The Meeting was hosted by the Italian Ministry of Agricultural, Food and Forestry Policies, and was held in Rome, Italy on 12-14 October 2016.
OECD Fruit and Vegetables Scheme

Proceedings

of the

17th Meeting of the Heads of National Inspection Services

October 12-14, 2016
Rome, Italy

organised by
OECD

hosted by
Italian Ministry of Agricultural, Food and Forestry Policies
FOREWORD

The OECD Fruit and Vegetables Scheme organised the 17th OECD Meeting of the Heads of National Inspection Services in Rome on 12-14 October 2016 on the invitation of the Italian Ministry of Agricultural, Food and Forestry Policies. The Meeting was attended by 45 delegates from 15 Scheme's participating countries and six Observer countries. The European Commission, the Secretariat of the FAO/WHO Codex Alimentarius Commission as well as the Business and Industry Advisory Board (BIAC) were also represented.

The objective of the Meeting of the Heads of National Inspection Services is to facilitate discussions between inspection services on major developments and challenges in the fruit and vegetables sector and quality inspection system. It is also a good possibility for the countries to provide an update on the latest developments in inspection techniques and tools, and to harmonise the application of OECD quality standards.

The Meeting focused on traceability, tolerances, risk based inspection methodologies, conformity checks for internet sales, phytosanitary risks, management of food after a nuclear accident, as well as optoelectronics and biophotonics for quality of fruit and vegetables. Italy and Romania gave an overview of their national quality inspection systems. Italy also organised a technical visit to see Kiwi production.

In order to raise the visibility of the Scheme the OECD Secretariat arranged for a film crew to accompany delegates during the entire meeting. Delegates were encouraged to deliver short speeches or interviews. The video will be ready by the end of November and will be officially launched at the next Plenary Meeting in Bratislava on December 2016.

3
EXECUTIVE SUMMARY

The OECD Fruit and Vegetables Scheme organised the 17th OECD Meeting of the Heads of National Inspection Services in Rome, Italy on 12-14 October 2016, at the invitation of the Department of European Policies and International and Rural Development, Directorate for International and European Union Policies of the Italian Ministry of Agricultural, Food and Forestry Policies. The Meeting was attended by 45 delegates from 15 Participating countries and six Observer countries. The CODEX and European Commission Secretariat also participated.

The Meeting discussed the Italian and Romanian Inspection Systems. Agecontrol SpA, the dedicated Italian agency for quality control, was established in 1985, and is the Agency in charge of the public controls and EU actions implementation in Italy. Agecontrol SpA performs quality checks on fresh fruit and vegetables products on both the domestic market and import/export sector. Agecontrol SpA operates in 28 locations and counts 80 inspectors.

The Department of State Inspection for Technical Control in Vegetable Production and Exploitation of Fruits and Vegetables (ISCTPVLF) is responsible for verification of compliance with marketing standards for fruit and vegetables for the imports, exports and domestic market in Romania. ISCTPVLF was established in 2003 and is divided into a coordinating and territorial inspection bodies. ISCTPVLF has 42 inspection bodies, 65 inspectors, and counts 44 mobile labs.

Participating Countries also discussed several challenges being faced by inspection services amongst participating countries. In particular the Netherlands highlighted that although tolerances in the Regulation 543/2011 are set at 1% tolerances in practice are and should be set at 3%. Furthermore, the meeting discussed the application of tolerances in international marketing/quality standards. Tolerances should be viewed in terms of progressive defects and non-progressive defects. For importing countries, currently the tolerances for decay vary from 0 to 3%. This should be harmonised.

Risk Based Inspection Methodologies were also discussed. The Netherlands shared with delegates their experience and explained that in their case inspections are randomly assigned, with SMS products in general undergoing 100% controls, while GMS products normally undergo solely 10% controls. Approved traders and approved third countries are deemed low risk; therefore they will face only 5% inspections. New Zealand also provided an overview of their phytosanitary inspections system. The system is unique in the sense that it deals with multiple country phytosanitary system requirements. It relies on Independent Verification Agencies (IVAs) and clear delegation, audits and accountability steps.

Delegates also discussed the challenges of conformity checks for fruit and vegetables internet sales (distant selling) and the feasibility for OECD to develop operating rules to address internet sales. Delegates also discussed the opportunities that new technologies in image technology can offer to test fruit and vegetables quality. The discussions covered electronic senses and technologies, biophotonics, non-imaging application, imaging applications, printing on food and infotracining.

Italy also organised a field trip where they provided a hands-on demonstration of the whole process from production to inspection to shipment of kiwifruit.

The recommendations of the Heads of National Inspection Services will be submitted to the 2016 75th Plenary Meeting for discussion.
### TABLE OF CONTENTS

**EXECUTIVE SUMMARY** .................................................................................................................. 5

**OPENING ADDRESS** ........................................................................................................................... 9

**SECTION I. PRESENTATIONS OF OTHER ORGANISATIONS** .............................................................. 12

  INFORMATION ON RECENT ACTIVITIES OF THE CODEX ALIMENTARIUS COMMISSION ON THE STANDARDIZATION OF FRESH FRUITS AND VEGETABLES ........................................ 13
  Presentation by Ms. Lingping Lingping Zhang, Codex Secretariat .............................................................. 14

**SECTION II. FRUIT SECTOR IN ITALY** .................................................................................................. 17

  ITALIAN FRESH FRUIT AND VEGETABLES SECTOR ........................................................................... 18
  Presentation by Dr. Eleonora Iacovoni, Ministry of Agricultural, Food and Forestry Policies, Italy ............. 19

**SECTION III. FOCUS ON KIWI FRUIT** ................................................................................................... 24

  NEW ZEALAND KIWIFRUIT INDUSTRY - AN OVERVIEW. ................................................................. 25
  Presentation by Ms. Catherine Richardson, Zespri International Ltd, New Zealand .................................... 26

**SECTION IV. STRUCTURE AND ACTIVITIES OF INSPECTION IN COUNTRIES** ............................. 33

  APPLICATION OF QUALITY STANDARDS IN THE FRUIT AND VEGETABLES SECTOR - IMPLEMENTATION IN ITALY ........................................... 34
  Presentation by Dr. Carla Magarotto, AgeControl S.P.A., Italy ................................................................. 35

  INSPECTION AT GUIDONIA AGRI- FOOD CENTER ............................................................................. 43
  Presentation by Dr. Carla Magarotto, AgeControl S.P.A., Italy ................................................................. 43

  CONFORMITY CHECKS AT EXPORT STAGE ....................................................................................... 50
  Presentation by Dr. Carla Magarotto, AgeControl S.P.A., Italy ................................................................. 50

  ROMANIAN FRUIT AND VEGETABLES INSPECTION SYSTEM - INSPECTION FOR TECHNICAL CONTROL IN THE PRODUCTION AND EXPLOITATION OF VEGETABLES AND FRUITS ....................................................................... 56
  Presentation by Mr. Dumitru Alexandru, Ministry of Agriculture and Rural Development, Romania .... 57

**SECTION V. FIELD TRIP** ..................................................................................................................... 62

  AGGREGAZIONE E SPECIALIZZAZIONE PER LA VALORIZZAZIONE DELLA PRODUZIONE E DELLA DISTRIBUZIONE ........................................................................................................... 63
  Presentation by Mr. Marco Mastroleo, Ufficio Tecnico Apofruit Italia .................................................... 64
SECTION VI. CHALLENGES FOR INSPECTION SERVICES .......................................................... 72

TRACEABILITY .................................................................................................................................. 73
Presentation by Ms. Diane Taillard, Director Consumer Safety & Traceability, Safety and Traceability, GS1 .......................................................... 74

UPDATE - DISCUSSION ON TOLERANCES .................................................................................. 79
Presentation by Mr. Jean Crombach, Quality Inspection Bureau (KCB), the Netherlands ........ 80

APPLYING TOLERANCES ................................................................................................................. 82
Presentation by Mr. Dorian Lafond, USDA Agricultural Marketing Service, the US ................. 83

RISK BASED INSPECTION METHODOLOGIES ......................................................................... 86
Presentation by Mr. Jean Crombach, Quality Inspection Bureau (KCB), the Netherlands ......... 87

INTERNET SALES ............................................................................................................................... 95
Presentation by Mr. Ian Hewett, Rural Payments Agency, United Kingdom .............................. 96

SECTION VII. PHYTOSANITARY AND HEALTH RISKS .............................................................. 102

PHYTOSANITARY INSPECTIONS IN NEW ZEALAND .............................................................. 103
Presentation by Ms. Karen Sparrow, Ministry for Primary Industries, New Zealand ............. 104

NEA POST-ACCIDENT FOOD MANAGEMENT FRAMEWORK ................................................ 108
Presentation by Mr. Edward Lazo, NEA/RAD, OECD ............................................................. 109

SECTION VIII. NEW TECHNOLOGIES FOR FRUIT AND VEGETABLES INSPECTION ...... 114

OPTOELECTRONICS / BIOPHOTONICS FOR QUALITY OF FRUIT AND VEGETABLES ..... 115
Presentation by Dr. Paolo Menesatti, Director of the CRA-ING, Italy ......................................... 116

FINAL DISCUSSION AND CONCLUSION ....................................................................................... 123

ANNEX I. SOME PHOTOS THE EVENT ............................................................................................. 124

ANNEX II. DRAFT AGENDA ............................................................................................................... 130

ANNEX III. LIST OF PARTICIPANTS .............................................................................................. 134
OPENING ADDRESS

By Dr. Felice Assenza, Director of the Department of European Policies and International and Rural Development, Directorate for International and European Union Policies, Ministry of Agricultural, Food and Forestry Policies

The Meeting was officially opened by Dr Felice Assenza, the Director of the Department of European Policies and International and Rural Development, Directorate for International and European Union Policies of the Italian Ministry of Agricultural, Food and Forestry Policies. He welcomed the representatives of the National Inspection Services from the Participating Countries of the OECD Fruit and Vegetables Scheme and from Observer Countries as well as the representatives of International Organisations such as OECD and the CODEX Alimentarius. Dr Assenza was hopeful that the topics for discussion in the agenda will allow participants to exchange views and share new developments and ideas in the fruit and vegetables inspection domain. He also stressed the importance of quality and marketing standards for efficient and transparent trade that will benefit producers and consumers.

Italy believes that the use of standards is indispensable for the correct functioning of fruit and vegetables trade. Therefore the need to ensure that the norms and regulations are interpreted and applied in a uniform way amongst all countries. In Italy, the inspections on quality and marketing standards are conducted by a dedicated agency called AGECONTROL that works in coordination with AGEA, the Italian agency for the provision of aid in agriculture. During the meeting the Italian inspections system and structure will be discussed. Dr. Assenza also reminded delegates that the OECD Heads of Inspection Meeting provides a unique opportunity for inspections services from different countries to discuss, learn and share their experiences. During the meeting Italy will also have the opportunity to show fellow inspection services the production and inspection of kiwifruit. Italy is one of the world leaders in kiwifruit production and will be more than glad to provide a hands-on demonstration of the whole process from production to inspection to shipment of kiwifruit.

Finally, Dr Assenza thanked in advanced all the speakers who will participate during the meeting and wished all delegates a fruitful meeting. He then passed the floor to Dr Iacovoni, Office Manager in fruit and vegetables, who will discuss the importance of fruit and vegetables in Italy.
SECTION SUMMARIES
SECTION I.
PRESENTATIONS OF OTHER ORGANISATIONS

The first Section is intended to summarise the latest developments in the fruit and vegetables quality inspection system and standardisation activities at the international level. The representative of the WHO/FAO Codex Alimentarius Commission introduced their activities and the latest developments in their programmes of work.

Presentations in the Section:

– Information on recent activities of the Codex Alimentarius Commission on the Standardization of Fresh Fruits and Vegetables
INFORMATION ON RECENT ACTIVITIES OF THE CODEX ALIMENTARIUS COMMISSION ON THE STANDARDIZATION OF FRESH FRUITS AND VEGETABLES

by Ms. Lingping Lingping Zhang, Codex Secretariat

Abstract:

Ms. Lingping Zhang from CODEX thanked OECD for the invitation and provided delegates a brief summary of current and recent activities of the CODEX Secretariat. In particular the 19th Session of the Codex Committee on Fresh Fruits and Vegetables, in Mexico, 5-9 October 2015 and the 39th Session of Codex Alimentarius Commission, in Italy, 27 June-1 July 2016. CODEX has also informed delegates of the status of the aubergines, kiwi and garlic standards. These standards have been currently adopted at step 5, while the ware potatoes standard is currently at step 3. New work is under development for fresh dates and previous proposals to work on shallots (Indonesia) and yams (Costa Rica) will be revised and resubmitted.

On other issues, CODEX will be discussing the replacement of the distribution of UNECE standards on their Agenda and the next 20th Session of the Codex Committee on Fresh Fruits and Vegetables will be held from 2 to 6 October 2017. The specific venue will be announced later.
INFORMATION ON RECENT ACTIVITIES OF THE CODEX ALIMENTARIUS COMMISSION ON THE STANDARDIZATION OF FRESH FRUITS AND VEGETABLES

Presentation by Ms. Lingping Lingping Zhang, Codex Secretariat
Information on recent activities of the Codex Alimentarius Commission on the standardization of fresh fruits and vegetables

19th Session of the Codex Committee on Fresh Fruits and Vegetables, in Mexico, 5-9 October 2015
39th Session of Codex Alimentarius Commission, in Italy, 27 June-1 July 2016

PROPOSED DRAFT STANDARDS ADOPTED AT STEP 5

• Aubergines
• Garlic
• Kiwifruit

PROPOSED DRAFT STANDARDS AT STEP 3

• Ware potatoes

NEW WORK ON STANDARD DEVELOPMENT

Approval of new work on fresh dates

Two proposals on shallots (Indonesia) and yams (Costa Rica) would be revised and resubmitted.

