



International Standards for Agricultural Products



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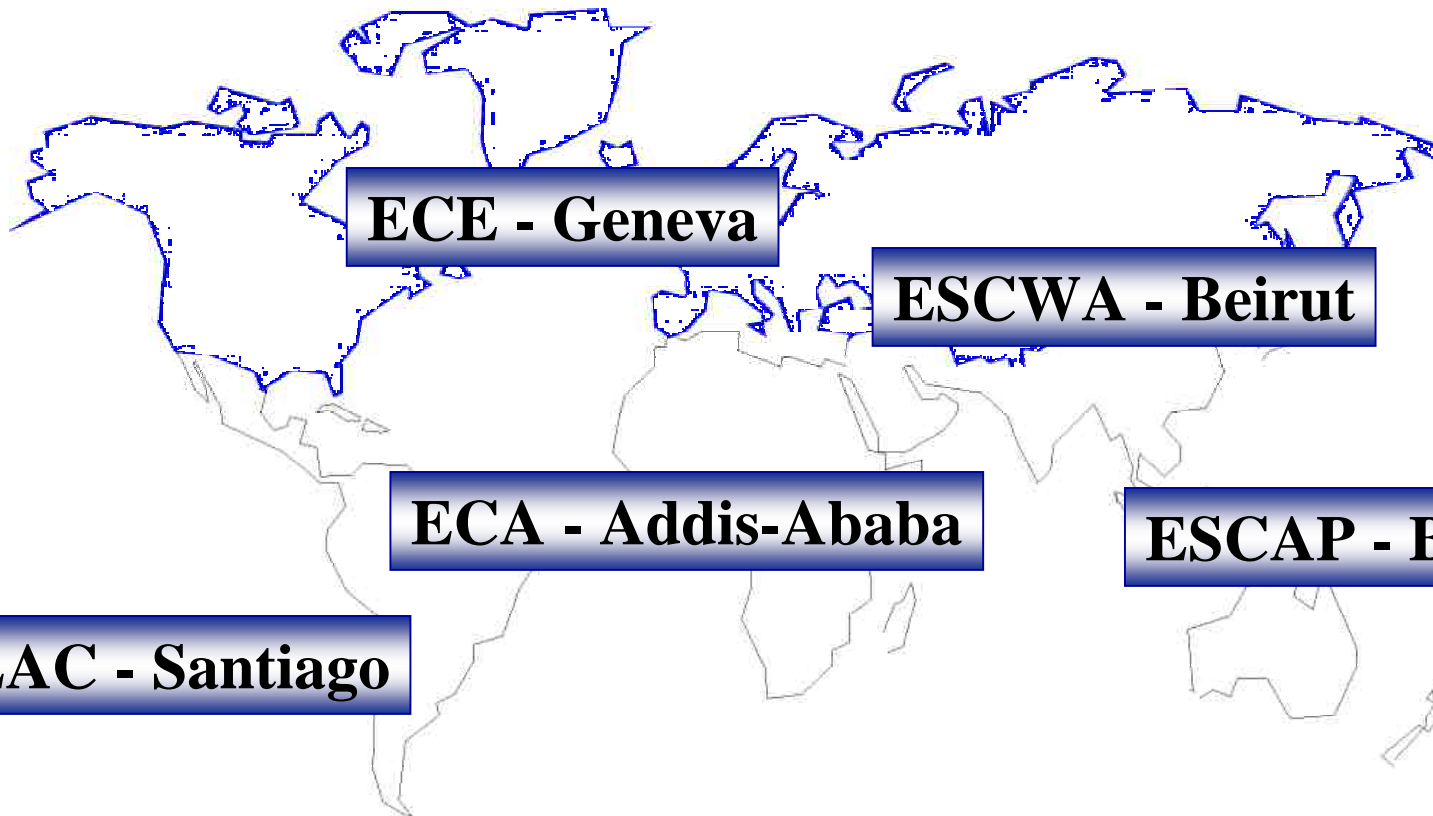


