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"Enlarging the EU Food Safety Regime: Adjustments of Polish Food Safety Regulations to the Requirement of the EU Membership"

Motto:

"What they are short of is imagination. Officialdom can never cope with something really catastrophic." [Albert Camus, *The Plague*, p. 105]

Abstract

EU officials say that they cannot "allow enlargement to reduce the level of food safety in the EU"¹. Enlargement has been portrayed as a challenge to the goal of "ensuring that European consumers have access to the safest possible food supply in the world"².

While not denying that food safety is an important issue for the successful extension of single market principles to candidate countries, this paper is set to discuss to what extent the challenge to the EU food safety is due to the process of enlargement and to what extent it is an intrinsic feature of an increasing international trade in foods and more generally increased internationalization of economic activities, of which EU enlargement is a part. Furthermore the paper analyzes the methods the EU has been using in assuring that candidate countries meet food safety levels required from them and in general it discusses the institutional set up for the regulation of food safety which has been emerging in Poland under the EU influence.

The paper is organized in the following way. It starts by discussing specific problems of regulating food safety risks – problems stemming overwhelmingly from the nature of underlying risks, and by assessing comparative advantages of various regulatory instruments used to control these risks. Next it sketches main features of EU actions in the field of food safety, its requirements towards candidate countries and ways to influence the fulfillment of these requirements. Then, it presents the current state of food safety systems in Poland as it has been evolving under the influence of EU accession negotiations. Finally, it asks how the evolution of EU food safety system fits into broader processes of actions for the creation of a comprehensive, global system of food safety regulations.

¹ For instance the speech by Paola Testor Coggi, Director, Health and Consumer Protection Directorate-General to the CIAA Conference, Paris, 21 October 2002.

² Speech by David Byrne, European Commissioner for Health and Protection, to European Business Summit, Brussels, 6 June 2002.

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1. Introduction: from local to internationalized food safety regulations

Public rules regarding the production, transportation and sale of food are by no means an invention of contemporary governments receptive to the pressure of wealthy and susceptible to irrational food scares citizens. Already in ancient Athens beer and wines were inspected for purity and soundness and the Romans had a well-organized state food control system to protect consumers from fraud or bad produce. In Europe during the Middle Ages, individual countries passed laws concerning the quality and safety of eggs, sausages, cheese, beer, wine and bread. Some of these ancient statutes still exist today³.

The major challenge for ensuring food safety arrived with the birth of modern chemistry in the 19th century. The development of science has created a scientific base for modern food safety controls as it has allowed to look at the chemical parameters of food composition. Science has begun providing tools with which to disclose dishonest practices in the sale of food and to distinguish between safe and unsafe edible products.

Initially food quality and safety legislations were a purely local matter: by the late 19th century however leading countries adopted general food laws and established law enforcement inspections: food safety regulations became national in scope. A multi-ethnic (if not multi-national) nature of some of large imperial states made them precursors of modern attempts at internationalization of food safety regulations as they had to tackle in food safety legislation the question of different production techniques and different tastes. Thus for instance the Austro-Hungarian Empire developed between 1897 and 1911 a series of standards and product descriptions for a wide variety of foods, known as the *Codex Alimentarius Austriacus*, which, although lacking legal force, was used as a reference by the Empire's courts to determine standards of identity for specific foods. The present day FAO/WHO *Codex Alimentarius* draws its name from this Austro-Hungarian code.

Food safety regulations seem to be first and foremost a policy response to domestic public health problems, but with the intensification of international trade in foods all countries risk importing threats to public health. International trade in foods predate modern times, but this was trade limited in quantity and variety. Large scale

imports of products from exotic countries started in mid-1800s when bananas were first shipped to Europe from the tropics. In late 1800s long distance food transportation started with first shipments of frozen meat from Australia and New Zealand to United Kingdom.

Today international trade in foods amounts to 10 percent of the World food production. In 2000 in the group of most developed countries (the OECD area) import penetration of food reached 20 percent and showed a steep rise from 7 percent in 1992. The decade of 1990s was a period of rapid growth of international trade in food, but it was, to a large extent, an increase of food trade within an OECD area. In the future however a fast growth of share of less developed countries in the international food trade is forecasted as the index of their food auto-sufficiency decreased from 97 percent in 1960s, to 91 percent in late 1990s and is expected to fall further to approx. 89 percent by 2010. International food trade will grow since there will be an increasing mismatch between areas of food abundance and areas of food shortages⁴.

It might seem that food safety is a field of easy international regulatory co-operation, if not harmonization. With increasing cross-border food flows countries might create food safety problems to their partners, but at the same time they are vulnerable to food safety problems originated in other countries. Symmetry between problem making and problem taking is supposed to support regulatory co-operation. Yet, food safety regulations might create international conflicts when spontaneously or strategically (that is out of intent to exploit regulations to gain advantage over other countries) countries create domestic regulations which can be considered as technical barriers (invisible tariffs⁵) to trade in foods.

Today international sanitary and phytosanitary standards are being developed by three international organizations: *the Codex Alimentarius Commission*; the International Office of Epizootics and the International Plant Protection Convention. The conformity of national standards with the standards set by these organizations prevents from legal challenges under the WTO. That is why it is beneficial for

³ This paragraph has been drawn on the information contained in the text „Origins of the Codex Alimentarius” from <http://www.fao.org/docrep/W9114E/W9114e03.htm> and

⁴ International trade in food is expected also to grow in response to the need for food variety.

countries to stick to these standards, unless countries deem them too low or want to use food safety regulations for strategic trade purpose even at the cost of being challenged in the WTO.

Even if international regulatory bodies take lead in elaborating food safety standards and these standards can hardly be questioned, if one applies strictest requirements of scientific evidence, the question of proper implementation of international rules will remain national and conflicts might move from the conflicts over choice of standards to the conflicts over standards' implementation⁶. The issue of properly enforcing implementation of regulatory rules is gaining on importance and, as it will be shown, later is a crucial question for judging the impact of the ongoing enlargement on the EU food safety regime.

2. Food safety regulations: problems and methods

It is a widely shared opinion⁷ that regulating food out of concern for health and environment is a difficult task due to an interplay of scientific uncertainties, risky human compartment and quality of natural environment. In what follows no attempt is made to give a comprehensive picture of these difficulties and issues discussed have been chosen with view for their relevance to the discussion of the impact of the ongoing enlargement on the EU food safety regime.

2.1 Basic concepts

What is a safe food? An answer to this seemingly easy question can be stated only in general terms like this "a safe food is one that does not cause harm to the consumer when it is prepared and/or eaten according to its intended use"⁸. The safety of food is thus not an intrinsic feature of food, but a product of food's characteristics and the ways food is handled.

⁵ The term invisible tariffs was first used by Percy Bidwell in 1939 in *The Invisible Tariff*, New York: Council of Foreign Relations, 1939.

⁶ This line of argument has been tried by the EU in the WTO case regarding beef hormones where the EU pointed to the danger of hormone abuse by cattle ranchers, even if the Codex Alimentarius studies are right that hormones are „safe” when used in accordance with good veterinary practices [see: Alan O. Sykes, Exploring the need for international harmonization: domestic regulation, sovereignty, and scientific evidence requirements: a pessimistic view, in *Chicago Journal of International Law*, Fall 2002.

⁷ See for instance section 1 of the book edited by Julian Morris and Roger Bate, *Fearing Food: Risk, Health and Environment*, Butterworth Heineman, 1999.

⁸ R. B. Tompkin, Interactions between government and industry food safety activities, in *Food Control*, nr 2/2001.

At the very general level food related health problems can be divided into the problems resulting from microbiological and chemicals hazards.

At the origin of health problems resulting from microbiological hazards there is a propagation in food of micro-organisms like *Salmonella spp.*, *Campylobacter jejuni*, *Listeria monocytogenes* or *E. coli* 0157⁹. Sound comparative international statistics of the scale of microbiological hazards does not exist as incidence rates of microbiologically caused foodborne diseases (MCFD) are reported according to different national definitions and diagnostic systems. Despite popular beliefs that microbiological hazards haunt only civilizationally backward societies, MCFD never fully disappear in any society and once control measures and public awareness to the risk are weakened they might reemerge as local or regional epidemics as it happened in Latvia and Lithuania between 1985 and 1992 and in the Czech Republic or Hungary between 1995-97¹⁰.

Although there is no world of zero risk controlling practices aimed at the identification and elimination of MCFD should target as closely as possible the state of no-microbiological contamination as in favorable conditions micro-organisms rapidly multiply and might threaten human health. MCFD regulations are thus a clear case of no existence of a threshold in setting process and product food safety standards¹¹.