SUPPORTING DOCUMENT FOR STANDARD DEVELOPMENT

Proposed Layout for Codex Standards for Fresh Fruits and Vegetables: Minimum Requirements, Provisions concerning sizing, Provisions concerning tolerances and Non-retail Container will be considered at next session

Glossary of Terms: start preparation

OTHERS

Replacement of the distribution of UNECE standards on the Agenda Item

The 20th Session of the Codex Committee on Fresh Fruits and Vegetables will be held from 2 to 6 October 2017. The specific venue will be announced later.

Reports of the meetings are available from the Codex website at:
END
The aim of this Section was to leave to the host country the opportunity to widely present its fruit and vegetables sector.

Presentations of the Section:

– Italian fresh fruit and vegetables sector
ITALIAN FRESH FRUIT AND VEGETABLES SECTOR

by Dr. Eleonora Iacovoni, Ministry of Agricultural, Food and Forestry Policies, Italy

Abstract:

Dr Eleonora Iacovoni, from the Head of Office for Fruit and Vegetables of the Ministry of Agricultural, Food and Forestry Policies, presented the Italian national fresh fruit and vegetables sector. Fruit and vegetables production represents almost 20% of the total agriculture production in Italy, with an average value of EUR 11 574 229 914 between 2013 and 2015. Italy counts more than 177 000 fruit farms covering 436 000 hectares and 111 000 vegetable farms covering a surface of 420 000 hectares.

The main products are apples, oranges, peaches and nectarines, tomatoes, table grapes, clementines and mandarins, pears, kiwis, melons, and courgettes. Italy also has the highest number of protected denomination of origin (PDO) and protected geographical indication (PGI) products in Europe with 269 recognised products, of which 97 are fruit and vegetables.

Italy is one of the main producers of kiwifruit with four regions specialized in the production of green flesh kiwis (variety Hayward) and yellow flesh kiwis, with exports reaching almost 350 000 tonnes in 2015.
ITALIAN FRESH FRUIT AND VEGETABLES SECTOR

Presentation by Dr. Eleonora Iacovoni, Ministry of Agricultural, Food and Forestry Policies, Italy
ITALIAN FRESH FRUIT AND VEGETABLES SECTOR

Eleonora Iacovoni
Head Office Fruit and Vegetables Ministry of Agriculture

Rome, 12-14 October 2016

VALUE OF ITALIAN FRUIT AND VEGETABLES SECTOR: PRODUCTION AND TRADE (source: ISTAT)

<table>
<thead>
<tr>
<th>Products</th>
<th>Value in euro (average 2013-2015)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vegetables (excluding potatoes)</td>
<td>6.888.891.644,00</td>
</tr>
<tr>
<td>Citrus</td>
<td>1.087.804.756,00</td>
</tr>
<tr>
<td>Fruit</td>
<td>3.587.733.514,00</td>
</tr>
<tr>
<td>Total fruit and vegetables</td>
<td>11.574.229.914</td>
</tr>
<tr>
<td>Agriculture branch</td>
<td>58.078.513.000,00</td>
</tr>
<tr>
<td>% of agricultural production Fruit and vegetables</td>
<td>19,9%</td>
</tr>
</tbody>
</table>

International trade (2014) Export (€) Import (€) Trade balance (€)

<table>
<thead>
<tr>
<th>F&amp;V (including processed products)</th>
<th>Export (€)</th>
<th>Import (€)</th>
<th>Trade balance (€)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total F&amp;V</td>
<td>3.847.855.806</td>
<td>2.968.378.881</td>
<td>879.476.925</td>
</tr>
</tbody>
</table>

THE ITALIAN F&V SECTOR

Total surface 860,000 ha. - Total volume 24.5 million tons

10 most important products

<table>
<thead>
<tr>
<th>Product</th>
<th>Surface (ha)</th>
<th>Volume (tn)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apple</td>
<td>51,639,0</td>
<td>2,441,579,8</td>
</tr>
<tr>
<td>Orange</td>
<td>84,291,0</td>
<td>1,905,103,1</td>
</tr>
<tr>
<td>Peaches and nectarines</td>
<td>67,506,0</td>
<td>1,422,856,4</td>
</tr>
<tr>
<td>Tomato (fresh consumption)</td>
<td>25,598,5</td>
<td>1,044,565,6</td>
</tr>
<tr>
<td>Table grape</td>
<td>44,460,0</td>
<td>1,036,691,5</td>
</tr>
<tr>
<td>Clementine and mandarines</td>
<td>34,365,0</td>
<td>822,408,5</td>
</tr>
<tr>
<td>Pear</td>
<td>30,533,0</td>
<td>753,666,8</td>
</tr>
<tr>
<td>Kiwi</td>
<td>25,965,0</td>
<td>598,557,9</td>
</tr>
<tr>
<td>Melon</td>
<td>24,796,5</td>
<td>595,601,0</td>
</tr>
<tr>
<td>Courgette</td>
<td>18,613,8</td>
<td>533,495,3</td>
</tr>
</tbody>
</table>

DISTRIBUTION BY REGION OF THE VALUE OF F&V PRODUCTION year 2015, in (000.000) euro (source: OECD)

MAIN CULTIVATION AREAS
Section II - Fruit sector in Italy

PROTECTED DESIGNATION PRODUCTS – PDO (protected denomination of origin) AND PGI (protected geographical indication) (source Ismea 2015)

Number of products recognized PDO/PGI in the UE by Member state

ORGANIC FRUIT & VEGETABLES IN ITALY

SURFACE hectares (source: Istat, 2016)

POs-APOs RECOGNIZED IN ITALY (1 January 2016) (source Ministry of agriculture)

<table>
<thead>
<tr>
<th>OPs/AOPs at 01/01/2016</th>
<th>Total number</th>
<th>Legal entity</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Cooperative</td>
<td>Others corporation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>POs</td>
<td>297</td>
<td>280</td>
<td>17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>APOs</td>
<td>15</td>
<td>13</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>312</td>
<td>293</td>
<td>19</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

AOPs associate N. 78 OPs

POs - EVOLUTION OF THEIR VALUE MARKETED PRODUCTION (VMP) (000.000 euro) (source: annual reports)

OPERATIONAL PROGRAMS APPROVED IN THE YEAR 2016 (source AGEA)

Number of operational programmes approved: 289
Value of Marketed Production: 5,194 billion euros

<table>
<thead>
<tr>
<th>Total costs ($)</th>
<th>Of which crisis measures ($)</th>
<th>Others measures ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A (B + C)</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>Operation funds</td>
<td>463,487,353,27</td>
<td>45,698,451,46</td>
</tr>
<tr>
<td>Crisis and</td>
<td>234,253,389,87</td>
<td>25,106,062,98</td>
</tr>
<tr>
<td>Other</td>
<td>9,85 %</td>
<td></td>
</tr>
</tbody>
</table>
**Total expenditure for operational funds of POs operational programs in the UE: 813.2 million euros**
(account period 06/10/2014 - 15/10/2015)

**SCHOOL FRUIT SCHEME**
Union aid in the financial period: 06/10/2014 - 15/10/2015

(*) The scheme was not implemented by UK, Sweden and Finland

---

**FOCUS ON KIWIFRUIT IN ITALY**
- Production and surface in Italy (2015)
- Most important Regions for the cultivation
- Import/Export trends

**Production & surface AREA of kiwifruit in Italy**

**Most important regions and commercial types**
- Green flesh: 90%
- Yellow flesh: 10%
THANKS FOR YOUR ATTENTION
SECTION III.
FOCUS ON KIWI FRUIT

As the field trip organised by Italy focused in this edition on kiwifruit, the chair and hosts invited one participating country to give an overview of this sector at its national level. In this section, the representative from New Zealand gave an overview on the kiwifruit industry in New Zealand.

Presentations in the Section:

- New Zealand kiwifruit industry - an overview
NEW ZEALAND KIWIFRUIT INDUSTRY - AN OVERVIEW

by Ms. Catherine Richardson, Zespri International Ltd, New Zealand

Abstract:
Ms. Catherine Richardson provided an overview of the kiwifruit in New Zealand, focusing on its history, industry and challenges. Zespri is the main company marketing kiwis in New Zealand, and the company is totally owned by New Zealand's kiwifruit growers. The first kiwi exports date back to 1952 with merely 13 tonnes, while today New Zealand exports more than half a million tonnes of Kiwifruits. Kiwis currently come in three colours, red, gold and green. China is the only country producing the red kiwi, while New Zealand and some European countries also produce the gold kiwi. The rest of the market is dominated by the green kiwi. The main challenges for New Zealand's kiwi industries are distance and the high costs of labour. Therefore, the only way that New Zealand can compete globally is by offering premium products, with superior quality supported by excellent customer service. In order to maintain its competitive advantage, enormous and continuous investments are required. Zespri invests heavily in large breeding programmes for new varieties, improved growing practices, efficient supply chains, and understanding consumer preferences.
NEW ZEALAND KIWIFRUIT INDUSTRY - AN OVERVIEW

Presentation by Ms. Catherine Richardson, Zespri International Ltd, New Zealand
The Zespri story

New Zealand Kiwifruit Industry – an Overview
Catherine Richardson
Market and Quality Assurance Manager
Zespri International Ltd.

What is Zespri?
- Company 100% owned by NZ Kiwifruit Growers
- Markets fruit for NZ growers
- Largest marketer of Kiwifruit
- 20% of globally traded fruit
- Our Goal
  - Be recognised as the World’s leader in Kiwifruit
  - Provide NZ growers with sustainable returns

Zespri International Ltd.

Section III - Focus on kiwifruit

Kiwifruit History

In 1904, Isabel Fraser brought ‘yang tao’ seeds back to New Zealand from her sister’s mission station in China’s Yangtze Valley.
Flourished in the Bay of Plenty
- First Exports 1952 – 13 T
- Initially called Chinese Gooseberry
- Renamed Kiwifruit in 1959
- Today:
  - 500,000T exported from NZ
  - Global crop grown in many countries
  - Recognised fruit category

Kiwifruit production: 2014/15

Advantages
- Temperate Climate
- Excellent growing conditions
- Skilled labour force
- Long shipping season
- Island country

Disadvantages
- Distance to markets
- High cost labour

New Zealand Horticulture

NZ Horticulture Industry
2500 NZ growers
- 3222 orchards
- 75% < 5 ha
- 12,578 producing hectares
  - Zespri Green: 7604 ha
  - Zespri Gold: 4277 ha
  - Organics and other varieties: 697 ha

NZ Horticulture – A Growing Industry

NZ Kiwifruit Industry – Today

Bay of Plenty • 80%
Nelson (South Island) • 4%
Northland • 4%
Auckland • 4%
Waikato • 3%
Gisborne • 2%
Hawke’s Bay • 2%
Southern North Island • 1%

Kiwifruit growing areas of New Zealand

Industry Structure

- 2500 Growers
- 48 Post Harvest Facilities
- 12 Supply Companies
- FOBS
- Global Market

Total NZ sales growth.
**New Zealand Kiwifruit Industry**

- **Psa Impact** (*Pseudomonas syringae* actividae)
  - Serious bacterial disease
  - Attacks plants
  - Has spread globally over last 10 years
  - Significant impact on NZ crops
- **Recovery**
  - Change in variety
  - Changes to growing practices
  - United and cooperative approach enabled rapid recovery

**Top 10 markets: 2015.**

**Total OGR per hectare. All varieties**

**Zespri - Purpose and strategy.**

**What is Quality?**
- High Taste and excellent eating
- Consistent and uniform appearance
- Safe
- Traceable
- Sustainable
- Excellent customer service
- None of this happens by accident
- Comprehensive quality system throughout supply chain
- Attention to detail

**Major Zespri Investment**
- Large breeding programme for new varieties
  - Breeding genebase with huge range of size, colour, flavor, texture
- More efficient supply chain
- Improved growing practices
- IP
- Sustainability
- Psa management
- Focus on health – science based claims
- Understanding consumer preference

**Innovation and New Varieties**
**Efficiency**

- Two-way flow of information
  - Customers have transparency in product
  - Suppliers receive feedback on performance
- Minimize waste

**Integrated Supply Chain**

---

**Zespri’s Brand Vision is**

**Making Life Delicious**

**Brand and Marketing**

---

**Major investment in promotion**

**First taste is important**

**Brand and Marketing**

---

**Distribution**

- Use selected partners
- Look for partners with same passion for quality and the Zespri brand
- Market in 53 countries
- High level of penetration

---

**Zespri Global Supply (ZGS)**

- Italy • France • Japan • South Korea • Australia •

---

**12 Month Supply**

- Reliable year-round Zespri supply
  - Retain shelf space and maintain consumer eating experience
  - Growing the kiwifruit category as a whole
- Maintain Zespri brand presence
  - Local presence and support in kiwifruit growing communities
  - Grow Gold3 under contract
  - Source Green fruit from range of suppliers
- Important to ensure same standards apply
The Future

NZ production growth.

Zespri Global Supply (ZGS).

- Biosecurity risks
- Climate change
- Lack of uniformity in requirements = increased complexity
- Increasing complexity = higher costs

The Future

- Increased consumption - currently kiwifruit is only 1% of total fruit
- More "ready to eat" fruit on retail shelves
- Exciting new varieties
- Red flesh
- New flavors
- Different categories
- New market regions
- More Nth Hemisphere production sites

Thank You
In this section, three OECD Scheme’s participating countries were invited to give an overview of their national fruit and vegetables inspection system. After a full overview of the Italian fruit and vegetables inspection system, Italy focused on inspections at Guidonia agri-food center and on conformity checks at export stage. Romania gave a comprehensive overview of the national system.

Presentations in the Section:

- Application of quality standards in the fruit and vegetables sector - implementation in Italy
- Inspection at Guidonia agri-food center
- Conformity checks at export stage
- Romanian fruit and vegetables inspection system - Inspection for technical control in the production and exploitation of vegetables and fruits
APPLICATION OF QUALITY STANDARDS IN THE FRUIT AND VEGETABLES SECTOR - IMPLEMENTATION IN ITALY

INSPECTION AT GUIDONIA AGRI-FOOD CENTER

CONFORMITY CHECKS AT EXPORT STAGE

by Dr. Carla Magarotto, national expert, AgeControl S.P.A., Italy

Abstract:

Dr Carla Magarotto (Agecontrol spa) provided a comprehensive summary of their fruit and vegetables national inspections system, outlining the competent authorities’ role, the various national provisions, their risk analysis and their approved trader database.