Outline

- UNECE
- The role of agriculture and trade
- History, goals and role of commercial quality standards
- Quality of agricultural products
- UNECE Agricultural Quality Standards – Development and Implementation
- Future work



5 Regional Commissions of the United Nations



ECLAC - Santiago

ECA - Addis-Ababa

ECE - Geneva

ESCWA - Beirut

ESCAP - Bangkok



UNECE Data



- Set up in 1947 by ECOSOC
- 55 Member States in North America, Asia and Europe
- 200 employees



UNECE Mission

- Encourage greater economic cooperation among its member states
- Facilitate trade between member states and beyond in all stages of the supply chain
- Encourage sustainable development of its member states

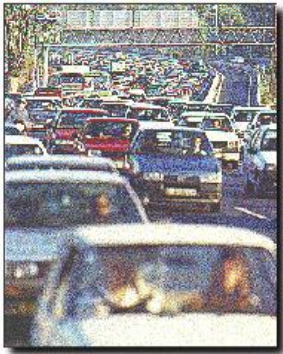


UNECE Services

- Evaluate the economic situation in the UNECE area
- Provide a forum for governments to develop conventions, regulations and standards
- Provide capacity building activities to facilitate integration of member states



UNECE Work Areas



**Inland
Transport**



Environmental Policy



Statistics

UNECE



Sustainable Energy



Trade



UNECE Trade and Timber Division



Timber



TRADE

UN/CEFACT

**Technical Harmonization
and Standardization
Policies, Conformity
assessment, Market
surveillance**



**Agricultural Quality
Standards**



Agriculture and trade: keys to civilization

- We all need to eat!
- We need to get the right quantity of good quality food
- How we get our food and what we eat determines how we live
- Agriculture and trade have given us the time to create the civilization we know today



Modern agriculture: A success story!

- More people than ever before have enough to eat and pay less for it
- There are more people today – but the percentage of people suffering from hunger and malnutrition has decreased
- Average life expectancy has increased
- Science and technology allow us to produce more with less workers
- There is more choice in food products than ever before and most products are available all year around in many places
- ...



Modern agriculture: A success story?

- People are still starving or suffer from malnutrition in some countries
- In the same countries and elsewhere a growing number of people die from eating too much and inappropriate food (too much fat, too much sugar)
- Small farmers have problems competing
- Many people complain about the taste of fruit and vegetables
- Agriculture has created problems with soils and water
- Agriculture has created new food safety problems
- ...



Could we do it differently?

- Good traditional cooking and gastronomy use high quality, natural ingredients and are healthy and tasty
- Good quality food is not necessarily expensive or difficult to prepare
- Competition could be based first on quality then on price



Values and education

- Problems: Lack of education
- Profit seeking can be a source of motivation – but when it is missing values, responsibility and, most of all, accountability, it can create problems
- We need responsible, well informed actors in the food supply chain from the producers to the consumers



The role of agriculture and trade

- Agriculture and trade should give all of us:
 - Enough, affordable, safe, healthy, tasty food
 - That has been produced in a sustainable way, with respect to our environment; and
- Agriculture and trade should give those who work there a fair income and good working conditions



Trade in agricultural products in the ECE region in 1949

- Countries use national quality standards to regulate trade within their borders
- Producers market
- Growing interest in international trade
- Existing national regulations became barriers to international trade



Harmonization of national standards

- 1949 The Working Party on Agricultural Quality Standards takes up its work at UNECE in Geneva
- 1954 The Geneva Protocol and Standard Layout are adopted



Why standards?