Health problems might be also due to chemical contaminants in foods. Chemical contaminants in foods include natural toxicants such as mycotoxins,

⁹ *Salmonella* is a rod-shaped, motile bacterium -- nonmotile exceptions *S. gallinarum* and *S. pullorum*--, nonsporeforming and Gram-negative. There is a widespread occurrence in animals, especially in poultry and swine. Environmental sources of the organism include water, soil, insects, factory surfaces, kitchen surfaces, animal feces, raw meats, raw poultry, and raw seafoods, to name only a few. *Campylobacter jejuni* is a Gram-negative slender, curved, and motile rod. It is a microaerophilic organism, which means it has a requirement for reduced levels of oxygen. It is relatively fragile, and sensitive to environmental stresses (e.g., 21percent oxygen, drying, heating, disinfectants, acidic conditions). *Listeria monocytogenes* is a, motile by means of flagella. Some studies suggest that 1-10percent of humans may be intestinal carriers of *L. monocytogenes*. It has been found in at least 37 mammalian species, both domestic and feral, as well as at least 17 species of birds and possibly some species of fish and shellfish. *E. coli* is a normal inhabitant of the intestines of all animals, including humans. When aerobic culture methods are used, *E. coli* is the dominant species found in feces. Normally *E. coli* serves a useful function in the body by suppressing the growth of harmful bacterial species and by synthesizing appreciable amounts of vitamins. A minority of *E. coli* strains are capable of causing human illness. [Source: US FDA]

¹⁰ Cristina Tirado, WHO, (2002) *Statistical Information on Food-Borne Disease in Europe: Microbiological and Chemical Hazards*, a paper to the FAO/WHO Pan-European Conference on Food Safety and Quality, Budapest, February 2002.

environmental contaminants such as dioxins, mercury, lead or food additives, pesticide and veterinary drugs.

The contamination of food by chemical hazards is a major public health concern in Europe, although the use of various chemicals (like food additives, pesticides, veterinary drugs and other agrochemical substances) is comprehensively regulated and controlled by state inspections.

Contrary to Western Europe, where chemical hazards to food result directly from the "industrialization" of agriculture production, in Central and Eastern Europe the contamination of food by chemical hazards arises mostly from industrial contamination of air, soil and water and only slightly from farm production enhancing agrochemicals as the use of fertilizers and pesticides is several times lower than in the EU countries¹².

Scientific analytical methods usually can establish the thresholds of non-harming doses of agrochemicals in food. But despite the existence of comprehensive regulations and precise standards no one can exclude the re-appearance of cases like that in Spain when in 1981-1982 rape seed oil denatured with aniline killing more than 1,000 people and disabling another 25,000¹³. In the Spanish case, the agent responsible was never identified despite intensive investigations¹⁴.

2.2 Scientific evidence for regulatory purposes

Safety effects of food hazards need to be cautiously and credibly assessed. This depends first and foremost on scientific and technological progress, but also on institutional developments. The accent on scientific evidence results from the search for objective, scientific truth (science is expected to establish certain knowledge

¹¹ But for instance USDA applies "zero-tolerance" policy to the detection of *L. monocytogenes* in ready-to-eat products, whereas countries such as Canada and Denmark have a "non-zero tolerance" for *L. monocytogenes* for some classes of foods [See Health Canada].

¹² See: Rolnictwo i gospodarka zywnosciowa w Polsce w aspekcie integracji z Unia Europejska, Raport of the Polish Ministry of Agriculture, Warsaw, 2002, p. 13.

¹³ See: The Guardian Weekend, 25 August 2001,

<http://education.guardian.co.uk/higher/research/story/0,9865,542111,00.html>

¹⁴ According to the data from the US Centers for Disease Control and Prevention estimate 76 million gastrointestinal illnesses, 325,000 serious illnesses and 5,000 deaths each year from foodborne illness in the United States. The economic impact resulting from medical costs and productivity losses for diseases caused by five key foodborne bacterial pathogens totals \$8.3 billion annually – see Thomas J. Billy, HACCP – a work in progress, in *Food Control*, 13 (2002), p.359-362.

whether and how a given microorganism can harm health) and from an attempt to discipline regulatory rulemaking.

Scientific proof is supplied by mainstream science based on reasoning from the experimental evidence¹⁵. The minority scientific views do of course matter, but only when they bring with them convincing evidence. And if they are convincing, in a normal scientific development, they become a part of new mainstream views¹⁶.

The requirement to present scientific proofs for food safety regulations serves, as it was for instance expressed in the WTO SPS (Phytosanitary Protocol), to limit, if not to exclude, the instances of arbitrary use of food safety regulations to protect domestic producers from foreign competition. Food safety regulations should not become technical barriers to trade, not be a part of the strategic use of regulations¹⁷.

Strictly speaking food safety regulations, if applied equally to domestic and foreign producers, are not a discriminatory measure, but still they can be called protectionist measures since as usual domestic producers are better suited to meet them¹⁸.

Uncertainty intrinsic to many scientific results should not serve as an easy justification for the introduction of tight food safety regulations. Science based regulatory making is contested not because of the knowledge of scientific disputes. The refutation of scientific arguments serves often to exploit ignorance, misunderstandings, people's desire to return to nature and irrational fears so common in contemporary societies which want to enjoy the benefits of technological progress without incurring some of its risks.

¹⁵ No serious scientist would subscribe to the radically sociological view on science expressed for instance by Bruno Latour who, according to Sokal and Bricmont [Alan Sokal, Jean Bricmont, *Fashionable Nonsense: Postmodern Intellectuals' Abuse of Science*, Piccador, 1998], challenged as anachronistic the report of French scientists who examined the mummy of Ramses II that the pharaoh had died of tuberculosis, because the tuberculosis bacillus came into existence only when Robert Koch discovered it in 1882.

¹⁶ „An interpretation that accepts the minority opinions of consultants as „risk assessment” effectively converts scientific evidence requirements into minimal procedural hurdles that can be met easily by any determined regulators, high-minded and protectionists alike” introducing into an international trade system the element of American tort system with its high litigiousity [Alan O. Sykes(2002).Exploring the need for international harmonization: domestics regulation, sovereignty and scientific evidence requirements: a pessimistic view, in *Chicago Journal of International Law*, Fall.

¹⁷ See David Orden and Donna Roberts (ed.)(1997)*Understanding Technical Barriers to Agriculture Trade*, The International Agricultural Trade Research Consortium.

¹⁸ They can for instance not apply hormone treatment of animals and the ban on it does not affect them.

2.3 The quest for safety: political claims of absolute safety in face of intrinsic relativity of safety

No scientific evidence matters if citizens are frightened enough by influential books, other publications or media. This case is best illustrated by a ban on the pesticide DDT introduced in the US in 1972 under the influence of a book by an influential American media person Rachel Carson entitled „Silent Spring“ – the ban introduced despite numerous scientific testimonies which concluded that "DDT is not a carcinogenic hazard to man... DDT is not a mutagenic or teratogenic hazard to man... The use of DDT under the regulations involved here do not have a deleterious effect on freshwater fish, estuarine organisms, wild birds or other wildlife"¹⁹.

Governments want to reassure its citizens about food safety risks. But they face difficulties in conveying the simple message that food safety is always a matter of degree, that risks are lower or higher, but there is no world of zero risk. For this reason even "The FDA does not state that American food is so safe that only 1 in 10 million Americans will be killed by bacteria contamination, but rather it declares that food is safe and makes unqualified commitments to maintaining this safety"²⁰

¹⁹ See The DDT ban By Steven Milloy, Copyright 2000 Junkscience.com, January 1, 2000, <http://www.junkscience.com/jan00/century.htm>

²⁰ Richard J. Zeckhauser i W. Kip Viscusi, The Risk Management Dilemma, w *The Annals of the American Academy of Political and Social Sciences*, May 1996.

People do react to what might be called an emotive side of food safety issues, that is to the fact that health is central to other personal values and that the majority of risks to health cannot be organoleptically identified and the causes of these risks are difficult to understand for a layman. What seems to matter for people's attitudes to food related risks to health is not that much the nature of risk²¹ as dimensions that do characterize the risks.

The outcomes of psychological research indicate that attitudes towards risk (these attitudes can be placed on the axe from risk-proness to being risk-averseness) depend on the following risk descriptors:

- whether risk is taken voluntarily or involuntarily;
- whether the effects of exposure to risk are felt immediately or with a delay (this delay can sometimes be an intergenerational one)²²;
- whether the risk is concentrated in space or diffused;
- whether the risk is catastrophic²³ or it is a recurrent risk;
- whether the risk is mortal or it is a risk of illness (morbidity)²⁴.

High scaring potential of foodborne risks makes food safety regulations dependent on today's public opinion pressures, which might make them ill-targeted and thus ineffective and inefficient. „Smart risk regulation“ cannot be passed or implemented in the havoc of media-induced food panic. Risk regulation should be based, as it is argued by Cass R. Sunstein, on science and procedures requiring a comprehensive analysis of its costs and benefits²⁵.

2.4 Approaches to risk regulation

Approaches to risk regulation can crudely be divided into a technological and economic approach. Ideally both should go together, but often there is a strong tension between them.