Agecontrol SpA was established in 1985, and is the Agency in charge of the public controls and EU actions implementation in Italy. It works on behalf of the Ministry of Agricultural, Food and Forestry Policies and of the Agency for Agricultural Payments. Agecontrol SpA performs quality checks on fresh fruit and vegetables products on both the domestic market and import/export sector. It also has an auditing mission in the agro food industry benefitting from EU subsidies. In total, Agecontrol SpA operates in 28 locations and counts 80 inspectors.
APPLICATION OF QUALITY STANDARDS IN THE FRUIT AND VEGETABLES SECTOR - IMPLEMENTATION IN ITALY

Presentation by Dr. Carla Magarotto, AgeControl S.P.A., Italy
APPLICATION OF QUALITY STANDARDS
FRUIT AND VEGETABLES SECTOR IMPLEMENTATION IN ITALY
AGECONTROL S.P.A

1. FRUIT AND VEGETABLES SECTOR - MARKETING PLACES BASE FOR MONITORING VISITS

<table>
<thead>
<tr>
<th>Places of Inspection</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production</td>
<td>18,414</td>
<td>18,440</td>
</tr>
<tr>
<td>Packhouses</td>
<td>10,838</td>
<td>11,773</td>
</tr>
<tr>
<td>Retail level</td>
<td>25,610</td>
<td>25,664</td>
</tr>
<tr>
<td>Wholesale</td>
<td>11,577</td>
<td>11,751</td>
</tr>
<tr>
<td>Import</td>
<td>1,374</td>
<td>1,469</td>
</tr>
<tr>
<td>Export</td>
<td>2,277</td>
<td>2,277</td>
</tr>
<tr>
<td>TOTAL</td>
<td>70,090</td>
<td>71,564</td>
</tr>
</tbody>
</table>

2. FRUIT AND VEGETABLES NUMBER OF MONITORING VISITS CONNECTED TO STAKEHOLDERS

<table>
<thead>
<tr>
<th>Monitoring Visits</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production</td>
<td>1,651</td>
<td>1,381</td>
</tr>
<tr>
<td>Retail level</td>
<td>3,146</td>
<td>3,428</td>
</tr>
<tr>
<td>Wholesale</td>
<td>1,815</td>
<td>1,826</td>
</tr>
<tr>
<td>Import</td>
<td>7,896</td>
<td>8,996</td>
</tr>
<tr>
<td>Export</td>
<td>60,819</td>
<td>61,527</td>
</tr>
<tr>
<td>TOTAL</td>
<td>75,327</td>
<td>77,158</td>
</tr>
</tbody>
</table>

Figures of Italian fruit and vegetables production

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Vegetables (including potatoes)</td>
<td>8,289,016,059.36</td>
<td>12,286,916.70</td>
</tr>
<tr>
<td>Fruit</td>
<td>1,385,620,351.77</td>
<td>19,379,128.39</td>
</tr>
<tr>
<td>Orange</td>
<td>1,071,005,985.67</td>
<td>3,380,759.09</td>
</tr>
<tr>
<td>Table grapes</td>
<td>122,447,370.49</td>
<td>1,609,207.00</td>
</tr>
<tr>
<td>Fruit and vegetable total production</td>
<td>14,710,712,630.40</td>
<td>22,085,824.29</td>
</tr>
<tr>
<td>BV % share of the global production</td>
<td>23.31%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fruit and vegetable surface (2014)</th>
<th>ha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vegetables</td>
<td>208,798.00</td>
</tr>
<tr>
<td>Fruits</td>
<td>277,363.60</td>
</tr>
<tr>
<td>Citrus fruit</td>
<td>108,249.00</td>
</tr>
<tr>
<td>Table grapes</td>
<td>46,938.60</td>
</tr>
<tr>
<td>Total</td>
<td>542,438.60</td>
</tr>
</tbody>
</table>

Italian import kg

<table>
<thead>
<tr>
<th>Year</th>
<th>kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>1,368,649,722</td>
</tr>
<tr>
<td>2010</td>
<td>1,404,981,788</td>
</tr>
<tr>
<td>2011</td>
<td>1,382,400,456</td>
</tr>
<tr>
<td>2012</td>
<td>1,523,595,862</td>
</tr>
<tr>
<td>2013</td>
<td>1,347,511,456</td>
</tr>
<tr>
<td>2014</td>
<td>1,368,649,722</td>
</tr>
<tr>
<td>2015</td>
<td>1,404,981,788</td>
</tr>
</tbody>
</table>

OUTLINE

1. FRUIT AND VEGETABLES INSPECTION SYSTEM IN FIGURES

2. BODIES RESPONSIBLE FOR CHECKING F & V QUALITY -authorities involved
   - structures, objectives and assignments

   • INSPECTION OF THE MARKETING STANDARDS FOR F&V
     - competent authorities
     - national provision
     - exemption
     - prosecution in case of infringements based on national provisions

   • CONFORMITY CHECKS
     - internal market
     - import - export

MARKETING STANDARDS CONTROL SYSTEM
- use of GMS - SMS - UNECE standard
- national provision

CONFORMITY CHECKS
- internal market
- import - export
2. NATIONAL COMPETENT AUTHORITIES

<table>
<thead>
<tr>
<th>Administration</th>
<th>Activities</th>
</tr>
</thead>
</table>
| MINISTRY       | Establish the National strategy  
|                | Implement the national provisions concerning EU regulation  
|                | Enact the decree for the application of the national provisions concerning EU regulation  
|                | Represent the interests of the different stakeholders in the context of national and European food safety and phytosanitary standards  
|                | Coordinate and ensure the sharing of information between operators, producers, traders, and representatives of the inspection services  |
| REGIONS        | Conduct further conformity checks in accordance with their procedures and notify the Ministry and coordination authority  
|                | Are responsible for the organisation of phytosanitary services  
|                | Are responsible for the coordination of conformity checks  
|                | Are involved in the decision process through regional-central state conferences  |
| AGEA           | Authority for the management, monitoring, and coordination of the National strategy  
|                | Authority for the submission of conformity to marketing standards  
|                | Authority for the submission to the European Commission  |
| AGECONTROL     | Authority for conformity to quality standards at every stage  
|                | Authority for the coordination of conformity checks  
|                | Manage the administration of the national phytosanitary system  
|                | Manage the application of sanctions based on asserted non-conformities  |
Established in 1985, Agecontrol SpA, is the Agency in charge of the public controls and EU actions implementation. On behalf of the Ministry of Agriculture and Forestry, and the Agency for Agricultural Payments, it performs quality checks on fresh fruit and vegetables products on both the domestic market and import/export sector. It does have also an auditing mission in the agro food industry benefitting of EU subsidies. On the other hand, Austria is to implement the common agricultural policy (ex-post) activities of paying agencies and other bodies, financial management, clearance of accounts, securities - II level.

The application of EU market standards is mandatory in Italy. The implementation of OECD and UNECE is on a voluntary basis in the case a trader choose to put labelling information relevant to these rules than the standard should be applied.}

**Activities of Agecontrol inspection service**

- Controls and inspection are carried out in the following sectors benefitting from European subsidies:
  - Improvement of olive oil and table olive production quality
  - Rural Development: Maritime and Fisheries Fund
  - Aid for feeding fruit and vegetables to children in educational establishments in the framework of School Fruit Scheme
  - Community aid for supplying milk and milk products in position sectors
  - Supply of food from intervention stocks for the benefit of the most deprived persons in the Union
  - Information, promotion, and protection measures for agricultural products on the internal market and in third countries
  - Financial management and monitoring of the common agricultural policy (ex-post)
  - Activities of paying agencies and other bodies, financial management, clearance of accounts, securities - II level

**CONFORMITY TO F&V COMMERCIAL STANDARDS**

**RELEVANT REGULATIONS ON QUALITY STANDARDS**

- Council Reg (UE) 1308/2013
- Commission Reg (UE) 543/2011
- UNECE Rules – OECD Guidelines

**NATIONAL RELEVANT REGULATIONS ON QUALITY STANDARDS**

- Ministry of Agriculture Decree implementing Communitarian Regulation
- Operating Manual in Annex to the Decree
- A GE A Guidelines
- Decree 306/2002 Related to Sanctions

**Risk Analysis**

- GMS checked
  - GMS Respected
  - GMS NOT Respected
  - UNECE standard NOT respected
  - UNECE standard Respected
  - Product NOT Respected GMS conformity
  - Product Respected GMS conformity
At import-export level products are checked systematically by the inspection body.

### Products under control

- **Specific marketing standard**: apples, pears, peaches and nectarines, kiwi, citrus, table grapes, lettuces and endives, strawberries, sweet peppers, tomatoes
- **General marketing standard**: on the basis of national legislation melons, onions, beans, artichokes, aubergines, cauliflowers, carrots, garlic, cherries

#### Number of controls in 2012
- Export: 181,607
- Import: 7,888
- Domestic market: 15,303
**Total**: 204,798

#### Number of controls in 2014
- Export: 190,856
- Import: 7,668
- Domestic market: 15,099
**Total**: 212,623

#### Number of controls in 2015
- Export: 188,996
- Import: 10,993
- Domestic market: 14,065
**Total**: 214,654

## 6. MARKETING STANDARDS

**Inspection body**: AGECONTROL s.p.a.

At import-export level products are checked systematically by the inspection body.

### Assignments

- Inspect F&V compliance with G/S standards - internal-imp/exp market

### Resources and equipments

#### Agecontrol web site

- To provide information to traders regarding legislation and standards
- Download of all forms required by the inspection procedures such as Data base application form or control request format imp/exp level

#### Inspection tools

- P.C. - printer
- Penetrometer-refractometer
- Others tools to assess maturity
- Size rings
- All the data base input of the monthly programmed inspections on the internal market
- All the forms, check-list and procedures to carry on inspections

### National Authorities

Delegate to Agecontrol

The responsibility for the implementation of all the quality control activities at the National level

- Control activities planned over ALL THE NATIONAL TERRITORY requiring IMMEDIATE ACTION
- Large ADMINISTRATIVE DECENTRALISATION based on the needs for OPERATIONAL AND MANAGERIAL AUTONOMY and criteria of FUNCTIONAL AND ECONOMICAL HOMOGENEITY

### AGECONTROL ACTIVITIES

**CONFORMITY CONTROL**

- MANAGEMENT OF MANDATORY COMMUNICATION
  - IN INTERNAL MARKET
  - ON F&V FOR EXPORTATION
  - ON F&V FOR IMPORTATION
  - MANAGEMENT OF AUTHORIZATION REQUESTS AS PER ART. 12 OF REG (UE) 543/2011
  - OPERATORS DATA BASE
  - SANCTIONS MANAGEMENT
  - INSPECTORS TRAINING AND F&V
  - OPERATORS TRAINING

**IT CONTROL PROCEDURES**

- **INTERNAL MARKET CONTROLS**
  - Drafting of a CHECK LIST
  - Traders data control and registration in the national trader database
  - Product conformity control

- **CONTROL OF PRODUCTS INTENDED FOR INDUSTRIAL PROCESSING**
  - Drafting of INDUSTRIAL USE CERTIFICATE
  - Products conformity control

- **CONTROLS FROM AND TO EXTRA EU COUNTRIES**
  - Self control as per Art. 12 Reg 543/2011
  - ORDINARY PROCESS
  - Drafting of a CONFORMITY CERTIFICATE
  - Simplified for countries with recognized Control structures
CONTROLS FROM AND TO EXTRA UE COUNTRIES

Control request
Import and export of F&V are notified to Agecontrol

Approved traders
Trader exporting to extra EU asks to be subjected to a simplified control stated on the 3\textsuperscript{rd} par.12 of Reg. 543/2015 recognition procedure consisting in an assessment of his internal quality control system evaluation
Capacities of the quality manager to enforce the relevant regulation curricula of the trader's staff dealing with quality control and their attendance to a specific training on quality assessment

Approved traders
The trader is required to have a suitable infrastructure and adequate tools to carry on internal inspections Agecontrol's officer has to carry out a deep inquiry on the assessment of the trader's quality The control consists in the evaluation of the capacity to implement an adequate process of quality assessment during the control is carried out a check of the compliance to the relevant standards of the available products The results of the assessment are analyzed by a commission that may reject, ask for further information or accept the trader request

Approved traders
In case of acceptance, the trader is inserted in a national centralized database generating an univocal identifying number The approved trader is subjected to a reduced percentage of inspection lowered from 100\% to 10\% of the exported shipment the remaining percentage is checked by the trader who needs to register all the lot checked in the appropriate register released by the inspection body Every lot checked has to be notified through an accompanying document to the inspection body The conformity certificate filled with the detailed data of the lot checked will be sent by fax to the traders to accompany the consignment to destination Every three years the accreditation procedure is repeated to assess the permanence of the essential requirements

Approved traders
The same procedure applies to the use of the specimen in annex II of Reg 543/2011 The label carries the unique identification number released by the National Database and included in the packages by the authorized traders Periodic inspections are scheduled to control the conformity of the consignments to the standards rules. If non conformities are found in either the case of self export check or logo use the responsible inspection committee after analyzing the evidence can decide on penalties/sanctions to suspend or revoke the agreement

Approved traders
Currently on a universe of 400,000 companies 167 are allowed to self-control at export level, 96 to the use of EU logo, and 77 have both facilities
INTERNAL MARKET CONTROLS ARE BASED ON RISK ANALYSIS

Agecontrol performs control activities on the basis of an annual framework inspection plan.

The scheduled inspection are determined on the basis of the position of the operator in the marketing chain - range of products traded - previous notifications.

All the above information are included in a database where all traders are bound to register included those based in other countries but trading within Italy.

Even spot checks may be carried out if the inspector finds it necessary or there are market information indicating possible irregularities.

