, by strategically mobilizing the different resources available. According to the dynamics of this trajectory, we can be led to momentarily favor the volume of the improved offer rather than the quality of the signed commitments (within acceptable limits), giving priority to quality at another stage. The same is true for the choice between the use of individual and/or collective agreements and the most effectively adapted sequence to mobilize them.

Finally, since this is an experimental policy network, it is surprising that no revision has yet been made, especially since the reference guideline provided for an assessment of the network's operation at the end of the first year. After five years of operation, the time has come for the designers and the coordinators of its implementation to examine the network in view of the experience acquired and to make the necessary adjustments to the reference guideline. It is also the opportunity to clearly lay out the actual principles that determine the actions of the charter validation committee.

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