²¹ That it might derive from the consumption of food.

²² As J.M. Keynes used to say short run matters because „in the long run we are all dead“ .

²³ That is, it happens once.

²⁴ Adapted from Paul Slovic, *The Perception of Risk*, Earthscan, 2000, p.173.

²⁵ Cass R. Sunstein(2002) *Risk and reason: safety, law and the environment*, New York, NY: Cambridge University Press, 2002.

Technological approach to risk regulation seeks to find a technical solution to any health and safety risk. Its method is to promote the application of technical devices to risk bearing equipment and technical controls to risk situations. This approach usually does not take into account neither the changes in the behavior of individual risk takers, not the cost tradeoffs.

Economic approach to risk regulation starts from an assumption that the proper role of the government is not to eliminate the risk, but to attenuate market failures which cause an inefficient balance between risk reduction and cost. The task of regulatory efforts should be to identify cases in which regulation can generate more benefits to society than the costs incurred due to its implementation.

Accordingly technological approach to risk regulation favors the application of process (or design standards), which specify the technology that a firm must use without specifying the outcome that must be achieved, whereas economic approach to risk regulation tend to favor performance standards which impose the requirements that a firm must achieve a specified level of product quality (safety) without specifying the technology that must be used to achieve the standard. Generally it is thought that whenever it is possible it is better to rely on performance standard than on process standard as the former give firms a chance to find the most efficient way to conform to the standard.

2.5 Health effects of regulation induced wealth changes

Regulations impose costs on food producers and distributors. These costs are called *compliance costs* and they are measured as the change (an increase) in the costs of production induced by compliance with the performance (or process) standard imposed by the regulator²⁶.

Usually regulatory costs are justified by a reference to expected benefits from regulation in the form of decreased number of deaths or decreased rate of morbidity. But, as Joseph M. Antle noticed, balancing of regulatory costs and benefits is not an easy task as the calculation of benefits is based on several uncertain assumptions:

²⁶ Other costs resulting from food safety regulations include: court imposed fines; the cost of civil damages awarded to downstream users, including final consumers; reduced revenues due to the loss of reputation and

“The goal of statutory food safety regulation is to mandate that firms produce higher quality, i.e. safer, products for consumers. The key reason why it is difficult to design regulations to do this, and why it is difficult to measure the benefits and costs of these regulations, is that food safety itself is difficult to measure. Information about the various quality attributes of food products is imperfect for consumers, producers, government regulators, and researchers, and this particularly true when microbial pathogens are involved. These pathogens cannot be readily observed or tested in the production process, and their health effects are often difficult for consumers to identify after a food product is consumed. Thus, a key challenge in modeling and measuring the benefits and costs of food safety regulation is to devise methods that can make the best use of the limited and imperfect data that are available. As recent experience in the United States with regulatory impact assessment shows, the data that are currently available provide, at best, highly uncertain estimates of benefits and costs of new regulations”²⁷.

Measuring benefits of health safety regulations is not a simple task and the problems get even stronger when we allow for an indirect health effects of regulation induced changes (reductions) in the GDP or people's income. The underlying idea can be explicated in the following way: public regulations lead to costs which are measured not only as compliance costs, but as implied changes in the GDP or people's disposable incomes as a result of regulations. So a given regulation may lead to a reduction of death (or morbidity) by a given percentage, but if its implementation costs (joint compliance and opportunity costs) are too high, the end result might be a greater human loss due to increased death and morbidity resulting from the fall in GDP and personal incomes²⁸. The comprehensive analysis of costs and benefits requires broadening the scope of analysis from an effect of a regulation on the probability of one hazard, to the analysis of its impact on other risks and eventually to the analysis of its impact on the society's overall welfare. The latter however increases the difficulties of making such a comprehensive analysis as to make it, as some would argue, infeasible.

“goodwill” arising from adverse publicity; the costs of product recalls; the costs of investigating possible negligence by a supplier and the costs of legal services (legal fees).

²⁷ John M. Antle, Benefits and costs of food safety regulation, in *Food Policy*, 24 (1999), p. 605-623.

²⁸ An accessible presentation of this argument can be found in W. Kip Viscusi, *Rational Risk Policy*, Clarendon Press, 1998.

2. 6 Alternatives to regulation

Public food safety regulations are not always the best (that is most effective and efficient) means to enhance food safety. One should remember that there are alternatives to publicly mandated rules, but the comparative advantages of their use should be assessed in the specific socio-institutional context. The list of most important alternatives to regulation includes:

A) Education and information – Consumers themselves may influence the probability of contracting food borne diseases by properly handling food products. Foods should be properly chilled and kept cold during processing, distribution, sale and storage. Meat and poultry products should be kept refrigerated until just prior to cooking²⁹. Informing public about the composition, proper ways of food handling and probable health effects may be in turn an obligation stemming from public regulations³⁰.

B) Technology changes - New options for controlling pathogens in meat and poultry might come with the creation of new methods of food treatment. One of such method, which has been approved by the US USDA, but is still strongly contested by some consumer movements, is irradiation³¹.

C) Stimulating market responses to food safety problems - Some food safety problems flow from market failure due to lack of consumer information and due to weak incentives to provide this information. One obvious question before embarking on government regulations is whether these market failures cannot be diminished by altering the structure of incentives market players face. This can be done by the changes in the liability law, but it can also stem from the firm's care for good reputation. Furthermore, food safety regulations might promote technological innovations and create competitive advantage for firms which care for food safety.

²⁹ A research by Neis and van Laanen (Nies, J. I. And P.G. van Laanen, "Effect of Safe Handling Programming on Participants' Food Handling Behaviors" in *Family and Consumer Science Research Journal*, vol. 24, No. 2, Dec. 1995, pp. 161-179) showed that when consumers were educated about food safety principles, the number of people consuming rare or pink hamburgers (that is undercooked) fell by 73 percent and other unsafe behaviors decreased.

³⁰ See the discussion about the food labelling of food produced with addition of transgenetic components in the EU (http://europa.eu.int/comm/food/fs/fl/fl_index_en.html).

³¹ Irradiation is a ionizing radiation composed of short wavelengths capable of damaging microorganisms such as those that contaminate food or cause food spoilage and deterioration.

Regulating food safety, it has to be repeated, is a complex issue, but public authorities have various instruments to optimize its actions. Thus, the choice of proper way to regulate food safety should be a part of scientific analysis done by a community of professional regulatory policies analysts and not led by short term political convenience or public scares³².

From the perspective of this paper it is worth stressing that food safety regulations rely more and more on mixed solution which overall evaluation requires an attention to institutional details and in particular to the difficulties in implementing regulations and limiting possible unintended effects.

3. The EU and Food Safety: Between Reliance on Scientific Evidence and Responsiveness to Public Fears

3.1 EU food safety regulations in a pre-BSE era

It can hardly be said that EU food safety regulations have been shaped exclusively by scientific evidence and careful policy analysis. Food scares and especially BSE crises, as documented for instance Ellen Vos³³, have been the driving force behind the acceleration of new European initiatives in the area of food safety.

Below I shortly evidence these recent developments in EU food safety policies asking how they might have affected the capacity of the EU to effectively influence the changes in food safety systems in candidate countries in the pre-accession period.

Ellen Vos describes a pre-BSE crisis EU food safety regime as being developed ad hoc and predominantly influenced by the jurisprudence of the European Court of Justice. She points out that with regard to food regulations the Community used to resort to committees and especially to the Scientific Committee on Foodstuffs (SCF) composed of independent scientists; the Standing Committee on Foodstuffs (StCF) consisting of national representatives and the Advisory Committee on Foodstuffs (ACF) composed of representatives of various interest groups. The SCF was charged to supply scientific evidence, the ACF supplied opinions of interests involved and the

³² This observation seems obvious, but it should be repeated when one observes a disparity in the expenditures on policy analysis between the US and Europe (see: A. Martino, *Aiutare lo Stato a Pensare*, FGA Torino, 1996).

³³ See Ellen Vos, (2000) EU Food Safety Regulation in the aftermath of the BSE crisis, in *Journal of Consumer Policy*, vol. 23, p. 227-255.

StCF has served to ensure the political approval of the Member States at the risk management stage.

Until mid-1990s this pragmatic way of dealing with food safety issues seemed to function relatively well, but the BSE crisis shattered this positive image. The Report of the EP Temporary Committee of Inquiry into BSE from February 1997 revealed the shortcomings of "the committee model" evidencing the political pressure exercised on formally independent members of the SCF, the little coordination and cooperation between the various DGs of the Commission active in the field of food safety and, what was the most serious, a true policy of disinformation on the part of the Commission.