CURRENT STANDARDS ORGANISATION

The control structure guarantees for all the participating parties to the transaction from and to third countries the implementation of a CONFORMITY CONTROL within 48 hours of the control request through a web based notification and certification system.

The organisation in local division and the constant territorial presence allows physical inspections to be carried out efficiently and with flexibility.

The filled electronic data documents are sent to the central database and grant the immediate updating of the national based data system.

POSITIVE CONTROL OUTCOME

INTERNAL MARKET

The goods Labelling has to report the mention "Industrial processing".

The processing company sends copy of the cert. certifying the processing completion.

INDUSTRIAL PROCESSING FROM AND TO OTHER COUNTRIES

Conformity certificate release accompanying the goods during transport to destination.

Industrial Destination certificate release accompanying the goods to the processing company.

Control closure and Check List emission.

NEGATIVE CONTROL OUTCOME

INTERNAL MARKET

In case of product non conformity:

1. Drafting of NON CONFORMITY CERTIFICATE
   - Redeemable
   - Non Redeemable
2. Drafting of NOTIFICATION
   - For goods of foreign origin
3. New product control and drafting of CONFORMITY CERTIFICATE

For traders whose control structures are recognised by the Commission:

- Drafting of a CHECK LIST
- NON CONFORMITY FORM
- NOTIFICATION

Significant irregularities- Main findings

• The label does not correspond to the product's characteristic …75%;
• The product does not meet quality requirements…………………….15%
• Packing defects………………………………………………………….10%.

Products with highest occurrence of defects in 2014

<table>
<thead>
<tr>
<th>Import</th>
<th>Export and Internal Market</th>
</tr>
</thead>
<tbody>
<tr>
<td>apples…………..5.99 % of product checked</td>
<td>pears…………..0.14 % of product checked</td>
</tr>
<tr>
<td>kiwi……………3.00% *</td>
<td>citrus fruit…………0.05% *</td>
</tr>
<tr>
<td>kiwi……………3.00% *</td>
<td>melons…………1.45%</td>
</tr>
<tr>
<td>citrus fruit…………1.88% *</td>
<td>table grapes…………1.39%</td>
</tr>
<tr>
<td>onions…………1.45%</td>
<td>apples…………0.02 %</td>
</tr>
<tr>
<td>table grapes…………1.39%</td>
<td>peaches…………0.01%</td>
</tr>
</tbody>
</table>
D. Lgs. n. 306/02 laying down sanction provisions in accordance to Regulation (UE) N° 543/2011, inherent checks on conformity to marketing standards for fresh fruit and vegetables

Art. 2, first paragraph, D. Lgs. n. 306/2002

The rule affects

whoever markets fruit & vegetable products without being registered in the DATA BASE

Art. 2, second paragraph, D. Lgs. n. 306/2002

The rule affects those

who, in the absence of the authorisation under Article 12, of the Regulation (UE) N°. 543/2011 affix the specimen on packages in accordance to attachment II of the said Regulation (Logo).

Art. 3, first paragraph, D. Lgs. n. 306/2002

The rule affects

whoever prevents the functions of control under Regulation(UE)N°. 543/2011 or otherwise obstructs their implementation

Art. 3, second paragraph, D. Lgs. n. 306/2002

The rule affects

whoever fails to provide the inspection bodies with the required information, according to the Regulation (UE) N°. 543/2011, or provide them in ways that are not in accordance with the national provisions

Art. 4, first paragraph, D. Lgs. n. 306/2002

The rule affects

whoever violates the standards for fresh fruits and vegetables adopted by the European Union Commission

Art. 4, second paragraph, D. Lgs. n. 306/2002

The rule affects

whoever violates the provisions of the controls

Art. 5 of the law by decree 306/2002

Assign to Agecontrol – Official Inspection Agency - the power to determine violations and to apply sanctions,

Assign to Agecontrol inspectors the status of public officers according to law 689/81.

DATA BASE AND SANCTION PROCESS

The sanction process and findings shall be registered in the operators data base - in particular the initiation of eventual litigation should be disclosed in order to update the risk analysis

THANK YOU FOR YOUR ATTENTION
INSPECTION AT GUIDONIA AGRI- FOOD CENTER

*Presentation by Dr. Carla Magarotto, national expert, AgeControl S.P.A., Italy*
Section IV - Structure and activities of inspection in countries

19

20

21

22

23

24

47
Section IV - Structure and activities of inspection in countries
CONFORMITY CHECKS AT EXPORT STAGE

Presentation by Dr. Carla Magarotto, national expert, AgeControl S.P.A., Italy
Section IV - Structure and activities of inspection in countries
Section IV - Structure and activities of inspection in countries
Section IV - Structure and activities of inspection in countries
ROMANIAN FRUIT AND VEGETABLES INSPECTION SYSTEM -
INSPECTION FOR TECHNICAL CONTROL IN THE PRODUCTION AND EXPLOITATION
OF VEGETABLES AND FRUITS

by Mr. Dumitru Alexandru, Ministry of Agriculture and Rural Development, Romania

Abstract:

Mr. Dumitru Alexandru from the Ministry of Agriculture and Rural development provided an overview of their national inspections system. The Department of State Inspection for Technical Control in Vegetable Production and Exploitation of Fruits and Vegetables (ISCTPVLF) is responsible for verification of compliance with marketing standards for fruit and vegetables for the imports, exports and domestically. ISCTPVLF was established in 2003 and is divided into a coordinating authority (within the Ministry of Agriculture and Rural Development) and territorial inspection bodies (within the 42 counties and Bucharest). ISCTPVLF has 42 inspection bodies (counties and Bucharest), 65 inspectors, 44 mobile labs, 88 control kits, 44 computers and is connected to the SINCC_LF (National Information System Compliance Checks for Fruit and Vegetables).
ROMANIAN FRUIT AND VEGETABLES INSPECTION SYSTEM -
INSPECTION FOR TECHNICAL CONTROL IN THE PRODUCTION AND EXPLOITATION
OF VEGETABLES AND FRUITS

Presentation by Mr. Dumitru Alexandru, Ministry of Agriculture and Rural Development, Romania
Overview of Romania

- Sum of degrees of average annual temperature, duration of sunshine and rainfall are favorably influencing the development of main branches of agriculture. Yet global warming tends to change these values in Romania.
- By variety topography confer benefits for agriculture: the plain is favorable to cereals (wheat, corn, barley, rye), sunflower, soybeans, rapeseed, sugar beet), plateau areas are favorable to crop potato and nearby hills are favorable to orchards, shrubs and vineyards, mountain areas are favorable to pastures and hayfields.

In 2015 the situation of agricultural areas was as follows:

- Crops
  1. cereal grains (wheat, corn, barley, rye, oats) 307,000 ha 21,614,000 tons
  2. legumes 141,381 ha 2,185,591 tons
  3. oilseed crops (sunflower, soybean, rapeseed) 1,494,000 ha 3,414,000 tons
  4. Sugar beet 31,000 ha 1,357,000 tons
  5. Potatoes 199,000 ha 3,520,000 tons
  6. Vineyards bearing fruit for the wine 177,000 ha 786,000 tons
     - grafted 90,000 ha 468,000 tons
     - hybrids 87,000 ha 318,000 tons

II. Horticulture

- Area of heated greenhouses planted with vegetables / flowers in the previous period of 1989 occupied 2700 hectares ranking the second place after the Netherlands, was reconsidered because energy costs and disinfection of soil representing the share of expenses could not be covered this led to reducing surface to 270 ha.
- In the organic farming system established vegetable areas in 2015 are 1210 hectares (onions, root vegetables, tomatoes, cucumber cornichon)
Vegetable crops

- 141.381 ha filled with vegetables out of which,
  - 137.029 ha field crops
  - 4.352 ha protected crops

Areas planted on vegetable species and the related production is as follows:

1. Cabbage 23.187 ha production 469.423 tons
2. Tomatoes 22.944 ha production 385.516 tons
3. Watermelons 21.630 ha production 449.155 tons
4. Onion 18.178 ha production 218.229 tons
5. Pepper 9.979 ha production 131.147 tons
6. Carrots 6.478 ha production 218.229 tons
7. Garlic 6.205 ha production 33.468 tons
8. Cucumbers 5.273 ha production 71.502 tons
10. Eggplants 4.405 ha production 66.077 tons
11. Others 5.827 ha production 59.688 tons

Fruit growing sector

- The fruit growing surface including area planted with fruit trees is 134,616 hectares of which 77,227 ha are well maintained.
- Fruit growing area of 77,227 ha is made up of species: 34,899 ha plum; 30,805 ha apple; 2953 ha cherry; 2172 ha apricot; 2052 ha cherry; 1795 ha pear; 1339 ha peach; 1129 ha walnut; 51 ha hazel; 31 ha almond; 1.3 ha chestnut to which we add 1668 ha and 136 ha strawberry bushes.
- Large socialist fruit farms through restitution, were chopped from 200-300 ha / unit in plots of 0.3 to 2.0 ha / owner.
- Romanian trees in groves are older, the pace of regeneration through new plantings is very low;
- The owners did not have the necessary equipment to such small areas;
- Most plantations were abandoned deforested and very few of them have applied a minimum of care works;

Perspectives for Romanian fruit growing

- The existence of national heritage fruit growing creates the premise of recovery in major growing areas of our country both quantitatively and qualitatively.
- Climatic conditions of Romanian hills which favor the accumulation of specific flavors and a variety of minerals and vitamins in fruits.

Fruits production

- Fruit production is approximately 1,000,000 tons by species 2015 occurred:
  1. Apples 365,000 tons
  2. Plums 345,000 tons
  3. Pears 65,000 tons
  4. Cherries 76,000 tons
  5. Peaches 23,000 tons
  6. Walnuts 20,000 tons
  7. Apricots 27,000 tons
  8. Quinces 6,500 tons
  9. Strawberries 15,600 tons
  10. Fruit bushes 3,900 tons
Fruits marketing

- Fruits are sold on the local market of Romania, the Community market or exported to third countries among which the most important beneficiaries mention Turkey, Moldova, Austria, Germany, Ukraine, Belarus, Italy, France, Netherlands, UK.
- BALANCE OF FRUITS AND VEGETABLES EXPORT/IMPORT tilts in favor of imports which are 3-5 times higher for certain products.
- In 2011 when the exports were higher than in previous years the situation if the following:
  - Vegetables - the value of exports was about 53 million Euro compared to the value of imports of 152.2 million Euro
  - Fruits - the value of exports for fruits was of cca 70.1 million Euro compared to the value of imports of 165.4 million Euro; on the first place in the top of the imported fruits are citrus, bananas, apples, pears, quinces and for exported fruits apples, pears, quinces, apricots, cherries and sour cherries, peaches, plums and shrubs.

Chapter 2 Organization of Quality Inspection System in Romania

- The chart of Agriculture Ministry and Rural Development
  - Ministry — General Direction of control, Anti fraud and Inspections (General Director) - in direct subordination to ministry
  - — Inspections Directorate Monitoring, Verification and Control (Director)
  - — Department of State Inspection for Technical Control in Vegetable Production and Exploitation of Fruits and Vegetables - ISCTPVLF
  - State Secretary — 3
  - General Secretary — 1
  - Deputy General Secretary — 3

Chapter 2 The law in „State Inspection for Technical Control in Vegetable Production and Exploitation of Fruits and Vegetables - ISCTPVLF”

- Chapter 2.1 a. European law
  - Commission Implementing Regulation (Eu) No 1333/2011 laying down marketing standards for bananas, rules on the verification of compliance with those marketing standards and requirements for notifications in the banana sector
  - UNECE standards
  - Romania notified the European Commission concerning the performing of inspection according to provisions of standards UN / ECE 14 standards of fruits and vegetables: cucumbers, onions, cultivated mushrooms, bean pods, carrots, eggplant, melon, watermelon, garlic, cabbage, apricots, cherries and sour cherries, walnuts and plums.

Chapter 2.1 a. European law

- Commission Implementing Regulation (EU) No 1333/2011 laying down marketing standards for bananas, rules on the verification of compliance with those marketing standards and requirements for notifications in the banana sector
- UNECE standards
- Romania notified the European Commission concerning the performing of inspection according to provisions of standards UN / ECE 14 standards of fruits and vegetables: cucumbers, onions, cultivated mushrooms, bean pods, eggplants, melons, watermelons, garlic, cabbage, apricots, cherries and sour cherries, walnuts and plums.

Chapter 2.2 national law

- Law no.312/2003 on the production and exploitation of vegetables, republished;
- Law no. 348/2003 of fruit-growing, republished;
- Law no. 145 as of 21 october 2014 for establishing measures to regulate the market of agricultural products;
- Order no. 420 of 26 June 2008 on the powers of the State Inspection for Technical Control and Exploitation in vegetable and fruit production;
- Order no.390/2009 approving the methodology for authorizing operators in the sector of fresh fruit and vegetables in order to use the system of self-control and use of the Community logo;
- Order no. 591/2006 on the organization and functioning of the State Inspection for technical control in the production and exploitation of fruit and vegetables, in order to enforce conformity checks for fresh fruit and vegetables;

Chapter3. International standards

- Romania as a EU member applies the EU relevant standards for fruits and vegetables including UE marketing standards. There are applied the 10 Specific Marketing Standards and General Standards. Products for which there are specific marketing standards are the following:
  - apples
  - citrus fruits
  - kiwifruits
  - lettuces, curled leaved and broad-leaved endives
  - peaches and nectarines
  - strawberries
  - sweet peppers
  - table grapes
  - tomatoes
  - bananas (green)
- The general standard (543/2011, Annex I, Part A) is applied to the remaining products.
Chapter 4. Administrative System Structure

State Inspection for Technical Control in the Production and Exploitation of Fruits and Vegetables (ISCTPVLF) is the department structured in:

- **A** - coordinating authority (within the Ministry of Agriculture and Rural Development)
- **B** - territorial inspection bodies (within the 42 counties and Bucharest)

ISCTPVLF is responsible for verification of compliance with marketing standards for fruit and vegetables for the imports, exports and domestically.

- ISCTPVLF was established in 2003.