- To define common trading language for all actors in the supply chain
- To facilitate fair international trade
- To avoid bad quality products on the markets
- To guide producers to meet market requirements
- To build trust and market opportunities
- To encourage high quality production
- To improve producers' profitability
- To protect consumers' interests
- Remove technical barriers to trade



Aspects of quality: Two basic notions

- The totality of **features and characteristics** of a product, process or service that bear on its **ability to satisfy stated or implied needs** as broadly defined in ISO 9000:2000
- “**Excellence**” – something that distinguishes a product from similar products and justifies demand



Aspects of quality for food: absence, presence, excellence

- **Absence** of defect, fraud and adulteration (e.g. food safety, quality defects) – regulated in food safety and quality standards
- **Presence** of expected properties (e.g. nutritional components, external and internal quality aspects) – regulated or starting to be in food quality or labelling standards



Aspects of quality for food: absence, presence, excellence

Excellence

- Added value through:
 - Forms of production (organic farming, environmental consideration, animal welfare)
 - Specific production areas (designation of origin) and their associated traditional production methods
- High interest in this area:
 - Operators try to distinguish their products from similar ones to attract customer attention and fidelity
 - Regulators provide a legal framework



Aspects of quality: Commercial quality

- No quality without safety
- Quality is MORE than safety
- Commercial quality is a set of parameters describing internal and external characteristics of the produce, which are necessary to ensure transparency in trade and good eating quality



Aspects of quality for food: Commercial Quality

External

Cleanliness

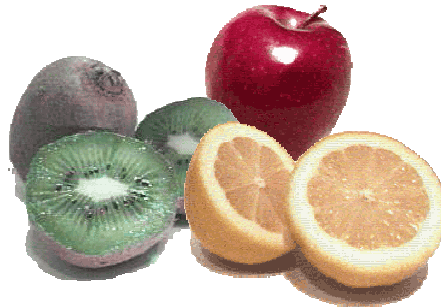
Colour

Freshness

Shape

Presentation

Packing...



Commercial quality

Internal

Taste

Maturity

Nutrition...



Evaluation of commercial quality

- Subjective
 - Sensorial characteristics (taste, smell, texture, colour...)
- Objective
 - Analytical or physical measurements



UNECE Standard Layout

- Definition of produce
- Minimum requirements
- Maturity requirements
- Classification (Extra, Class I, Class II)
- Sizing provisions
- Tolerances (quality, size)
- Presentation (uniformity, packaging)
- Marking
- Annexes: Definitions, Lists of varieties, Testing and Sampling procedures



Principles for the development of UNECE Standards

- All relevant actors in the supply chain (buyers, sellers, retailers, producers, consumers etc. through their associations) should participate
- Cooperation with other international organizations should be sought and any duplication avoided
- All UN member countries can participate with the same rights
- Decisions are taken on a consensus basis

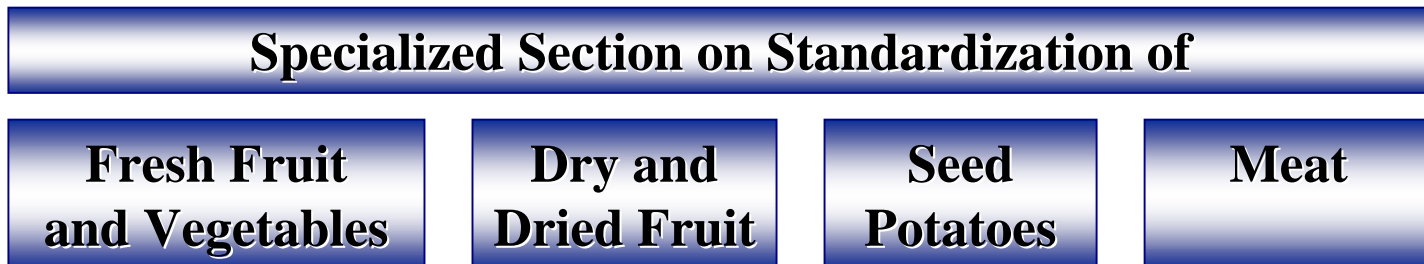


Participation

Argentina, Australia, Austria, Belgium, Bolivia, Brazil, Bulgaria, Cameroon, Canada, Chile, Côte d'Ivoire, Cyprus, Denmark, Estonia, Finland, France, Germany, Georgia, Greece, Hungary, India, Ireland, Italy, Kenya, Lithuania, Morocco, Netherlands, New Zealand, Poland, Portugal, Romania, Russian Federation, Slovakia, South Africa, Spain, Sweden, Switzerland, Ukraine, Thailand, Turkey, United Kingdom, United States, Uruguay, European Community