3.2 The Commission's new approach to food safety

In response to the perception of crisis in the EU food safety regime the European Commission in a series of moves has laid down institutional and conceptual basis for a new approach to food safety issues. Firstly the Commission has introduced an internal reorganization putting all activities related to public health into one DG XXIV called DG Sanco. Next in a communication on a "New Approach to Consumer Health and Food Safety" it announced three basic principles for its approach – namely separation of the responsibility for legislation and for scientific advice, separation of the responsibility for legislation and for inspection and greater transparency and better information. In the following "Green Paper on the General Principles of Food Law in the EU" the Commission has announced that it would like to ensure free movement of foods within the internal market, science based risk assessment and greater competitiveness of European food exports by placing greater responsibility for food safety on food processing industry and increasing effectiveness of official food control and enforcement. Finally in a White Paper on Food Safety from January 2000 the Commission announced that the Commission would like to base its food safety policy on a "comprehensive and integrated approach"³⁴ which

³⁴ It is worthwhile noting that there exist international blueprints for such comprehensive approaches. Thus, for instance, the International Commission for Microbiological Specifications for Foods (ICMSF) is proposing the following steps as a logical sequence for food safety management:

- Risk managers define food safety concern based on epidemiological data that links a microbial agent and a food;
- Risk assessors conduct a risk assessment;

covers the whole food chain “from farm to table”. The Commission has proclaimed that risk analysis will be the basis of its food safety regulatory policies, that risk analysis will be based on best scientific advice thanks to the institutional innovation – the establishment of the European Food Safety Authority³⁵ with task to provide independent scientific advice on food safety issues, collect and analyze data related to food safety issues, identify and warn about emerging risks, support the Commission in the case of crisis and communicate to the general public on food safety related issues.

3.3 Ambiguities of the EU food safety regime

In spite of all reform attempts it seems that the new European food safety regime is plagued by old ambiguities: it is supposed to rely on science, but at the same, via the stress on the precautionary principle, remains over sensitive to public food safety scares, its administration should be „independent but not out of control” from politics, as it was put by the SANCO Commissioner³⁶, it should rely more on food industry self-regulation and companies’ social responsibility but it should also give more power to public inspectors and enforcement services; and eventually it should be guided by international bodies, but executed nationally.

It can be said that the current stage of the development of European food safety policy and of building its institutional framework does not help to discipline political discretion in regulating food safety³⁷, not only as far as the relationship between the EU and the rest of the world, but also within the EU. By creating the European Food Safety Authority (EFSA) with functions limited to risk assessment the EU has not exploited the window of opportunity created by the BSE crisis to launch a

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- Risk managers use the outcomes of the risk assessment to develop a risk management option assessment;
 - Risk managers with input from all affected parties establish a tolerable level of risk;
 - Risk managers with input from all affected parties establish a food safety objective;
 - Risk managers in government and industry verify that the food safety objective is achievable through the application of GHP and HACCP;
 - Risk managers in government and industry establish acceptance criteria (i.e., performance, process and product criteria) (<http://www.dfst.csiro.au/icmsf/approach.htm>)

³⁵ The Regulation from 28th January, 2002.

³⁶ Erik Millstone and Patrick van Zwanenberg, *The Evolution of Food Safety Policy-making institutions in the UK, EU and Codex Alimentarius*, in *Social Policy and Administration*, December 2002.

³⁷ G. Majone, (2002) *What price safety? The precautionary principle and its policy implications*, in *JCMS*, vol. 40, nr 1

new European regulatory model with the EFSA coordinating the work of emerging national food safety agencies³⁸. Thus, the EU has not taken all steps indispensable to insulate food safety regulation making from short term political pressures.

The conceptual and institutional flaws indicated above are in part compensated by the developments of new powerful food safety instruments in the hands of the EU. The first instrument is applied to external partners, the second aims at guiding the functioning of the internal agro-alimentary sector. The former instrument consists of rules that member countries must apply to live animals and animal products from third countries³⁹. The rules impose safety and supervisory standards which are equal or at least equivalent to the rules applied in the trade among EU member countries. Before getting an approval for exports to the EU countries a third country is inspected by an inspection from the Food and Veterinary Office which checks on spot whether the EU veterinary requirements are met.

3.4 Granting market access as a food safety instrument

This policy instrument has been also applied to candidate countries. The Food and Veterinary Office (FVO) has carried out several inspections in candidate countries⁴⁰. Their purpose was to certificate food producers in order to give them "market access"⁴¹ to the EU. Besides "ordinary missions" the FVO has conducted

³⁸ In recent years national food safety agencies have been created in: Great Britain (May 1997- the Food Standards Agency); in France (April 1999- the Agence Francaise de la Securite Sanitaire des Aliments), in Finland (the National Food Agency), in Ireland (1998 - the Food Safety Authority of Ireland) and in Sweden (the Swedish National Food Administration (NFA), in Belgium (February 2000 - the Belgian Federal Agency for the Safety of the Food Chain).

³⁹ The list of veterinary rules applied in such cases has been recently updated and published in the Food and Veterinary Office document entitled: „General Guidance to Third Country National Authorities on the Rules to Be Followed For the Import of Live Animals and Animal Products into EU from Third Countries” 23 January 2003.

⁴⁰ The missions are carried under the provision of the following Community legal acts:

a) Commission Decision 86/474/EEC of 11 September 1986; Commission Decision 98/140/EC of 4 February 1998 and Council Decision 95/408/EC of June 1995.

⁴¹ The permission for imports of food (meat in particular) are issued based on the following EU regulations:

- a) Council Directive 72/462/EEC on health and veterinary inspection problems upon importation of bovine, ovine and caprine animals and swine, fresh meat or meat products from third countries (as last amended) – OJ No. L302, 31/12/1972, p. 28.
- b) Council Directive 92/118/EEC laying down animal health and public health requirements governing trade in and imports into the Community of products not subject to the said requirements laid down in specific Community rules referred to in Annex A(I) to Directive 89/662/EEC and, as regards, pathogens, to Directive 90/425/EEC – OJ No.L62, 17/12/1992, p. 19.
- c) Council Directive 94/65/EC laying down the requirements for the production and placing on the market of minced meat and meat preparations – OJ No. L368, 31/12/1994, p.10.

several special assessment missions to the applicant countries with view to assess their food safety system.

Table

**List of special veterinary missions to assess the conditions of food
production in Poland**

-
1. 03/04-07/04/2000 – Special mission to assess the conditions for production of fresh meat, meat preparations and meat products;
 2. 31/01-04/02/2000 - Special mission to assess the level of residues in live animals & animal products;
 3. 31/01-04/02/2000 - Special mission to assess the conditions for production of game and rabbit meat;
 4. 27/09-01/10/1999 - Special mission to assess the quality of fishery products
 5. 03/05-07/05/1999 – Special mission to analyze public health issues;
 6. 23-25-26/03/1999 - Special mission to assess animal welfare during transport
 7. 08/06-13/06/98 - Special mission to assess the conditions for production of dairy products
-

Source: FVO http://europa.eu.int/comm/food/fs/inspections/index_en.html

It is hard to prove that such missions have been misled by the host country's manipulation of where they go, what they see and whom they meet as the program of each mission has been set by mutual agreement and the mission officers could change it at will (if they could not do it, they would register this in the final report and this would be as a signal of type "something is going wrong" or "some irregularities are being hidden). So the will to cooperate with FVO inspections has been a clear test of loyal cooperation in dealing with food safety.

The outcomes of such inspections have gained on importance as they have been used to asses the progress of candidate countries towards the fulfillment of membership conditions⁴².

d) Council Directive 96/93/EC on the certification of animals and animal products – OJ No. 13, 16/01/1997, p.97.

⁴² This falls under Heather Grabbe's category of „gate-keeping mechanism” , in which the outcomes of such controls are used to let candidate countries to pass to further stages in the accession process – see:

3.5 The emergence of regulatory auditing

The second important development in food safety policies may be called: *the move from food controls to regulatory auditing* due to the expansion of HACCP as a method of producer' self control. Following the developments in the US food safety regulations, the EU tries to promote indirect methods of controlling food safety. It does so by requiring all food processing plants to implement an inspection system called Hazard Analysis and Critical Control Points (HACCP)⁴³. HACCP system strives to reduce human exposure to meat and poultry borne pathogens by requiring processing plants to scrutinize the critical control points in the production process – points where food safety hazards can be prevented, reduced to an acceptable level or eliminated⁴⁴.

Placing HACCP at the core of food safety regulatory developments leads to two major changes in food safety policies: firstly, food safety inspections can move from *command and control food safety inspections to regulatory audits*; secondly, the costs of food safety controls shift from the budget of the government to the food processor.

The implementation of HACCP requires the registration of the results of the company's internal controls at critical points. Inspectors of food safety agency can then examine these records or even these reports are to be transferred via internet to the central files of the food safety agency. The control is enhanced by a parallel, but rare sampling of processed food for laboratory examinations, but the proportions shift: food testing is above all own responsibility of the food processor. Such a change alters the distribution of costs stemming from food safety controls. The public food safety agency invests initially in educating the industry in HACCP method and then starts controlling HACCP implementation plans and monitoring the way

„Europeanization Goes East: Power and Uncertainty in the EU Accession Process” in K. Featherstone, C. Radaelli (eds.)(2003)*The Politics of Europeanization*, Oxford UP.