**A. Organization**

- 1 inspector
- 42 inspection bodies (counties and Bucharest) - 65 inspectors

**B. Endowment**

- 44 mobile labs
- 88 control kits
- 44 computers
- Connection to SINCC_LF (National Information System Compliance Checks for Fruit and Vegetable)
- Leaflets edited and used by inspectors
- Technical quality control schemes for fruit and vegetables
- State Inspection for Technical Control
- State Inspection for Technical Control - FRUITS AND VEGETABLES. PRODUCERS GROUPS. PRODUCERS ORGANIZATIONS. STANDARDIZATION.
- Producers manual
- D. Half-yearly training sessions. Trainings. Participations to OECD meetings. EC meetings. Experience exchanges

**Year 2015**

- Controls performed
- 10,681 controls on domestic market and customs, out of which
- 8,716 controls on domestic market
- 1,965 customs controls, out of which 1,625 import controls, 340 export controls
- 820 visits to farmers
- 3,406 certificates of conformity issued domestically
- 12 minutes of finding non-compliance
- 103 economic operators checked in the field of producing fresh fruits and vegetables in order to grant authorization, performing the self-monitoring and use of the community logo

**The risk analysis in performing controls**

Compliance control is performed randomly based on the risk analysis.

In determining the frequency of checks the following criteria are important:

- The peculiarity of the operator on the marketing chain wholesaler or retailer
- The findings of previous checks on infringements of marketing standards
- Size of lots of products to control and species
- Type of product, firmness, maturation, perishability

**Importance of the participation to OECD**

OECD scheme's primary objective is to facilitate international trade which requires harmonization, interpreting and implementing the marketing standards. OECD quality inspection system is important in helping the international harmonization of export explanatory brochures for fruits and vegetables and the OECD Peer reviews. Peer reviews play an important role by ensuring the knowledge of best practices of member countries by understanding and interpretation of OECD rules to harmonization.

- Romania's accession to the OECD is considered a strategic objective of Romanian foreign policy, steps taken are motivated by:
  - The benefit of access of Romania to the tools and economic decision centers of the OECD and the opportunity to contribute to global economic governance
  - The benefit of the support in public policy from OECD members by conducting periodical assessments of Romanian policies in specific areas (peer reviews) and issuing recommendations on their improvement.

Thank you for your attention!
In this section, the participants were invited to a field trip in the Lazio Region, to the Apofruit facilities in Aprilia. They first visited a kiwifruit orchard, where they could attend the harvest of kiwi. Mr Marco Mastroleo, from the Apofruit Technical unit, guided the tour, explaining the production and harvest process. Apofruit hosted a working lunch during which Marco Mastroleo commented in English a PowerPoint presentation on the history, structure and role of Apofruit federation. In the afternoon delegates visited the packaging plant of Apofruit. They were welcomed by Mr Gianluca Balzani, Vice-President of Apofruit. Mr Ermanno de Bono, inspector, gave an in situ demonstration of inspection of kiwifruit.

Presentations in the Section:

- Aggregazione e specializzazione per la valorizzazione della produzione e della distribuzione
AGGREGAZIONE E SPECIALIZZAZIONE PER LA VALORIZZAZIONE DELLA PRODUZIONE E DELLA DISTRIBUZIONE

by Mr. Marco Mastroleo, Ufficio Tecnico Apofruit Italia

Abstract:

Mr. Marco Mastroleo made a presentation on the history, structure and role of Apofruit federation.

The Apofruit Group consists of five entities that cover fruit and vegetables production: i) Apofruit Italia, a cooperative company that works with its own processing facilities and producer members from the north to the South of Italy; ii) Canova, a specialised company that works directly with over 800 organic farm companies in Italy to provide a complete range of products with constant quality; iii) Mediterraneo Group, a consortium combining a number of highly specialised but independently managed companies that work in Italy’s most traditional production areas; iv) Almaverde Bio Italia Srl consortile, instrument to advise the Group on brand policy for the organic market; and v) AOP Gruppo VI.VA. Visione Valore, the Protected Designation of Origin of reference.

Apofruit Group was founded in 1960, gathers 1400 producers and produces 271 500 tonnes of fruit. The four main fruit are kiwi, plum, apricot and peaches/nectarines. They develop robust methods for testing quality of fruit and the member producers benefit from this research. They bring to the market some widely spread brands: Solarelli and Almaverde bio.

Mr. Mastroleo focused on the kiwi production and export and the project Kiwi quality. The overarching goal of the project is to encourage the producers to apply good growing techniques fitting the pedo-climatic conditions and the seasonality and produce a high quality kiwi - even in lesser quantity. Aprofuit Group has developed a specific sampling method for testing the dry matter and selecting fruit that will have the best ration in tonnes/dry matter*ha. This ratio indicates the resistance of fruit to shocks for instance during transportation. The kiwis exported under the brand Solarelli resist to shocks and can be shipped to long distance with little decay, which gives them a high economic added-value. This enables Aprofuit Group to export to Asian market where the kiwis are sold at high prices with some significant benefit for growers.
AGGREGAZIONE E SPECIALIZZAZIONE PER LA VALORIZZAZIONE DELLA PRODUZIONE E DELLA DISTRIBUZIONE

Presentation by Mr. Marco Mastroleo, Ufficio Tecnico Apofruit Italia
Aggregazione e specializzazione per la valorizzazione della produzione e della distribuzione

Una vera e propria articolazione di Gruppo

- Apofruit Italia, Coop che presidia il conferimento e il rapporto con i soci.
- Canova Srl, trading per il biologico che si internazionalizza per sfruttare tutte le opportunità di mercato.
- Mediterraneo Group SpA consortile, braccio commerciale per i partner del Gruppo.
- Almaverde Bio Italia Srl consortile, strumento di un Gruppo di imprese per la politica di marca nel bio.
- AOP Gruppo VI.VA. Visione Valore, AOP di riferimento.

Ogni società con una sua autonomia operativa e gestionale, ma tutte rispondono alle stesse logiche strategiche e all’obiettivo primario di valorizzare la produzione dei soci.

La nostra storia

La Cooperativa nasce nel febbraio del 1960, in un momento storico di profondi cambiamenti e forte crescita della cooperazione agricola in cui servivano:

- Regole e nuovi sistemi aggregativi;
- Modelli più efficienti;
- Maggiori tutele per i produttori.

La O.P. Apofruit Italia oggi

- 4.180 soci produttori
- 271.500 tonnellate di ortofrutta ritirata
- 246 milioni di euro di volume d'affari
- 102 milioni di euro di Patrimonio Netto
- 12 stabilimenti + 15 centri di ritiro/stoccaggio
- 161 dipendenti fissi + 2.181 stagionali

-section V - Field trip
L’OP Apofruit Italia associa n. 4.180 aziende agricole (dato al 15.07.2016) di cui 2.113 in Emilia Romagna.

**Parole d’ordine del Gruppo**

- **Efficienza/Specializzazione**: sono un obiettivo che ci vede costantemente impegnati con il coinvolgimento di soci e dipendenti nelle strategie aziendali rivolte alla valorizzazione delle produzioni. Ogni investimento di risorse va in questa direzione.

- **Trasparenza/Legality**: dovrebbero essere obiettivi per tutte le imprese, per noi sono sempre stati prioritari, non solo per dare ad ognuno il suo, ma per rendere chiare e condividere con i soci le scelte strategiche.

**Parole d’ordine del Gruppo**

- **Qualità**: con un controllo totale della filiera che parte dalla programmazione degli impianti con uno staff di 45 agronomi specializzati presenti su tutte le aree produttive che si occupa dell’assistenza tecnica ai soci per le produzioni integrate e biologiche, sino alla lavorazione nei nostri magazzini dotati delle principali certificazioni di prodotto e processo con tecnologie in grado di soddisfare le esigenze dei clienti.

**Parole d’ordine del Gruppo**

- **Innovazione**: di processo e di prodotto grazie alla innovazione varietale come elemento chiave per offrire al consumatore prodotti di qualità elevata in grado di soddisfare le richieste del consumatore e assicurare un reddito alle aziende agricole.

---

**Legenda**

- **Stabilimento**
- **Centro di ritiro**

**Gli stabilimenti**: (12):

**Emilia Romagna**: Cesena (FC), Longiano (FC), Forlì (FC), San Pietro in Vincoli (RA), Faenza (RA), Lavezzola (RA), Vignola (MO), Albola (BO)

**Lazio**: Aprilia (LT)

**Metaponto**: Scanzano Jonico 1 (MT), Scanzano Jonico 2 (MT)

**Sicilia**: Donnalucata (RG)

**Centri di ritiro e di stoccaggio**: (15):

- Russi (RA), San Martino in Spino (MI), Piangargano (MI), Castelfiorentino (SI), Campione (RA), Doventrì (BO), Imola (BO), Modiano (RA), Fili (Ferentino) (FI), Alberese (AR), Casoli Valenza (AR), Cingoli (PG), Casamicciola (NA), Campomola (PN), Romagnano (TN).
INNOVAZIONE VARIETALE/PRODOTTO

APOFRUIT E’ PARTNER CON I PRINCIPALI BREEDERS MONDIALI:

• STAR FRUIT (PINK LADY)
• NEW PLANT
• SUN WORLD
• SNFL
• ASF, IPS
• SELENELLA
• ZESPRI INTERNATIONAL
• ??

La nostra mission.....

I nostri 55 anni di storia sono, per noi, un patrimonio straordinario e, forti di questo, continuiamo sul sentiero tracciato dai soci fondatori che ancora oggi è la ragione primaria del nostro impegno e cioè assicurare un reddito e una prospettiva alle aziende agricole socie.

I nostri obiettivi

• Acquisire SPECIALIZZAZIONE su tutta la gamma dei prodotti presenti all’interno del paniere Apofruit

Il complesso lavoro che abbiamo svolto con la fragola negli ultimi anni sarà da esempio per tanti altri nostri prodotti

I nostri obiettivi

• COMPETITIVITÀ: non intesa come strategia dei bassi prezzi bensì come strategia di ALTA QUALITÀ per raggiungere il consumatore con il massimo della qualità utilizzando le nostre linee premium

I trend evidenziano un aumento dei consumi dei prodotti con alto valore aggiunto

Prodotto commercializzato
Creare valore in ortofrutta

- Qualità / politica di marca
- Innovazione
- Segmentazione

Progetti di Qualità

PROGETTO QUALITÀ KIWI

- Area di coltivazione "vocata": Veneto, E. Romagna, Lazio, Basilicata, Calabria
- Assistenza tecnica diretta
- Potatura (+ carico di frutti per pianta)
- Impollinazione (> n° semi -> qualità)
- N° di piante per ettaro / n° di maschi
- Fertilizzazione
- Corretti parametri alla raccolta (durezza e liv di sost. Secca 16,5 )
- Specializzazione nel condizionamento del prodotto
Da dove siamo partiti

- Aziende molto colpite da PSA
- Prezzi del Kiwi Hayward in ribasso
- H16A capitozzato per PSA
- Qualità generale del frutto NON distinguibile dalla massa di produzione.
- Poche aziende “coraggiose” che applicavano buona tecnica colturale.

Il progetto KIWI QUALITÀ è nato con la Mission di differenziare economicamente il prodotto di qualità, incentivando i produttori a puntare sulla QUALITÀ piuttosto che sulla quantità.

C’è una correlazione diretta tra peso dei frutti e numero dei semi.

Piovosità (mm) rispetto all’area pedoclimatica
Metodo di campionamento Sostanza Secca

Obiettivo: fare una fotografia realistica e attendibile dell’intera partita di frutta che arriverà in magazzino

Metodo: si preleva un campione di 90 frutti in campo, cercando di rappresentare l’intero campo (attraversandolo tutto) e la variabilità all’interno di ogni pianta.

Un gruppo di “campionatori” addestrati dalla cooperativa preleva i frutti campione 3-4 giorni prima della raccolta.

L’azienda può conferire la frutta in magazzino solo quando l’analisi è completa.

Riepilogo dopo 5 anni di lavoro

• Crescita della qualità dei frutti
• Efficacia delle tecniche colturali
• Rapporto con le condizioni climatiche
• Rapporto con la natura pedologica del sito

Per maggior comprensione abbiamo creato un indice di Ton/Sostanza Secca x Ha

### Trend Generali

![Image of trend graph]

<table>
<thead>
<tr>
<th>Anno</th>
<th>SS % media di Cooperativa</th>
<th>SS % media di Cooperativa</th>
<th>SS % media di Cooperativa</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>16.05</td>
<td>15.8</td>
<td>16.14</td>
</tr>
<tr>
<td>2013</td>
<td>15.8</td>
<td>16.14</td>
<td>15.63</td>
</tr>
<tr>
<td>2014</td>
<td>16.14</td>
<td>15.63</td>
<td>15.3</td>
</tr>
<tr>
<td>2015</td>
<td>15.63</td>
<td>15.3</td>
<td>15.4</td>
</tr>
<tr>
<td>2016</td>
<td>15.3</td>
<td>15.4</td>
<td>15.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Anno</th>
<th>SS % media di Cooperativa</th>
<th>SS % media di Cooperativa</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>3.79</td>
<td>3.8</td>
</tr>
<tr>
<td>2013</td>
<td>3.8</td>
<td>3.55</td>
</tr>
<tr>
<td>2014</td>
<td>3.55</td>
<td>3.95</td>
</tr>
<tr>
<td>2015</td>
<td>3.95</td>
<td>3.3</td>
</tr>
<tr>
<td>2016</td>
<td>3.3</td>
<td>3.4</td>
</tr>
</tbody>
</table>

![Image of production graph]
SECTION VI.
CHALLENGES FOR INSPECTION SERVICES

The Secretariat and the Host Country invited speakers from participating countries, observer countries and observer organisations to share their experiences on some key issues for the fruit and vegetable inspection services. An invited speaker from GS1 gave an overview on the tools they developed for traceability. The Netherlands and the US shared their experience on tolerances. The Netherlands explained the principles of their risk based inspection methodology. The UK was invited to present their experience on internet sales.