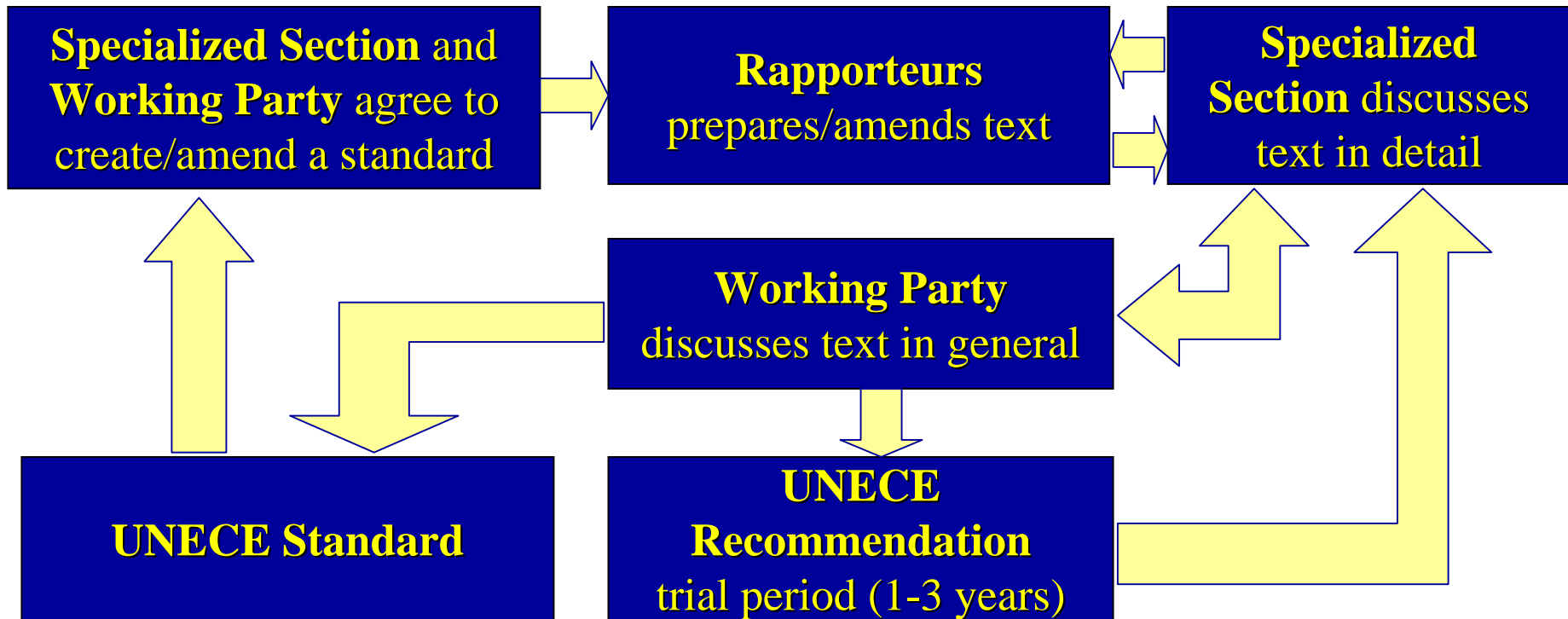


Organizational Structure



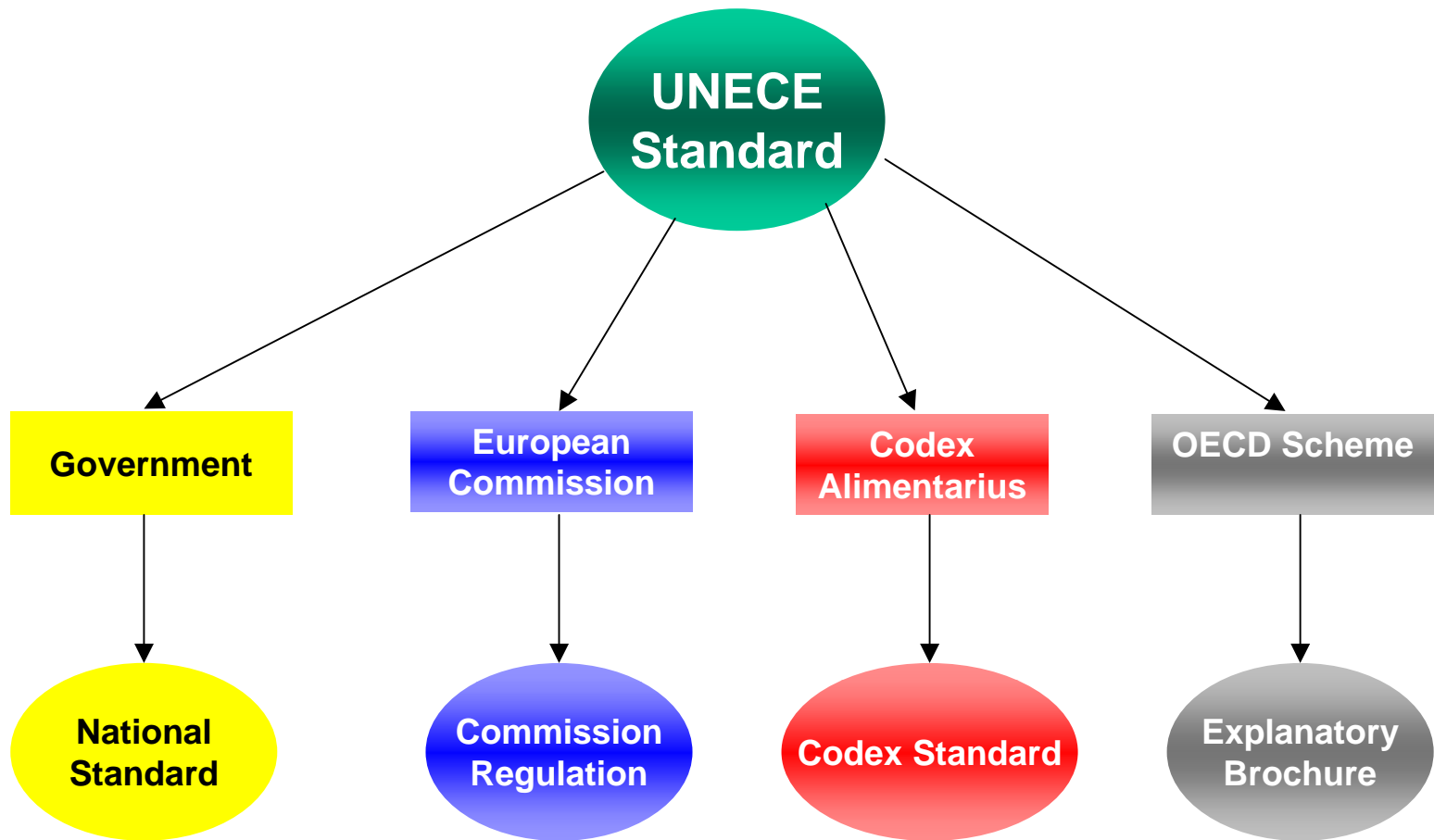


Process of developing a UNECE standard





Implementation of standards





Standards available

Dry and Dried Produce (17)