⁴³ EU Council Directive 92/46/EEC.

⁴⁴ A single and authoritative food safety agency would not only assume full responsibility for risk assessment and risk management, but it would help to streamline the implementation of industry process standards since „Inconsistent HACCP implementation is just one of numerous problems that arise from having several agencies with separate responsibilities for food safety regulation”, Caroline Smith DeWaal,(2003)Safe food from a consumer perspective, in *Food Control*, vol. 14.

companies run their own HACCP system. External controls are supposed first to certificate the HACCP and next to control the way it is run. This change entrusts producers, it makes saving on the costs of controls and allows a better targeting of control resources⁴⁵.

4. The food safety regime in Poland and factors influencing its adjustment to the requirements of the membership in the EU

Food safety regulations are a crucial element of Poland's system for protecting public health. But food safety regulations have also become an important factor influencing the changes in the Polish agro-alimentary system since agriculture and food industry play an important part in the Polish economy and give employment to a large share of the Polish workforce.

It seems just fully justified to start this part of the paper by sketching the picture of the Polish agriculture and food industry.

4.1 Polish agriculture and food industry in the national economy

Agriculture accounts for 3.3 percent of the Polish GDP (as compared with 2 percent in the EU), but employs 18.8 percent of all working people (as compared to 4.4 percent in the EU)⁴⁶. Agriculture productivity in Poland is much lower than in the EU, but it has been steadily rising since mid-1990s. In 1999 the Polish food processing industry employed 480,000 employees and the value of processed food production amounted to 12 bl USD. In late 1990s the productivity of the Polish food industry used to rise yearly by more than 10 percent⁴⁷.

The Polish agriculture is composed of almost 2 m individual farms of an average size equal to 7.1 ha (as against an average size of farm equal to 19.4 ha in the EU). Small sized and numerous farms make the Polish agriculture similar to the agriculture in Italy, Greece or Portugal.

⁴⁵ Estimated benefits from the introduction of HACCP in the US vary very widely. Thus for instance Stephen R. Crutchfield et al. [S. R. Crutchfield, Jean C. Buzby, Tanya Roberts, Michael Ollinger and C-T. Jordan Lin, (1997)An Economic Assessment of Food Safety Regulations, USDA, Agriculture Economic Report No: 755] estimate that economic benefits from the introduction of HACCP controls may stay within the range of \$1.9 billion to \$171.8 billion depending on the effectiveness of HACCP implementation.

⁴⁶ The data come from Susan Senior Nello, *Food and Agriculture in an Enlarged EU*, RSC WP n. 58/2002, p.3.

⁴⁷ These data come from the Polish diplomatic sources <http://www.poland.org.au/trade/pdf/food.pdf>.

Table 4.1

Size distribution of farms in Poland (as of 1996)

Size group (ha)	Number	Land are (ha)	Average size (ha)
1-2	462,206	650,634	1.41
2-5	667,588	2,199,048	3.29
5-7	260,713	1,541,820	5.91
7-10	260,103	2,171,527	8.35
10-15	217,202	2,631,547	12.12
>15	173,568	5,064,957	29.18
Total	2,041,380	14,259,525	6.99

Source: Siemiński (1999) The Change of property and area structure of Agriculture in Poland and Wielkopolska Region between 1988 and 1996. In S. Paszkowski (ed.) *Determinanty transformacji struktury agrarnej w rolnictwie polskim, czesc I*, Poznan, p. 327-338.

Food expenditures matter for families as they account for some 30-35 percent of their budgets⁴⁸.

Agriculture is an important sector of the Polish economy and its restructuring will be decisive for the changes in the level of already high unemployment (18 percent as of end 2002).

Equally high market fragmentation does characterize the Polish food industry. Post-communist economic transformations brought to existence a myriad of small enterprises in food processing industry. Out of more than 30,000 enterprises active in the food industry, only 1523 (as of 2001) employ more than 50 persons. The process of concentration of food processing industry in Poland is slow and small and medium size enterprises dominate all branches of food industry except brewing industry, the production of vegetal oils and the production of feed for animals. Profitability of food processing is low and almost 1/3 of functioning enterprises show financial losses⁴⁹. This makes these enterprises not willing and not able to invest much in the modernization of their production processes and in the incurring compliance costs of meeting food safety regulation.

⁴⁸ As compared with 17-18 percent in the EU countries.

⁴⁹ The data in this section come from the Report „*Rolnictwo i gospodarka zywnosciowa w Polsce w aspekcie integracji z Unia Europejska*”, Warszawa, 2002, different pages.

Poland and other candidate countries do not play any important role in the EU food imports. But the EU countries account for 43 percent of Polish agriculture exports and 48 percent for agriculture imports. The main item in Poland's imports from the EU countries are animal feeds and in the country's exports live animals and meat.

Difficulties in meeting EU standards, poor quality and less experience in marketing seems to be main reasons for a poor performance of Poland's exports to the EU countries.

Table: 4.1.1

Agro-alimentary products in Polish foreign trade according to destination
(in m USD)

	Exports			Imports			Trade balance		
	1999	2000	2001	1999	2000	2001	1999	2000	2001
UE	1,277	1,287	1,456	1,615	1,622	1,790	-338	-335	-334
Former SU	662	602	608	74	106	113	588	496	495
CEFTA	283	316	353	289	352	325	-6	-37	28
EFTA	29	30	40	150	140	174	-121	-110	-134
USA	100	107	116	108	74	81	-8	34	35
Others	317	308	457	1,139	888	923	-822	-581	-466
Total	2,668	2,650	3,030	3,374	3,183	3,406	-707	-533	-376

Source: GUS (Main Statistical Office)

4.2 Domestic determinants of Polish food safety policy

4.2.1 Public awareness of food risks

The sheer size of the agricultural sector and its importance for employment and domestic budgets form background conditions for the development of food safety policies in Poland. But food safety policies may change also under the influence of public opinion as democratic policy makers are expected to design policies which are responsive to popular preferences. Below we report some data showing whether food safety issues (worries) do have an important place in public consciousness.

Available data seem to show that the Polish society has not been much scared by BSE and other food scares so diffused in Western Europe. Responding to a survey made in December 2000, that is, after scientists had established a high probability of a link between BSE and new variant of Creutzfeld-Jakob disease in human, 58 percent Polish respondents said that they do not feel threatened by BSE as they believe the Polish cattle had not been affected by the disease⁵⁰.

Table: 4.2.1.

Beliefs in safety of domestic cattle

In some countries of the EU have been registered cases of BSE. Do you believe that the Polish cattle is affected by this disease?	
Strongly yes	3%
Rather yes	16%
Rather no	45%
Strongly no	13%
Difficult to say	22%

CBOS: December 2000, (Centrum Badania Opinii Społecznej).

In the case of Poland the perception of BSE risk should be related to the perception of domestic food safety practices as imports of meat to Poland is low and in the case of bovine insignificant (see the table below).

Table: 4.2.2

Imports of meat to Poland (data for 1Q 2002)

Type of meat	Imports in tons
Pork	1262
Beef	3
Sheep meet	146
Poultry	6298

Source: Główny Lekarz Weterynarii (<http://www.wetgiw.gov.pl/>)

Accordingly the information about BSE has not provoked major changes in dietary habits of Poles. In December 2000 some 15 percent of respondents have declared that they had ceased to eat bovine meat and 24 percent have limited bovine meat consumption.

⁵⁰ And they are wrong as in 2002 Poland registered the second case of Creutzfeldt-Jakob disease, the first case was diagnosed in 1999 in the same hospital in the city of Bolesławiec [Gazeta Wrocławska, p. 2, 14 October 2002].

Table: 4.2.3

Modification of diet under the impact of BSE (in %)

Have you, in response to the information about BSE, limited or stopped the consumption of bovine meat?	The date of survey	
	January 1998	December 2000
Yes, I have entirely stopped eating bovine meat	6	15
I have limited the amount of bovine meat consumed by me	16	24
I do not eat bovine meat for other reasons like taste	16	21
I have not ceased nor limited the amount of bovine meat	61	37

Source: CBOS, December 2000.

The analysis has confirmed a high correlation between beliefs in the existence of cattle affected by BSE and the decision to stop eating beef. Furthermore, as a rule, a higher sensitivity to the threat of BSE has been registered among younger and better educated parts of the Polish population.

In a different survey people were asked whether they expect that the accession to the European Union will improve or deteriorate food safety.

Table: 4.2.4

Expectations as to the changes in food safety after the accession to the EU (in percent)

Will food in your country after the accession to the EU become?	Safer	Nothing will change	Less safe	Difficult to say
Poles	29	29	27	15
Hungarians	41	41	9	9
Czechs	23	50	11	16
Lithuanians	37	31	14	18
Rumanians	45	26	17	12

Source: CBOS, Survey November 2001.