Presentations of the Section:

- Traceability
- Update - Discussion on tolerances
- Applying tolerances
- Risk based inspection methodologies
- Internet sales
TRACEABILITY

by Ms. Diane Taillard, Director Consumer Safety & Traceability, Safety and Traceability, GS1

Abstract:
Ms. Diane Taillard, Director Consumer Safety & Traceability, GS1 provided a comprehensive presentation on food traceability. GS1 is a non-profit organisation with over a million members and provides standards to ensure key processes run smoothly in some of the world’s biggest industries. In 2005 when EU Food Law entered into force, traceability became compulsory for all food operators. So industries and governments tried to develop a common understanding of traceability. Indeed, today traceability has become one of the top obstacles to efficient supply chains. Systems and processes in place fail to address supply chain risks or to ensure transparency and visibility across the supply chain, plus there is a need to achieve real time traceability.
TRACEABILITY

Presentation by Ms. Diane Taillard, Safety and Traceability, GS1
Introduction

Traceability
OECD Scheme for the Application of International Standards for Fruit and Vegetables - Meeting of Heads of National Inspection Services
14 October 2016, Rome
Diane Taillard, Director Consumer Safety & Traceability, GS1 Global Office

GS1 standards

GS1 standards are the global language of business—a language for identifying, capturing and sharing information automatically and accurately, so that anyone who receives that information can understand it, no matter who or where they are.

The global language of business

GS1 standards

Identify
GS1 Identification Numbers
Companies, Products, Locations, Logistics, Assets and Services

Capture
GS1 Data Carriers
Barcodes and EPC-enabled RFID

Share
GS1 Data Exchange
Master Data, Transactional Data and Physical Event Data

110+ Member Organisations
Serving Business Around the World
2005: EU Food Law entering into force

Traceability becomes compulsory for all food operators. Industries and governments try to develop a common understanding of traceability.

Today

- More regulatory & business requirements
- New technical possibilities

GS1 Standards available for traceability

Basics for interoperability

Today

Traceability: one of the top 3 obstacles to efficient supply chains!

"(...) systems and processes in place fail to address supply chain risks or to ensure transparency and visibility across the supply chain."

Challenges

Growing expectations from traceability systems
Challenges
Even more complexity
Adding the omnichannel environment to the complexity of the supply chain

Challenges... or opportunity?
Many ways to perform traceability

Cumulative tracking
Distributed Information Sources
Or traceability network

One up – One down
Single source data base

Example: Traceability approach at Metro
The innovative approach: Traceability in the cloud.

Example: capacity building in Peru

A couple GS1/industry references
• Traceability for Fresh Fruits and Vegetables Implementation Guide, GS1, 2015 (http://www.gs1.org/docs/traceability/Global_Traceability_Implementation_Fresh_Fruit_Veg.pdf)
• Improving Traceability and Food Safety with GS1 standards in Fresh Foods, GS1 US, 2012 (http://www.gs1us.org/industries/fresh-foods/tools-and-resources)
• The Produce Traceability Initiative (http://www.producetraceability.org/)
An EU reference (non food)


E.g. Chapter 4 incl. table with supply chain characteristics that typically increase risks in terms of traceability

E.g. Chapter 5. Capacity building of Market Surveillance Authorities, incl. existing sources of information to collect information about product and about economic operators / useful documents, websites and contacts

A concrete tool http://gepir.gs1.org/

For more information please contact:

Diane Taillard
Director Consumer Safety & Traceability
GS1 Global Office

D +32 2 788 78 39
M +32 475 600 229
E Diane.taillard@gs1.org

www.gs1.org

Thank you
UPDATE - DISCUSSION ON TOLERANCES

by Mr. Jean Crombach, Quality Inspection Bureau (KCB), the Netherlands

Abstract:

Mr. Jean Crombach (KCB - The Netherlands) presented a short summary of previous tolerances discussions. In particular they highlighted that although tolerances in the Regulation 543/2011 are set at 1%, tolerances in practice are and should be set at 3%. Germany enquired if the 3% threshold was for Class I. The Netherlands explained that it would be their preference that the tolerance is uniform for all classes and set at 3%.
UPDATE - DISCUSSION ON TOLERANCES

Presentation by Mr. Jean Crombach, Quality Inspection Bureau (KCB), the Netherlands
Update
Discussion on Tolerances

• Tolerances in Regulation 543/2011: 1%
• OECD-meeting in Poland 2014, presentation by KCB
• Tolerances in Practice: 3%
• Road to getting the Practice in the Regulation

Section VI - Challenges for inspection services
APPLYING TOLERANCES

by Mr. Dorian Lafond, USDA Agricultural Marketing Service, the US

Abstract:

Mr Dorian Lafond (US) also made a presentation on tolerances, highlighting the unrealistic use of tolerances that do not take into account the decay of soft fruit and vegetables. They provided an example for kiwifruit where each standard includes tolerances for defects allowed in all grades/classes. Some standards include variances in the tolerances allowed based on the standard’s point of application - Shipping Point, En Route, or at Destination.
APPLYING TOLERANCES

Presentation by Mr. Dorian Lafond, USDA Agricultural Marketing Service, the US
Specialty Crops - Defined
"Fruits and vegetables, tree nuts, dried fruits, horticulture, and nursery crops (including floriculture)."
- Fruit
- Vegetables
- Tree nuts
- Culinary herbs and spices
- Medicinal plants
- Nursery, floriculture, and horticulture crops

AMS History
- Agricultural Marketing Service’s first program was the Market News Service in 1915 - for strawberries.
- The first U.S. grade standard was issued by AMS for fresh potatoes in 1917.
- The first processed product grade standards in 1928 for Canned peas and Canned corn.

U.S. Standards for Grades Fruits and Vegetables
- 166 FF&V Standards
  - Fruits
  - Fruit for Processing
  - Vegetables
  - Vegetables for Processing
  - Nuts and Specialty Crops
- 157 PFV Standards
  - Canned F&V
  - Frozen F&V
  - Sugar products
  - D&D
  - Misc. Olive oil, Peanut butter

Tolerances are included every USDA F&V Quality Standard and accompanying Inspection Manual/Explanatory Brochure. Both take into consideration:
- The physiological characteristics of the FF&V
- Production practices and producer concerns
- Established trade practices throughout the distribution channel
- Consumer concerns/trends such as; food waste, more sustainable, wholesome and safer FF&V influence:
  - Organic & chemical-free production, post-harvest and marketing practices
  - FF&V that are more physiologically developed/mature (tree-ripened fruits) to maximize desired organoleptic characteristics and reduce in the use of packaging materials FF&V.
Tolerances Singhly or collectively lead to a faster rate of senescence accompanied by higher incidents of soft rot, decay, and internal breakdown in FF&V.

Impact of zero” or unrealistic on of Tolerances for Decay Soft Rot and Internal Breakdown on:
- Consumers:
  - Reduced availability of high quality products and range of FF&V offerings
  - Establishing dissonance in the quality-price relationship – price markdown spiral
- Producers:
  - Negative consequences for producers/farmers/farming income, farming and farm sustainability
  - Reduced farm investment
  - Population shift from farming and the rural way of life.
- Packers and exporters:
  - Reduced or no returns on investments in sorting, packaging, shipping/transportation services.
  - Negative impact on these sectors to other FF&V...
Physiological characteristics of FF&V:
- In most instances, FF&V are stored after preparation and packing, besides they may not always be re- inspected prior to being shipped.
- Senescence commences and/or quickens immediately after harvest, and Irrespective of the post-harvest
  treatments applied following harvest, senescence is only temporarily slowed or halted.
- In most instances, FF&V are stored after preparation and packing. Vendors may not always be re-
  inspected prior to being shipped.
- Evidence of soft rot, decay and internal breakdown occurring internally within the FF&V can evade
  detection at all stages from harvest until consumption.

Each FF&V standard includes tolerances for defects allowed in all grades/classes. Some standards include
variances in the tolerances allowed based on the standard's point of application—shipping point, En Route, or at Destination.

<table>
<thead>
<tr>
<th>Location</th>
<th>At Shipping Point</th>
<th>En Route or at Destination</th>
</tr>
</thead>
<tbody>
<tr>
<td>FF&amp;V Class</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extra Class</td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S. Fancy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S. No. 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S. No. 2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Condition Defects</th>
<th>Tolerances</th>
<th>Quality Defects</th>
<th>Additional Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Injury</td>
<td>1 mark</td>
<td>25% of fruit surface</td>
<td>No more than 25% of fruit surface may have injuries.</td>
</tr>
<tr>
<td>Damage</td>
<td>2 marks</td>
<td>25% of fruit surface</td>
<td>No more than 25% of fruit surface may have damage.</td>
</tr>
<tr>
<td>Serious Injury</td>
<td>3 marks</td>
<td>25% of fruit surface</td>
<td>No more than 25% of fruit surface may have serious injuries.</td>
</tr>
<tr>
<td>Serious Damage</td>
<td>4 marks</td>
<td>25% of fruit surface</td>
<td>No more than 25% of fruit surface may have serious damage.</td>
</tr>
</tbody>
</table>

 Having tolerances for decay, soft rot and internal breakdown does not mean that:
- Overall quality of the FF&V lot is compromised or lowered.
- Affected FF&V should be offered for sale to consumers — sellers are responsible for taking away the affected produce before it is offered for retail sale.
- Producers and exporters are allowed to purposely trade/ship in affected produce.
- Trading parties can willfully claim damages to get lower prices from suppliers/producers.
- There’s job security for inspectors and inspection services — for in most countries FF&V are traded without the application of standards or conformance with existing standards is not mandatory.

<table>
<thead>
<tr>
<th>Defects limits per class/grade are indicated with fixed parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size (max and/or Min)</td>
</tr>
<tr>
<td>NONE</td>
</tr>
<tr>
<td>Sizes 39 or smaller may not vary in diameter more than 1/4 inch or 6.4mm</td>
</tr>
<tr>
<td>Sizes 31 – 38 may not vary in diameter more than 3/8 inch or 9.5mm</td>
</tr>
<tr>
<td>Sizes 31 – 38 may not vary in diameter more than 3/8 inch or 9.5mm</td>
</tr>
<tr>
<td>Extra Class</td>
</tr>
<tr>
<td>U.S. Fancy</td>
</tr>
<tr>
<td>U.S. No. 1</td>
</tr>
<tr>
<td>U.S. No. 2</td>
</tr>
</tbody>
</table>

For example:

<table>
<thead>
<tr>
<th>FF&amp;V Class</th>
<th>Tolerances</th>
<th>Quality Defects</th>
<th>Additional Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extra Class</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S. Fancy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S. No. 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S. No. 2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Each FF&V standard includes tolerances for defects allowed in all grades/classes. Some standards include variances in the tolerances allowed based on the standard’s point of application—shipping point, En Route, or at Destination.

- Tolerances for decay, soft rot and internal breakdown are included in every FF&V standard due to:
- Uncontrollable and unseen factors that lead to soft rot, decay and internal breakdown occurrences.
- The amount of FF&V that is allowed to be defective/unsaleable per lot upon buyer/importer receipt, for
  example:
- Affected FF&V should be offered for sale to consumers — sellers are responsible for taking away the affected produce before it is offered for retail sale.
- Producers and exporters are allowed to purposely trade/ship in affected produce.
- Trading parties can willfully claim damages to get lower prices from suppliers/producers.
- There’s job security for inspectors and inspection services — for in most countries FF&V are traded without the application of standards or conformance with existing standards is not mandatory.
RISK BASED INSPECTION METHODOLOGIES

by Mr. Jean Crombach, Quality Inspection Bureau (KCB), the Netherlands

Abstract:

Mr. Jean Crombach (KCB - The Netherlands) presented their Risk Based Inspection Methodologies. Inspection is randomly assigned, with SMS products in general undergoing 100% controls, while GMS products normally undergo solely 10% controls. Approved traders and approved third countries are deemed low risk; therefore they will face only 5% inspections. The system is based on a yearly analysis of inspection results and has 11 fixed levels of inspection percentages (5, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100%). There are 120 approved traders at the moment in the Netherlands. If a company does not agree with a non-conformity decision, the company can protest. The protest is sent to a Committee formed by ‘wise’ members. A hearing can be held in which the company can give a further explanation of the case. Then the Committee gives an advice to the inspection service and the Board and Directors take the final decision.
RISK BASED INSPECTION METHODOLOGIES

Presentation by Mr. Jean Crombach, Quality Inspection Bureau (KCB), the Netherlands
RISK BASED INSPECTION METHODOLOGIES

17th OECD Meeting Heads National Inspection Services
Rome, 12-14 October 2016

Jean Crombach
Technical director KCB

CONTENT PRESENTATION
1. Something about KCB, history and present
2. Volumes of trade in The Netherlands
3. Risk based inspection system
   - import, internal market, export
4. Questions

KCB CHARACTERISTICS
- Founded in 1924
- Primary task 1924: export inspections quality fresh fruits and vegetables
- Appointed by Government
- Independent
- High level of expertise
- Accreditation

DEVELOPMENTS
- History: product control at auctions and packing stations
- Change in product flow:
  - direct from grower to packing station
  - direct from grower to supermarket
  - direct from grower to export/traders
- Change of checkpoints – efficiency
- 2005: introduction regulation ‘Approved Trader’ (RIK)
- 2007: delegation some tasks NPPO to Agricultural Inspection Agencies, like KCB

ACCREDITATION KCB
- ISO/IEC 17020, type A (certified by Dutch Council for accreditation)
- Type A, highest level of independency
- Quality system (includes procedures, instructions, etc.)
- Guarantees high quality level of control
- KCB: independency, integrity and efficiency
INSPECTION COSTS

- Costs of inspection: 100% payment by inspected companies
- No contribution by government
- Fee per inspection:
  - starting fee (covering administrative costs, costs travelling from office to company) → € 47.68 per inspection
  - fee per minute inspection → € 1.49 per minute
- Fee is ordered by / approved by Ministry of Economic Affairs
- Fee must cover costs; profit not allowed

THE NETHERLANDS; A GLOBAL PLAYER

- Global player in F&V
- Imports from 114 countries
- Production € 3.4 billion
- Exports 50% product & 50% import product
- NL: worldwide exporter nr. 2 avocados

FIGURES FRESH FRUITS & VEGETABLES

Import 2012
(x 1 mln kg)
Total: 4.418
Fruit: 3.238
Vegetables: 1.180

Export 2012
(x 1 mln kg)
Total: 6.595
Dutch product: 3.387
Re-export: 3.408

CHALLENGES

- High volumes / large quantities
- High speed / dynamics
- Time

Inspections must be very effective and efficient

USE OF IT-TECHNOLOGY

- IT-technology used in all inspection processes
- Planning via tablet
- All information available on tablet:
  - Information on consignment
  - Information on company
  - Instructions/procedures
- Inspection data/results transferred to database
- Management information / reports
PHILOSOPHY EU-REGULATION ON FRESH FRUITS & VEGETABLES

- Application risk analysis ➔ import, internal market and export
- Dynamic approach ➔
  - focus on products with potential risk
  - poor quality ➔ more inspections
  - good quality ➔ less inspections
- Approved traders

INSPECTION QUALITY FRESH FRUITS AND VEGETABLES

KCB performs conformity checks at:
1. Import from non-EU-countries
2. Export to non-EU-countries
3. Internal market

IMPORT - RISK FACTORS

- Quality
  - Regulation EU No. 543/2011, Article 11 ➔ Risk factors
  - Approved 3rd countries
  - Nature of produce, production period, the weather, country of origin, size of the lot, type of packing
  - Results from previous checks
  - Each member state can decide how to organise it nationally (NL = KCB)

IMPORT - HOW MUCH DO WE INSPECT?