Fresh Fruit and Vegetables (50)

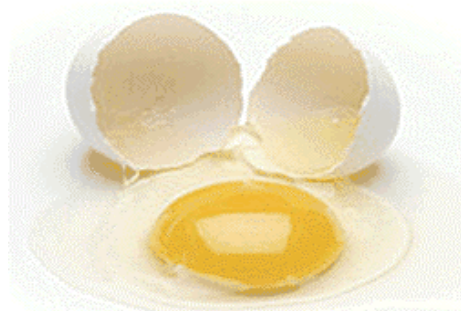


Meat (5)

UNECE Agricultural Standards



Seed Potatoes (3)



Eggs and Egg Products (5)



Cut Flowers (8)



UNECE Standards for Fresh Fruit and Vegetables



Annonas	Headed Cabbages	Garlic	Potatoes: early & ware
Apples	Carrots	Horse-radish	Radishes
Apricots	Cauliflowers	Kiwifruit	Raspberries
Artichokes	Chinese Cabbages	Leeks	Ribbed celery
Asparagus	Cherries	Lettuce and endives	Rhubarb
Aubergines	Citrus fruit	Mangoes	Scorzonera
Avocados	Cucumbers	Melons	Spinach
Beans	Courgettes	Onions	Strawberries
Bilberries and Blueberries	Cultivated mushrooms	Peaches and Nectarines	Sweet peppers
Broccoli	Edible sweet chestnuts	Pears	Table grapes
Brussels sprouts	Fennel	Peas	Tomatoes
	Fresh figs	Pineapples	Watermelons
		Plums	Witloof chicory



Current and future work in Fresh Fruit and Vegetables



- Internal quality/Maturity requirements
- Control certificate
- Promoting trade in Fresh Fruit and Vegetables to contribute to a WHO strategy on Diet, Health and Physical Activity
- New standards for Shallots, Truffles and Ceps



Internal quality



- The goal (for now) is to define the minimum internal quality which a fruit/vegetable must have in order to still deserve its name.
- To remove external quality requirements from the standards or reduce them (e.g. size for apples).
- To make it easier for organic produce to make it into Class I.
- To avoid immature fruit on the markets at the beginning of the season.
- Question: Can a December tomato still be called a tomato?



Cooperation with WHO

- WHO recommends the intake of a minimum of 400g of fruit and vegetables per day for the prevention of chronic diseases such as heart disease, cancer, diabetes and obesity.



Postcards promoting the strategy

How many did you eat today? Ne les mangez pas seulement des yeux! Сколько фруктов и овощей вы съели сегодня?你今天吃了多少?

WHO recommends the intake of a minimum of 400g of fruits and vegetables per day for the prevention of chronic diseases such as heart disease, cancer, diabetes and obesity.

L'OMS recommande une certaine quantité de fruits et légumes afin de prévenir les maladies chroniques telles que les maladies cardiovasculaires, le cancer, le diabète et l'obésité.

ВОЗ рекомендует ежедневно съедать не менее 400 граммов фруктов и овощей для предотвращения таких хронических заболеваний, как сердечно-сосудистые заболевания, рак, диабет и ожирение.

世界卫生组织建议每天至少摄入 400 克水果和蔬菜，以预防心脏病、癌症、糖尿病和肥胖。

UNECE Standards for Quality CEE-ONU Normas de calidad ЕЭК ООН СТАНДАРТЫ КАЧЕСТВА 欧洲经委会

كم أكلت منها اليوم؟ ¿Cuántas ha comido usted hoy? How many did you eat today? Ne les mangez pas seulement des yeux

WHO recommends the intake of a minimum of 400g of fruits and vegetables per day for the prevention of chronic diseases such as heart disease, cancer, diabetes and obesity.