The outcomes of this international survey may suggest that Poles have ambiguous expectations related to the changes in the level of food safety after the accession to the EU. This might be because they feel safe and they do not pay much attention to the problem of food safety

This hypothesis needs further investigation but there are indications which seem to confirm it. First Poles consider food produced from domestic components as safer than food composed of mixed components or food imported from the EU countries.

Table: 4.2.5

Perception of food safety according to its origin (in percent)

Is food composed of:	Safe	Risky	Difficult to say
Poles			
Exclusively domestic components	86	11	3
Containing imported components	57	35	8
Imported from the EU countries	44	46	10
Imported from the US	40	46	14
Imported from other countries	33	52	15
Hungarians			
Exclusively domestic components	70	27	3
Containing imported components	55	40	5
Imported from the EU countries	58	35	7
Imported from the US	49	40	11
Imported from other countries	32	58	10

Source: CBOS, November 2001

The choices of food by Polish consumers are guided by beliefs that domestic agriculture which does not widely use the methods for the intensification of food production offers safer food. This might be true if one takes into consideration chemical pollutants of foods due to the use of fertilizers, but it is not true if we

consider microbiological pollutants which tend to spread when not enough is spent to support the hygiene in production, transformation and distribution of food products.

Other data suggest that Poles do not seem to be cautious food consumers as only 31 percent of consumers says that it always checks the date of product validity, 7 percent checks the composition of food products bought and 7 percent buys products paying attention to its health claims (CBOS, October 2001).

In general it seems justified to say that public opinion does not exert major pressure for safety increasing changes in the Polish food safety regulations.

4.2.2 Foreign direct investments in the Polish Agro-alimentary sector

Classical works on regulations⁵¹ point to multinational corporations and FDIs as an important factor of demand for harmonization of regulation. What is the weight of FDIs in agriculture and food processing in Poland and could FDIs be of some importance for the decision whether and how rapidly to adjust to the EU food safety rules?

The answer given here can be only of a preliminary nature as more research is needed . Aggregate data show that as of mid-2002 FDIs in the Polish agriculture reached approx. 45 m USD, which is an almost negligible amount. On the other hand FDIs in food processing amounted to almost 6 bl USD and accounted for 21percent of all FDIs in manufacturing⁵². More than 60percent of FDIs in manufacturing has come from the EU countries – a circumstance facilitating the approval for the EU food safety rules.

Furthermore FDIs has been often linked with the privatization of food processing sector in Poland which has lead to the dominance of foreign (mostly EU) food manufactures in the group of large food producers. If, as it is assumed, large multinational companies tend to apply uniform production standards across all plants owned by them⁵³. The outcomes of several field research seem to confirm that FDIs in the food sector seemed to help processing firms to upgrade their agri-food

⁵¹ See for instance G. Majone (ed.)(1996)*Regulating Europe*, Routledge.

⁵² Data from the Polish Agency of Foreign Investments (PAIZ - http://www.paiz.gov.pl/facts2_4.html).

⁵³ They do so to smooth intra-company trade.

products to international standards⁵⁴. EU food safety regulations might have come to the Polish food processing sector with EU investors independently of Poland's membership in the EU.

4.3 Food safety regulations and control institutions in Poland

Polish food safety regulations date back to the interwar period (the first comprehensive food safety law comes from 1929). Next major revision of legislation on food safety, health and nutrition was passed in Poland in November 1970, roughly about the time the US created its FDA. Furthermore Poland has been the member of *the Codex Alimentarius Commission* since its beginning and the Polish The Agricultural and Food Quality Inspection (earlier the Centralny Inspektorat Standaryzacji) has been participating in the works of various international safety standard setting bodies. Basic food regulations in law under the communist regime did not deviate at all from international standards. What had been different however was the context of their implementations.

Democratization and market reforms have called for changes in food regulations, but the changes have been brought only in late-1990s by the start of the EU membership negotiations. For Polish law makers it was clear from the outset that the adoption of the *acquis communautaire* is the precondition for Poland's accession to the EU⁵⁵. When EU officials kept repeating that food safety is especially sensitive because high public health concerns in European societies, they have found no objection in candidate countries. No compromise has been offered as far as food safety legislation is concerned, but also no compromise has been asked for. The changes to food laws meeting EU requirement were accepted and timely introduced by all candidate countries. Accordingly Poland has brought the food legislation in line with the EU *acquis* by passing the Law from 11 May 2001 on Health Conditions of

⁵⁴ See for instance J.F.M. Swinnen(2002).Transition and Integration in Europe: Implications for Agricultural and Food Markets, Policy and Trade Agreements, in *The World Economy*, pp. 481-501.

⁵⁵ A comprehensive survey of legal issues related to the adoption of the *acquis communautaire* can be found in A. Ott and Kirstyn Inglis (ed.) (2002)*Handbook on European Enlargement*, The T-M-C-Asser Press, The Hague.

Food and Nutrition (Dz. U. No 63, item 643, as amended), hereinafter referred as "the Food Law")⁵⁶.

The law "On Health Conditions of Food and Nutrition" from 11 May 2001 has modernized the system of food safety regulations in Poland in view of membership in the EU⁵⁷. Below I review the main provisions of this law showing that it contains all essential features of a modern food law.

The Polish food law starts by defining food safety (art. 3 p. 15) "As a set of complex of conditions, which must be met and activities which must be undertaken on all stages of food production and food distribution in order to safety for people's health and life". These conditions and activities are translated into product and process standards. Specific product and process standards are not part of this basic law: their formulation has been delegated to the Ministry of Health. The Ministry of Health is also supervising the work of the General Sanitary Inspection which carries out field controls with regard to all foods except the food of animal origins whose control is left to the State Veterinary Inspection under the supervision of the Ministry of Agriculture.

The law recommends that the maximum allowed levels of food contamination are based on "the outcomes of scientific research and in order to protect human health and life" (art. 7, point 2). This statement can be read as positing the essentiality of scientific expertise in setting standards, but the law (art. 45, point 2) has relaxed this condition by stating that "official inspection authorities can undertake anticipatory and proportional to the threat preventive actions in order to protect human life and health (*the precautionary principle*)" in case "there are no scientific proofs confirming non-harming characteristics of food items' (art. 45, point 2).

When searching for scientific expertise referenced laboratories should (art. 44, point 2.7) transfer to state inspection authorities "information about research

⁵⁶ Earlier the Law of 24 April 1997 on control of infectious diseases of animals, examinations of slaughter animals and meat, and on the Veterinary Inspection, (Dz. U. from the year 1999, No 66, item 752, as amended) was passed which contains provisions concerning food of animal origin. And with regard to non-health related food quality, the most important is the Law of 21 December 2000 on Commercial Quality of Agricultural and Food Products, which replaces two former statutes and enters into force on 1 January 2003 r. (Dz. U. from the year 2001, No 5, item 44, as amended).

⁵⁷ This law covers the requirements of more than 80 EU Directives.

methods applied in referenced laboratories in the countries – members of the EU". Standard setters should thus draw on best knowledge wherever it is produced.

The law gives a definition of "new food" (art.3, point 26) as substances or their mixtures, which earlier have not been applied to feed people". Genetically modified food is considered a subcategory of new food and it is not forbidden to be produced or sold in Poland if 1) it is properly labeled (art. 11, point 3 says that food product should be marked with information "product genetically modified" and 2) it should go through a testing procedure with the General Sanitary Inspector who after reviewing the opinion of experts and scientific centers (art. 11, point 5) issues a decision allowing or forbidding its production or sale. The firm wishing to produce or to sell genetically modified food should cover the costs of testing and issuing an opinion by referenced experts and laboratories (art. 11 point 6). This provision can be read as a violation of the EU ban on GMOs in food and will be suspended after the accession. Provisionary however the lack of threshold for the content of GMOs and the approval rights placed in the hands of the General Sanitary Inspector make the introduction of genetically modified food to Poland time consuming, costly and hence difficult.

Art. 6 of the law forbids the production of food from animals treated with hormones, or substances acting thyrostatically or beta-agonistically.

Art. 8 approves the production or sale of irradiated food, if "it does not pose threat to human health or life and if it is technologically justified". The law adds that irradiation should not substitute for normal hygiene practices or be applied to food which contains chemical substances serving to conserve or stabilize food (art. 8 point 2). Specific rules regarding irradiation are fixed by the Ministry of Health in special rulings.

The General Sanitary Inspector should make publicly available the register of taken decisions (art. 14 point 13) with all documentation of the admissibility procedure, thus, allowing public control of impartiality of decisions taken. Besides this there is no however any appealing mechanism which would give a chance to contest its decision.

The power of the General Sanitary Inspector is enhanced by the fact that he can (art. 17 point 3) issue a decision waiving the requirement to go through the whole testing procedure required for "new food".