- 87 product (11 SMS + 76 GMS) are declared via CLIENT Import system
- Based on Risk Analysis it is determined whether inspection is necessary before release into free circulation
- Inspection is randomly assigned
  - SMS products in general 100%
  - GMS products in general 10%
  - SMS and GMS subject to import dynamics
  - Approved traders ➔ low risk ➔ 5% inspection
  - Approved 3rd countries ➔ low risk ➔ 5% inspection

IMPORT - DYNAMIC SYSTEM

Basic principles
- SMS start at 100%
- GMS start at 10%
- Yearly analysis of inspection results
  - Product/Country combination
  - Number of inspections per month
  - Result of inspections (percentage of rejections) per month
**Basic principles**

- 11 fixed levels of inspection percentages
- Percentage of rejections
  - More than 5% means that inspection percentage increases with 2 levels
  - Between 3 and 5% means an increase with 1 level
  - Between 1 and 3% means the inspection percentage does not change
  - Between 0 and 1% means a decrease of the inspection percentage with 1 level
  - No rejections means a decrease with 2 levels
- Number of executed inspections is taken into account

---

### Percentages SMS per 1 juni 2015

<table>
<thead>
<tr>
<th>inspectie%</th>
<th>afkeuringen per maand</th>
<th>Minimaal # inspecties</th>
</tr>
</thead>
<tbody>
<tr>
<td>20% of hoger</td>
<td>nvt &lt;20 Geldend % + 1 trede</td>
<td></td>
</tr>
<tr>
<td>5%</td>
<td>nvt Geldend % + 2 tredes</td>
<td></td>
</tr>
<tr>
<td>3% &lt; x &lt; 5%</td>
<td>nvt Geldend % + 1 trede</td>
<td></td>
</tr>
<tr>
<td>1% &lt; x</td>
<td>nvt 3%</td>
<td></td>
</tr>
<tr>
<td>0% &lt; x</td>
<td>nvt 1%</td>
<td></td>
</tr>
</tbody>
</table>

---

### Percentages GMS per 1 juni 2015

<table>
<thead>
<tr>
<th>inspectie%</th>
<th>afkeuringen per maand</th>
<th>Minimaal # inspecties</th>
</tr>
</thead>
<tbody>
<tr>
<td>20% of hoger</td>
<td>nvt &lt;20 Geldend % + 1 trede</td>
<td></td>
</tr>
<tr>
<td>5%</td>
<td>nvt Geldend % + 2 tredes</td>
<td></td>
</tr>
<tr>
<td>3% &lt; x &lt; 5%</td>
<td>nvt Geldend % + 1 trede</td>
<td></td>
</tr>
<tr>
<td>1% &lt; x</td>
<td>nvt 3%</td>
<td></td>
</tr>
<tr>
<td>0% &lt; x</td>
<td>nvt 1%</td>
<td></td>
</tr>
</tbody>
</table>

---

### May 2011 - Apples from Chili with lenticel rot
- Inspection percentage was 10%
- # inspecties = 130
- Rejections = 5.2%
- New inspection percentage 40%
- May 2015 inspection percentage 100%

---

### December 2011 - Grapes from Namibia
- Inspection percentage was 100%
- # inspecties = 235
- Rejections = 0.9%
- New inspection percentage 80%
- December 2015 inspection percentage 5%
IMPORT - APPROVED 3rd COUNTRIES

- Quality Control System before export
- EU approval
- Control Certificate to accompany shipments

<table>
<thead>
<tr>
<th>Country</th>
<th>Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Switzerland</td>
<td>Vegetables and fruit, except citrus fruits</td>
</tr>
<tr>
<td>Morocco</td>
<td>Vegetables and fruit</td>
</tr>
<tr>
<td>South Africa</td>
<td>Vegetables and fruit</td>
</tr>
<tr>
<td>Israel</td>
<td>Vegetables and fruit</td>
</tr>
<tr>
<td>India</td>
<td>Vegetables and fruit</td>
</tr>
<tr>
<td>New Zealand</td>
<td>Apples, pears, and kiwis</td>
</tr>
<tr>
<td>Senegal</td>
<td>Vegetables and fruit</td>
</tr>
<tr>
<td>Kenya</td>
<td>Vegetables and fruit</td>
</tr>
<tr>
<td>Eritrea</td>
<td>Vegetables and fruit</td>
</tr>
</tbody>
</table>

EXPORT - HOW MUCH DO WE INSPECT?

- 87 products have to be declared
- Consignments of those products are subject to inspection
  - SMS products = 60%
  - SMS-GMS-mix = 60%
  - GMS products = 10%
- Approved traders → low risk → 5%

INTERNAL MARKET - SURVEILLANCE

- Visits are based on:
  - Signals from the market (e.g., bad product quality)
  - Disappointing results of the company (lot of rejections)
  - Department KKB can order to do extra inspections
  - Inspectors are always allowed to do extra inspections if they think it is necessary
- Surveillance visits are unannounced

INTERNAL MARKET - STRUCTURAL SUPERVISION

- Unannounced visits to traders and growers
- Visits are based on Risk Analysis: Higher risk → more inspection

RIK (= APPROVED TRADER)

- RIK = Regulation Internal Quality Control
- EU Regulation 543/2011: approved traders
  - Companies have own quality system
  - Companies perform own product control
  - All types of companies can participate (e.g., traders, growers)
- Result: less inspection by KCB → lower costs
- RIK started in 2005
RIK DOCUMENTATION

• Rules of procedure
• KCB Quality Code
• Description of the audit
• Enforcement document

REQUIREMENTS KCB QUALITY CODE

• Good inspection results over the last 6 months (= 10% rejections)
• Companies have their own quality management system, including:
  • Execution of quality controls and registration of the results
  • Qualified controllers
  • Calibration and maintenance of measuring equipment
  • Maintenance and cleaning plans for sorting- and packing machines and coldstores

CONTROLS BY KCB

• Yearly audit
• General Supervision (surveillance) based on signals
• Structural Supervision: 2 inspections per year
• 5% export inspections
• 5% import inspections

ENFORCEMENT

Deviations in the yearly audit

Regards processes and procedures
• Category A, serious, to be solved directly
• Category B, incident, to be solved within 1 month
• Category C, light, to be solved within 3 months

ENFORCEMENT

Rejection of a lot by KCB

The product is not in conformity with the marketing standard
• Depending on the nature of the non-conformity, 1 to 4 points are given
• When a total of 6 points is reached within 3 months, the enforcement starts:
  • Companies has to take corrective measures
  • KCB comes 4 times over period of 4 weeks for extra visits
  • Structural Supervision
  • Companies have to pay for the extra visits
  • Assigned points are deducted after 3 months
  • No rejections in half a calendar year means 1 bonus point

COMMITTEE FOR ADVICE

• If a company does not agree with a decision of KCB, the company can protest
• The protest is send to the Committee
• Committee is formed by 'wise' members
• A hearing can be held in which the company can give a further explanation of the case
• The Committee gives an advice to the KCB directors and the KCB Board
• Board and Directors take the final decision
APPROVED TRADER

120 approved traders at the moment
- Many onion companies participate since the start in 2005
- Number of traders grows slowly
- Introduction of Structural Supervision for Traders in 2010 showed an increase in participants (cost calculation)
- Introduction of Structural Supervision for growers in 2014 showed again an increase, also from grower associations

WRAP UP

- Use of risk methodologies essential → you can’t do everything → focus on real risks
- Look for improvement → more effective / more efficient
  Accreditation ISO/IEC 17020 helps
- IT-technology very important → supports inspection

WRAP UP

- BUT, also focus on inspector
  o Education / knowledge / experience / qualification
  o Inspector makes ultimate decision
    - which product?
    - which box?
    - how many samples?

Thank you for your attention
Are there any questions?
INTERNET SALES

by Mr. Ian Hewett, Rural Payments Agency, United Kingdom

Abstract:
Mr. Ian Hewett (UK) discussed some of the challenges raising form increasing internet sales of fruit and vegetables. The UK noted that EU Regulation 543/2011 on the marketing of fresh fruit and vegetables requires at retail that all the required information particulars shall be legible and conspicuous; furthermore it requires that in the case of distance selling these particulars shall be available before the purchase is concluded. Finally, the regulation indicates that invoices and accompanying documents excluding receipts for consumers shall indicate the country of origin of the product and where appropriate the class and variety or commercial type. In the UK alone, predictions suggest the amount sold via the internet could rise to 25% by 2025. Companies operate from multiples stores as well as dedicated internet sales depots (or “dark stores”).

From a quick review of UK websites from the major supermarkets it was clear that the vast majority do not report class or origin of the fruit and vegetable being sold through internet. Or, when reporting the country of origin, provide in some cases a list of up to 7 different countries. Overall, internet sales raise a series of challenges, in particular a limited amount of produce available for inspection. In the event a case of non-conformity arises, it is not clear to whom should a notification of nonconformity be issued? If the case of non-conformity is confirmed, then how can we ensure produce is brought back into conformity? How to ensure web pages contain statutory information, and how and where to inspect are just some challenges that need to be addressed.
INTERNET SALES

*Presentation by Mr. Ian Hewett, Rural Payments Agency, United Kingdom*
Internet Sales
Ian Hewett, United Kingdom

Summary
- Regulatory background to distance selling requirements
- Internet sales in the UK
- Information particulars available
- Options for checking conformity
- Issues with checking conformity
- Conclusion

Regulatory Requirements
- EU Regulation 543/2011 on the marketing of fresh fruit and vegetables
- Article 6 requires at retail that all the required information particulars shall be legible and conspicuous
- Article 5 requires that in the case of distance selling these particulars shall be available before the purchase is concluded.

Regulatory Requirements
- Article 5(4) indicates that invoices and accompanying documents excluding receipts for consumers shall indicate the country of origin of the product and where appropriate the class and variety or commercial type.

UK Internet Market
- As a percentage of the overall market internet sales rose by 1% to 5.4% from 2012 to 2015.
- 20% of consumers have used internet sales.
- Predictions suggest the amount sold via the internet could rise to 25% by 2025.
- Companies operate from multiples stores as well as dedicated internet sales depots (or "dark stores").

UK Companies with websites
- Major supermarkets with own websites: Tesco, Sainsbury's, Waitrose, Asda,
- Other companies delivering fruit and vegetables: Ocado, Amazon,
- Small companies: Abel & Cole,
### Examples of Information available

<table>
<thead>
<tr>
<th>Product</th>
<th>Asda</th>
<th>Tesco</th>
<th>Sainsbury</th>
<th>Ocado</th>
<th>Waitrose</th>
<th>Abel &amp; Cole</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Apples</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gala</td>
<td>Variety shown, Various origins, No Class</td>
<td>Variety shown, Various origins, No Class</td>
<td>Variety shown, Various origins, No Class</td>
<td>Variety shown, Various origins, No Class</td>
<td>Variety shown, Various origins, No Class</td>
<td>UK, No Class</td>
</tr>
<tr>
<td><strong>Oranges</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Navel</td>
<td>No origin, No variety, No Class</td>
<td>No variety, various origins, No Class</td>
<td>No variety, various origins, No Class</td>
<td>No variety, various origins, No Class</td>
<td>No variety, various origins, No Class</td>
<td>No origin, No variety, No Class</td>
</tr>
</tbody>
</table>
Section VI - Challenges for inspection services
Checking conformity

• Check website for statutory information.
• Check invoice/receipt for statutory information.
• Check produce on arrival for compliance with marketing standards.
• Inform trader of any non-conformity.
• “Dark stores” not open to consumers so statutory information not needed.

Checking conformity issues

• Discuss website and invoice requirements with traders to ensure statutory information is displayed.
• Not easy to show country of origin when deliveries can be in any part of country.
• Need to purchase produce in order to see labelling and quality of what is delivered.
• How to pay for produce, where should it be delivered?

Checking conformity issues

• Regulation 543/2011, Article 17, on methods of inspection at paragraph 3 states:
  • Where the goods do not conform with the standards, the inspection body shall issue a finding of non-conformity for the attention of the trader or their representatives.

Checking conformity issues

• Very limited amount of produce is available for inspection.
• To who should a notification of non-conformity be issued?
• How can we ensure produce is bought back into conformity?
• Conformity check in “dark store”?

Conclusion

• Ensure web pages contain statutory information. Origins can be a problem.
• How to buy produce for a conformity check.
• How and where to inspect.
• How to inform of non-conformity.

Traditional Retail – Easier to manage?
End

• Any Questions?