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عثة الأمم المتحدة للإحصاءة الأوروبية CEPE Normas de calidad UNECE Standards for Quality CEE-ONU

Сколько фруктов и овощей вы съели сегодня?你今天吃了多少?كم أكلت منها اليوم? ¿Cuántas ha comido usted hoy

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UNECE Standards for Dry and Dried produce



- Apples, dried
- Apricots, dried
- Cashew kernels
- Dates, whole
- Figs, dried
- Grapes, dried
- Hazelnuts, inshell
- Hazelnut kernels
- Pears, dried
- Pine nuts, decorticated peeled
- Pistachio kernels, decorticated and decorticated peeled
- Pistachio kernels, unshelled
- Prunes, sweet
- Almonds, decorticated
- Sweet almonds, unshelled
- Walnut kernels
- Walnuts, inshell



Current and future work in Dried Produce



- Revision of standards for pistachios and almonds
- New standards for Dried Peaches, Pecan nuts, Macademia nuts, Dried Peppers, Dried Tomatoes, Peanuts



Colour chart for walnut kernels

Extra Class: Uniformly light-coloured kernels with practically no dark straw and/or lemon yellow and with no dark brown.



Class I: Kernels of a colour not darker than light brown.



Class II: Kernels of a colour not darker than dark brown. Darker kernels may be marketed in this class, provided the colour is indicated on the package





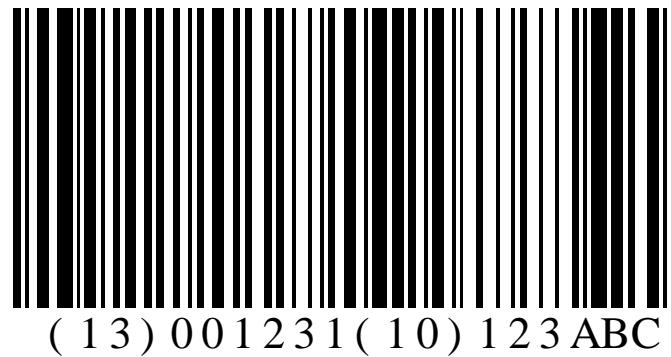
UNECE Standards for Meat

- Porcine Meat - Carcasses and Cuts - 1998 - currently being revised
- Bovine Meat - Carcasses and Cuts – 2004
- Ovine Meat - Carcasses and Cuts – 2004
- Chicken Meat - Carcasses and Parts – 2004
- Llama/Alpaca Meat – 2004
- Other standards planned: Goat, Turkey, Veal





Example: Bovine Coding



(01) 91234567890121

(3102) 000376

(7002) 15111110205142111

(13) 001231

(10) 123ABC

- Global Trade Item Number (GTIN)
- Net Weight, kilograms
- UN/ECE Meat Carcasses and Cuts Code
- Slaughter/Packaging Date
- Batch Number



The situation today

- Consumers market - Consumers concerned about quality and safety
- Complex international supply chains
- Big retailers operate globally
- More countries enter the international markets
- Trade creates their own strict standards
- New technologies allow new types of quality testing
- Problems as mentioned in the introduction



Future work

- Private and public standard setting and implementation bodies work together, complementing each other
- Definition of parameters and values for internal quality of produce and use new technologies for testing
- Encourage good quality and good farming practices by giving recognition to those who farm in a sustainable way
- Support the trade of organic produce by basing the definition of quality less on external appearance and more on internal parameters
- Codify standards to be used in electronic commerce; Electronic export certification
- Develop training packages to assist countries in the implementation of standards



Why participate in standardization?

- To be integrated in the international trading system (to contribute and decide)
- To propose standards for local products for which international standards do not exist
- To network, exchange experiences, learn from others



Products with future

- High quality products which can command a high price
- Promotion of “brand awareness” for local products (controlled origin labels)
- Organic produce



UNECE Agricultural Quality Standards on internet

<http://www.unece.org/trade/agr>