Art. 24 of the law requires that packing of all food and nutritional products should contain the information essential for the protection of human health and life and in particular: the composition of food products, the nutritional value of food products, the presence of permitted additional substances or food additives; the expiring date of food's nutritional usefulness; the instruction of use; the data which identify the producer or the company which introduces the product to the domestic market.

Furthermore, the information on the food "should not mislead a consumer with texts or graphic signs" or "should not attribute to the product nutritional values which it does not possess" (art. 24, point 2). More specific rules of labeling a product are established by the ruling of the Ministry of Agriculture prepared in co-operation with the Ministry of Health.

Art. 28 of the law imposes on companies producing and selling food the obligation to meet food safety standards first and foremost by internal inspections. The same article makes HACCP a basis for internal inspection system and all large companies should implement and document proper working of HACCP control system since 1 January 2004 (small and medium sized companies are freed from this requirement). Art. 32 gives to the Minister of Health (acting jointly with the Minister of Agriculture) to define more precise rules for the working of HACCP and all internal inspections in general. These precise rules should take into account the requirement of the European Union with regard to food safety.

The application of HACCP is backed by a general rule (art. 23) stating that technological processes and methods of proceedings applied in the production and distribution of food stuffs should not cause the emergence of substances harmful for human health and safety.

Food company should withdraw spontaneously food stuff (art. 31) in case it registers problems with food safety rules. The state of food produced or treated in a given company can be however verified afterwards since all food companies are

required to store for some time the samples of food products and to pass them to food inspections.

The law (art. 35) stipulates requirements regarding health state of the employees of food safety companies. First of all they should have medical certificate confirming the fact that they are not affected by infectious diseases. They should also receive education in food hygiene requirements in special courses which contents is specified by the ruling of the Ministry of Health.

Operators who produce food stuffs or sell them in violation of food safety rules are threatened with financial penalties or imprisonment up to 2 years (art. 49).

In sum it might be argued that the Polish food law has been promptly modified to include EU food safety requirements and that it does contain provisions on all important contemporary food safety issues. What can be called the nominal harmonization of the Polish food law to EU standards has been largely achieved. But is it enough to say that enlargement related challenges to food safety in the EU has been positively solved? This question brings us to the issue of controlling the implementation of food safety standards since, as it becomes more and more evident, same regulatory standards may produce different safety outcomes depending on the way they are implemented and controlled.

4.4 Factors influencing the implementation of food safety regulations

4.4.1 Institutional setup and procedural rules for food safety inspections

Transposition of law and nominal regulatory harmonization is not enough to ensure meeting regulatory goals⁵⁸. These goals have to be vigorously pursued by national food safety inspections and supported by the government. Both propositions need further elaboration. Contemporary research on specialized public administration posits as the main condition for its effective and efficient functioning its insulation from political bodies by among others the technique of managers' appointment and

⁵⁸ The full implementation of European regulations should encompass four consecutive stages: Formal transposition; Practical application; Enforcement/control and outcomes/results. See Stava, P.(1993). *Implementation of Community Law: Stronghold of National Control?*, in Andersen, S.S. & Elinssen, K.A. eds. *Making Policy in Europe: The Europeanization of National Policy Making*, London: Sage. p. 60)

the length of their tenure⁵⁹. Only then specialized public administration can take full advantage of their expert knowledge and try to act in the public interest.

Are these conditions fulfilled in the case of the Polish food safety inspection system? Let us take as an example the veterinary inspection. The law from 24 April 1997 on Veterinary Inspection⁶⁰ says that the Chief Veterinary Inspector called the Chief Veterinary Doctor is nominated (art. 34) by the Prime Minister and can be recalled by him at the motion of the Minister of Agriculture. He can be dismissed any time as his post is not protected by assuring the minimal tenure of his position and clear procedural requirements for the recall. Thus the Chief Veterinary Inspector is in a weak position to defend him self against political turmoil and in fact all government changes in last decade (1993, 1997 and 2001) were accompanied by the change on the post of he Chief Veterinary Inspector.

Down the inspection ladder the Regional Veterinary Inspector is nominated by the Governor of the Region (art. 37) who in turn is appointed by the government in agreement with the Chief Veterinary Inspector. But again the period of his tenure is not specified and his position is weak, although in this case both nominating organs make part of the structure of the central government.

In Poland routine inspections of abattoir and food factories are conducted by the Provincial Veterinary Inspector who is nominated by the President of the Province on the motion of the Regional Veterinary Inspector. Again in this case there are no formal provisions protecting the stability of the tenure, but, what makes this position even weaker is its subordination to the President of Province in turn elected by provincial counselors. The data show that in provincial councils there is strong representation of business people often owning or running food enterprises and in principle being able to exert pressure on the decisions of the Provincial Veterinary Inspector. The drawback of this institutional design consists in the fact that instead making the Provincial Veterinary Inspector autonomous with regard to local business interests, the Provincial Veterinary Inspector has been exposed to business pressure and it is doubtful whether he can resist such a pressure especially when there is a

⁵⁹ See Murray Horn, *The Political Economy of public administration: institutional choice in the public sector*, Cambridge UP, 1995.

⁶⁰ Its full name is „The Law about the fight against infectious animal diseases, examination of animals and meat and Veterinary Inspection”.

conflict between public health interests and for instance an interest in the protection of jobs in the locality.

Inspections, when they lead to the decision to suspend production or close a plant, have to be backed by relevant public authorities. The government can influence the implementation of regulations also in a different way: the majority of regulations states a date from which they start obliging and this date is often delayed by months or even years. Firms get time for making necessary investments and to implement and to learn new safety procedures. Governments also subsidize and educate firms to enhance their capacity to smoothly apply regulatory requirements⁶¹. Once however the deadline arrives all regulatory requirements should be enforced. Adjustments efforts of firms and farmers depend upon the credibility of public authorities. This condition was not however fulfilled by Polish authorities used to delay and change the deadline for the introduction of some provisions of food safety regulations.

The efficacy of food inspections is crucial for external credibility of domestic food safety policies. The outcomes of inspections should be properly documented and shown at the request of foreign partners. If documentation does not raise doubts the country sends credible signals to its partners and strengthens international confidence in its domestic policies.

External auditing for the assessment of the Geographical BSE-risk of Poland done by the Scientific Steering Committee (SSC) and published in March 2001 evidences several drawbacks in the working of veterinary inspections in Poland⁶². While overly stating that BSE "is likely but not confirmed" (p. 13)⁶³, the SSC indicates following deficiencies of BSE inspection system in Poland:

- no documentation of control of slaughter and movement of imported cattle (p.3);

⁶¹ Such a support is offered to Polish farmers within an accession package signed in Copenhagen on 13 December 2003. According to the agreement in the years 2004-2006 Polish farmers can get repaid for the costs of adjustments introduced in order to meet EU food safety standards up to 200 Euro per one hectare (Informacja na temat wyników zakończonych negocjacji akcesyjnych z UE w obszarze "Rolnictwo" 6 January 2003, http://www.minrol.gov.pl/Publikacje/negocjacje_rolnictwo.html).

⁶² Remember: the assessment is based on the data voluntarily supplied by the country's authorities. The document's name is: *Report on the Assessment of the Geographical BSE-Risk (GBR) of Poland*, March 2001, <http://europa.eu.int/comm/food/fs/sc/ssc/>.

⁶³ The presence of BSE in Poland was confirmed in 2002 with 2 cases of cattle infected.

- no evidence how the Veterinary Inspectorate had excluded the possibility that meat-and-bone meal (MBM) served to feed cattle and not only pigs, poultry, fish and pets (p.5);
- late implementation of a ban for feeding MBM (to ruminants (the feed ban exists since March 1997, but the legal basis for official controls of proper implementation of the MBM ban was adopted only in March 1999 (p. 7);
- no possibility to assess the efficiency of the procedure for notification of BSE (compulsory since April 1997) (p. 10).

In addition the SSC assessment warns about the possibility of cross-contamination in the process of rendering the carcasses of fallen stock as Polish feed-mills prepare feeding stuffs for all animal species using the same production lines with only separation in time of the production process⁶⁴.

The SSC report points also to the intrinsic difficulties in inspecting 6 million cattle population dispersed over 2 million multi-species farms having usually one-cattle, one or some pigs and few poultry⁶⁵.

The lack of safeguards for independent administrative action and negligence in properly documenting inspection rules and activities can undermine the credibility of implementation of food safety rules in Poland.

To above indicated problems one should add the barrier of limited resources which can be devoted to food controls in Poland and in other candidate countries. Contemporary food inspection is technologically intensive: "scratch and sniff" examination of meat is no effective. Often times, only a full laboratory analysis can detect a dangerous pathogen. Thus for instance the costs of cattle examination in the pre-BSE era were in Poland minimal amounting to 2 Euro per one cow. Now the examination of all cattle older than 30 months is much more costly as the transportation of the material and examination in referenced laboratories costs as

⁶⁴ Basic regulation dates from 13 July 1939 with modifications from 24 April 1997.

⁶⁵ The impact of farm structure on the implementation of food safety rules is discussed in the section on safety regulations for milk production.

much as 40 Euro per one cow. Poland needs to test yearly for BSE some 0.5 m cattle and this would cost alone some 20 m Euro⁶⁶.

A country can improve the image of its commitment to the control of food safety if it shows that it devotes enough resources to inspection services⁶⁷.

4.4.2 The size distribution of firms: the example of Polish milk factories and UE milk safety rules

The ability to meet safety requirements depends on the organizational structure of the industry. The domination of small food producers seems to diminish the likelihood of meeting food safety requirements since a) it increases the costs of inspections; and b) small food farm producers are financially unable to cover the costs of compliance with all food safety regulations. Thus, often the regulator excludes small farms (or small producers) from such obligations or small food operators tend to practically neglect such regulations. In both cases the risk is that food safety regulations are not applied uniformly and some hazards (especially microbiological ones) to health may spread to other producers and consumers.

Such a situation can be illustrated with the example of milk production in Poland. The quality of farm milk is influenced by a number of factors associated with the technology of farm production⁶⁸.

The microbiological contamination of raw milk during the production on farm may result in the presence of a variety of microorganisms, some of them pathogenic. To limit the incidence of safety failure, minimum standards and surveillance procedures are set in legislation. The table below presents milk safety norms in Poland and in the EU.

⁶⁶ Andrzej Komorowski, Jacek Zak, *Problemy bezpieczeństwa żywności w kontekście zdrowia publicznego* (Problems of food safety in the context of public health), mimeo, 2002.

⁶⁷ Poland employs 13,500 persons in the institutions performing food controls. It is comparatively less than an EU average. It is not enough to examine all cattle slaughtered as, according to press report, some 5,5 m animals are slaughtered without being ante-mortem examined by veterinary inspectors (see: Joanna Solska, Pasztet z miesem, in *Polityka*, 19/2000).

⁶⁸ In the paragraph I draw on the PhD dissertation by Waldemar Guba,(2000) *Competitiveness of Polish Milk Processing Industry during the Integration to the European Union – Analysis of Dynamic Competitive Advantages*, University of Gottingen 2000.

Table: 4.4.2

Milk safety standards in Poland and the EU (as of 1998)

Quality criteria	Units	EU quality categories (EU Directive 92/46/EEC)			
		Acceptable		Unacceptable	
Limits for the bacteria number	1 000 per ccm	<=100			
Limits for the somatic cells	1 000 per ccm	<400			
Freezing point	C	<=-0.515			
Density	g/ccm	1.028			
Quality criteria	Units	Poland (Polish norm PN-A-86002:1995)			
		Class Extra	Class I	Class II	Class III
Limits for the bacteria number	1 000 per ccm	<100	100-400	400-1000	>1000
Limits for the somatic cells	1 000 per ccm	<400	400-500	500-1000	>1000
Freezing point	C	<=-0.515			
Density	g/ccm	1.028			

Source: adapted from Waldemar Guba, (2000) *Competitiveness of Polish Milk Processing Industry during the Integration to the European Union – Analysis of Dynamic Competitive Advantages*, University of Gottingen 2000, p. 20.

As it can be noticed the strictest standards with regard to milk safety in Poland do not differ from that of the EU just because they have been modeled on them. What differs however is the technique of diluting the rigor of these standards by introducing subcategories for milk safety, which allow to slow down (if not bypass) the adjustments needed to meet these standards.

The Polish milk safety and quality regulations used to distinguish four classes of milk according to its safety/quality parameters, but only Class Extra corresponds to the quality standard acceptable in the EU.

In 1999 Poland liquidated the Class III, but still in mid-2000 among 450,000 farms which used to supply milk to milk factories, only 160,00 produced exclusively the milk of Class Extra Quality. Still the pace of adjustment seemed pretty fast as in

1999 there were only 90,000 milk suppliers who produced only milk of Class Extra quality⁶⁹.

But there are limits to further progress in this regard as the analysis of the IERiGZ (1999)⁷⁰ shows that investments in milk safety are economically justified only in farms with at least 5-6 cows, but such farms account only for 30-35 percent of farms functioning in Poland.

A similar situation can be observed one step further in the milk processing chain. In Fall 2002 only 9 percent of milk processing plants (dairies) met EU milk quality requirements and further 40 percent of them have declared to be ready for the moment of accession. Poland has received a 3 year transition period for next 28 percent of milk factories, but 23 percent of all milk factories have to be closed according to all estimates.

To be sure, the supply from 28 percent of milk factories in need for the transition period does not threaten the EU food safety as they will produce exclusively for the local market.

Table: 4.4.1

Polish Milk Producers and UE Milk Safety Rules

The number and a share of Polish milk factories which:	In numbers	As a share
Already meet UE milk safety rules	36	9%
Will meet UE milk safety rules at the date of accession	156	40%
Will meet UE milk safety rules after a 3 year transition period	108	28%
Have no chance to meet UE milk safety rules for economic reasons	90	23%

Source: Rzeczpospolita, 10 October 2002, p: A1.

⁶⁹ FAPA(2000)*Stereotypy w UE dotyczące polskiego sektora rolno-spożywczego*, Warszawa, p. 15.

⁷⁰ IERiGZ(1999)*Rynek mleka: stan i perspektywy*, Warszawa.

The adjustment to EU milk regulations does create several problems for the Polish economy and these problems can be summarized in the following two statements:

- a) The strict application of milk quality rules may lead to a short term reduction in domestic milk production and by this to an increase of the price of milk.
- b) The application of milk quality rules may spur the concentration in milk processing industry adding to social problems (increase in unemployment) in the country side and villages.

4.5 HACCP and regulatory auditing in Poland

HACCP is to become be an important part of a new food safety regime in Poland. By law all Polish food producers have to implement a HACCP system no later than by 1 January 2004. But the law makes an important exception by lifting this obligation from all small and medium sized enterprises, that is from enterprises employing less than 50 people. The size distribution of food processing enterprises in Poland makes this provision a true whole in the HACCP control as for instance for 4139 meat processing firms functioning in Poland in 2000 only 350 employed more that 50 persons, 520 employed from 6 to 49 persons and the rest 3269 (that is 79 percent) employs less that 5 persons. Of course larger companies process the bulk of meat sold on the Polish market, but because the HACCP controlling will cover only 21percent of all active companies, the Polish regulatory system cannot rely on indirect controls via mechanism of regulatory auditing, but have to depend on the effectiveness of old style veterinary inspections.

The diffusion of HACCP has to be a part of a broader change in the philosophy of food safety controls. This change consists on a greater reliance on companies food quality and safety discipline⁷¹ and a greater use of courts in search for a better

⁷¹ Especially so since under the pressure of the European Commission candidate countries, including Poland, have to limit the scope of formal approval of food before placing it on the market (see for instance the speech by David Byrne, European Commissioner for Health and Consumer Protection to European Business Summit on 6 June 2003 (Speech/02/260)).

consumer protection⁷². The policies to encourage changes in both directions take time to bear fruits.

5. Conclusions: importing regulations with commitment to deliver

In a recent article Richard S. Silverman points to an increased internationalization of food safety regulations and makes forecast that this trend will continue:

“Food regulation in the last half of the twentieth century has been characterized in part by an accelerating shift from local regulation to a system of national standards or national “uniformity”. We will see the same trend during next fifty years toward an international uniformity, with national agencies giving up authority to international standard setting and scientific organizations. “Emerging” or third world war nations appear to be expecting and planning for this to happen. They do not appear to be creating their own independent scientific/regulatory infrastructure, but seem to be relying on Codex and organizations such as the Joint Expert Committee on Food Additives to serve this function”⁷³.

It is in fact quite likely that the leadership in designing and scientifically justifying food safety regulations belongs to international organizations. This is likely also because most countries do not have enough resources to create and support centers of scientific excellence and because food safety regulations are an example of international public goods.

But still even if food safety standards are global, their implementation will always be local. The crucial moment for international trade in foods will slowly move to the questions of assuring that international food standards are faithfully enforced, if countries are to abolish controls of foreign foods and reduce the costs of double-checking.

⁷² Drawbacks in the Polish system of legal consumer protection has been evidenced by M. Sengayen, (2002)Consumer Sales Law in Poland: Changing the Law, Changing Attitudes, in *Journal of Consumer Policy*, vol. 25, pp: 403-437.

⁷³ Richard S. Silverman, Report on the Future of Food Regulation, in *Food and Drug Law Journal*, nr 11/2000.

According to the estimations done by the Office of the Committee for European Integration (UKIE) the application of food safety regulations might result in the increase of food prices by 4-5% and this mainly due to the forced change in the components used for food production⁷⁴.

The Polish Standardization Committee (the PKN – Polski Komitet Normalizacyjny) estimates that 80% of Polish norms meet the EU requirements.

⁷⁴ See: Costs of production might rise, in *Rzeczpospolita*, from 14 February 2003.