• Ian Hewett

• ian.c.hewett@rpa.gsi.gov.uk
SECTION VII.
PHYTOSANITARY AND HEALTH RISKS

The Secretariat and the Host Country invited speakers to share their experiences on possible new challenges that could be addressed by the Scheme, for consideration by the Heads of National Inspection Services. New Zealand introduced their phytosanitary inspection system. The Nuclear Energy Agency presented the post-accident food management framework that they developed.

Presentations of the Section:

– Phytosanitary inspections in New Zealand
– NEA post-accident food management framework
**Abstract:**

Ms. Karen Sparrow, Ministry for Primary Industries, New Zealand provided an overview of their phytosanitary inspections system. New Zealand's geographic location implies that wherever their product will go, they are expected to travel big distances. New Zealand relies heavily on their agriculture industry. So, given that distance and travel costs are non-negligible, the only way for New Zealand to compete is to focus on high-quality products. Indeed 80% of all food is exported so mistakes are very expensive to fix. New Zealand has no subsidies; if a farmer or company decides to export they have to be able to cover the costs. Therefore they need to have also in place an effective phytosanitary inspection system that ensures that all products are free of pests and keep trading channels open.

New Zealand's phytosanitary certificate is a government-to-government certificate of compliance. It provides specific IPPC data elements and states that the produce has been inspected prior to export, and meets the importing country’s phytosanitary requirements. The certificate is issued by the Ministry for Primary Industries (MPI). The system is unique in the sense that it deals with multiple country phytosanitary system requirements. It relies on Independent Verification Agencies (IVAs) and clear delegation, audits and accountability steps.
PHYTOSANITARY INSPECTIONS IN NEW ZEALAND

*Presentation by Ms. Karen Sparrow, Ministry for Primary Industries, New Zealand*
Phytosanitary Inspections in New Zealand
Karen Sparrow
Ministry for Primary Industries, New Zealand
17th OECD Meeting of the Heads of National Inspection Services

Overview
• Introduction to New Zealand
• Importance of trade
• Ministry for Primary Industries (MPI)
• MPI’s plant export certification system

Where is New Zealand?
Ɣ Is geographically remote
Ɣ Is free of many pests and diseases
Ɣ Has a mild climate and fertile land
Ɣ Has a land area size between UK and Italy
Ɣ Population of 4.7 million
Ɣ Is reliant on primary industries which contribute approximately 56% of New Zealand’s total exports

Importance of trade to New Zealand
• New Zealand’s economy dependent on a high-quality agricultural sector
• 80% of all food produced in New Zealand is exported
• Must get it right first time
  – Our trading countries are a long way away from New Zealand
  – Mistakes are expensive to fix
  – An effective phytosanitary system is critical to the economy of the country
  – Quality of product exported is crucial
Ministry for Primary Industries (MPI)

“Growing and Protecting New Zealand”
Manages food, forestry, biosecurity, plants and fisheries in New Zealand
- Plant exports group:
  - Thirteen members
  - Manage phytosanitary, grade and food safety
  - Set standards and manage the system that exporters must comply with to receive export certificates

Phytosanitary Certification

- The phytosanitary certificate:
  - Is a government-to-government certificate of compliance;
  - Provides specific IPPC data elements
  - States that the produce has been inspected prior to export; and
  - Meets the importing country’s phytosanitary requirements
  - Is issued by MPI as the NPPO

- Meets International obligations:
  - Transparent;
  - Technically justified; and
  - Sufficient to protect plant, animal or human life.

The MPI Regulatory Model for Export Certification

The regulatory model (simplified)

Export Certification System Overview

Unique in the world, effective, flexible and efficient.

MPI Role

Independent Verification Agency (IVA) Role
Section VII - Phytosanitary and health risks

MPI Approved Organisation (MAO) Role

- **Approves Systems**
- **Phytosanitary Certificate**
- **Compliant Product**
- **Audits**
- **End Point Inspection**
- **Verify**
- **Phytosanitary Security**
- **Phytosanitary Sampling**
- **Identification and traceability**
- **Phytosanitary Treatments**
- **Apply ISPM 15 mark**
- **MAO Inspection**

RECOGNITION

- **Verify**
- **Phytosanitary Certificate**
- **Request**
- **Compliant Product**

ACCOUNTABILITY

- **MAOs (MPI Approved Organisations)**
- **IVAs (Independent Verification Agencies)**

- **Audit**
- **Phytosanitary Inspections**
- **Pre-clearance and Assurance Programmes Activities**
- **Certificate request verification**
- **Authorises and Approves IVAs and MAOs**
- **Oversight of compliance and processes**

- **MPI (New Zealand’s NPPO)**
- **Sets Phytosanitary Standards**
- **Validates Importing Country Phytosanitary Requirements**
- **Negotiates access with importing countries**
- **Authorises and Approves IVAs and MAOs**
- **Negotiates access with importing countries**
- **Delegates Authority**

- **Audit**
- **Phytosanitary Inspections**
- **Pre-clearance and Assurance Programmes Activities**
- **Certificate request verification**
- **Authorises and Approves IVAs and MAOs**
- **Oversight of compliance and processes**

Additional information:

- **MPI (New Zealand’s NPPO)**
- **IVAs (Independent Verification Agencies)**
- **MAOs (MPI Approved Organisations)**
- **Audit**
- **Phytosanitary Inspections**
- **Pre-clearance and Assurance Programmes Activities**
- **Certificate request verification**
- **Authorises and Approves IVAs and MAOs**
- **Oversight of compliance and processes**

- **Verify**
- **Phytosanitary Certificate**
- **Request**
- **Compliant Product**

- **Accountability**

- **Recognition**
- **Phytosanitary Certificate**
- **Compliant Product**
- **Audit**
- **Phytosanitary Inspections**
- **Pre-clearance and Assurance Programmes Activities**
- **Certificate request verification**
- **Authorises and Approves IVAs and MAOs**
- **Oversight of compliance and processes**

- **MPI (New Zealand’s NPPO)**
- **Sets Phytosanitary Standards**
- **Validates Importing Country Phytosanitary Requirements**
- **Negotiates access with importing countries**
- **Authorises and Approves IVAs and MAOs**
- **Negotiates access with importing countries**
- **Delegates Authority**
NEA POST-ACCIDENT FOOD MANAGEMENT FRAMEWORK

by Mr. Edward Lazo, NEA/RAD, OECD

Abstract:

Mr. Edward Lazo, Radiological Protection and Radioactive Waste Management Division, NEA/OECD, presented a Post-Accident Food Management Framework. The NEA explained that their role is to provide authoritative assessments and to forge common understandings on key issues, as input to government decisions on nuclear energy policy, and to broader OECD policy analyses in areas such as energy and sustainable development.

Recently, the widespread contamination in Japan from the Fukushima Daiichi accident provoked many questions concerning domestic consumption and export of Japanese food. Furthermore, it was clear that current radiological protection guidance was insufficient and there is no internationally-agreed framework for post-accident food management.

In order to address this challenge, the NEA collected national decisions and recommendations related to trade in food from Japan and developed a comprehensive framework for the management of post-accident food. The Framework is aimed at having a single set of criteria for the local, national and international management of food from post-accident affected areas.
NEA POST-ACCIDENT FOOD MANAGEMENT FRAMEWORK

Presentation by Mr. Edward Laço, NEA/RAD, OECD
NEA Post-Accident Food Management Framework

Dr Ted Lazo
Scientific Secretariat
NEA Committee on Radiological Protection and Public Health (CRPPH)

17th OECD Meeting of the Heads of National Inspection Services
12–14 October 2016, Rome

The NEA: A Forum for Co-operation for the Most Advanced Countries in the World
• Founded in 1958
• 31 member countries
• 7 standing technical committees
• 75 working parties and expert groups
• 21 international joint projects

The NEA Mission
• To assist its member countries in maintaining and further developing, through international co-operation, the scientific, technological and legal bases required for a safe, environmentally friendly and economical use of nuclear energy for peaceful purposes.
• To provide authoritative assessments and to forge common understandings on key issues, as input to government decisions on nuclear energy policy, and to broader OECD policy analyses in areas such as energy and sustainable development.

OECD/NEA Membership
• Australia
• Austria
• Belgium
• Canada
• Chile
• Czech Republic
• Denmark
• Estonia
• Finland
• France
• Germany
• Greece
• Hungary
• Iceland
• Ireland
• Israel
• Italy
• Japan
• Korea
• Luxembourg
• Mexico
• Netherlands
• New Zealand
• Norway
• Poland
• Portugal
• Russia
• Slovak Republic
• Slovenia
• Spain
• Sweden
• Switzerland
• Turkey
• United Kingdom
• United States

NEA Organisational Structure

Post-Accident Food Management Background
• The wide-spread contamination in Japan from the Fukushima Daiichi accident provoked many questions concerning domestic consumption and export of Japanese food
• Radiological protection guidance was insufficient
International Guidance for Food Management

- The Codex Alimentarius agreement, provides radiological criteria for imported food, based on 1 mSv/a, 10% of food basket
- The European Commission Directives, provides guidance and criteria for consumption of contaminated food from accident-affected territories, based on 1 mSv/a, 10% of food basket
  - Basic Safety Standards Directive
  - The Council Regulation laying down maximum permitted levels of radioactive contamination of food and feed following a nuclear accident or any other case of radiological emergency (1987, 2016)
- The IAEA Safety Requirements Level documents, establishes criteria for the consumption of food in contaminated areas, based on 10 mSv/a
  - Radiation Protection and Safety of Radiation Sources: International Basic Safety Standards, GSR-7
  - Preparedness and Response for a Nuclear or Radiological Emergency, GSR-3

International Guidance Limitations

The Codex agreement is the only internationally agreed criteria for post-accident situations, but this only provides criteria for the importing of post-accident foods.
The EC Directives and IAEA Standards refer to the protection of individuals living in accident-affected territories
- Standards are conservative and generic, but are not based on circumstances from the actual accident
- There is no internationally-agreed framework for post-accident food management

What is the Issue?

- International guidance:
  - Is based on generic assumptions
  - Addresses only some food-management aspects
  - Provides a single solution for all situations
- The Fukushima situation presented unique questions
  - How to manage domestic distribution and consumption
  - How to manage export
  - How should importing countries use Japanese criteria

Criteria for international trade of food products from Japan were not well understood within the context of existing standards

NEA Framework General Considerations

- Accidents are rare and are unique
- Affected food products will be accident specific
- There are a limited number of export food products from any affected area
- Consumption and export criteria are a matter of national choice and will evolve with the situation circumstances

Emergency Food-Related Actions

- Food consumption in areas modelled to be affected will be banned / restricted rapidly in the case of a declared emergency
- Food distribution from areas modelled to be affected, and exports will be will be banned / restricted rapidly
- Food consumption and distribution will be resumed only after:
  - the accident is under control
  - affected areas have been radiologically characterised
  - national criteria have been established, and
  - a measurement / certification process has been established
National Food Criteria

- National criteria should be based on pre-determined risk assessments, but will need to be refined to address actual prevailing circumstances, that is:
  * What food products are affected
  * What radionuclides have been released
- Criteria refinement can take place during the time that the accident is being brought under control and affected areas are being characterised
- Criteria will be developed to protect the most exposed group – those living in the affected area

NEA Framework Elements

For affected food, consumption criteria:

- Will be developed in Bq/kg
- Will be selected based on an assumed annual food consumption (kg/a)
- Will be selected to assure that eating affected food will not cause a radiation exposure over a specified level (mSv/a)

The value selected will be so that the population consuming the largest amount of affected food, those living in affected areas, does not exceed the specified exposure

CODEX values should be the ceiling level for national affected food criteria

Framework Objective and Basis

The Framework is aimed at having a single set of criteria for the local, national and international management of food from post-accident affected areas, developed by the accident country to protect the most exposed group

- Criteria will be based on protecting those living in affected areas
- It will be socially, politically and perhaps ethically difficult for a country to use different criteria for those living in the affected area and those living in unaffected areas
- Similarly, criteria for national consumption will most likely be used as export criteria
- The accident country will use Codex Alimentarius levels as a ceiling for national consumption criteria
- Importing countries should use the accident country’s export criteria as their import criteria

NEA Framework

The diagram illustrates the framework with the affected area, rest of country, accident country exports, and non-accident country. It shows the application of national criteria for food consumption and marketing, along with the flow of affected area, rest of country, and country imports.

International Validation

To contribute to national and international confidence in the accident country’s food consumption criteria and food certification processes, the following could be considered:

ValidFood

International Validation Process for Post-Accident Food Management

- Establish a process to validate, against state-of-the-art science, the national process used to select food consumption criteria
- Establish a process to validate, against state-of-the-art science and equipment, the national approach used to certify that food meets criteria to allow consumption
Considerations
- The post-Fukushima accident food-related issues caused significant national and international confusion
- The NEA is considering how planning could avoid such confusion should another accident take place
- A neutral, internationally established process/group could be used to address these aspects

OECD Legal Instruments
- OECD Council Decisions are legally binding
- OECD Council Recommendations are not legally binding, but represent political will
- OECD Declarations are not legally binding, but represent policy commitments
- OECD Arrangements and Understandings are not legally binding, but are adopted by some member countries

Next Steps
- The NEA will convene a group of interested member countries, with participation of OECD Trade and Agriculture Directorate and the UN Food and Agriculture Organisation (home of CODEX), to discuss possible/desirable instruments to move this issue forward, e.g.:
  - Adopt the NEA Framework
  - Develop an international validation instrument
- Based on discussions, further work will be undertaken as appropriate

Political Interest is Necessary
To Undertake Formal Steps

Conclusions
- State-of-the-art processes and science are essential to re-establishing agricultural activities in accident-affected areas
- Trust and confidence are difficult to re-establish
- The NEA feels that a broad framework, and a neutral, international, science-based process of validation can contribute to re-establishing trust and confidence in agricultural activities

Food Safety Science Workshop
Fukushima
8 – 10 November 2016
SECTION VIII.
NEW TECHNOLOGIES FOR FRUIT AND VEGETABLES INSPECTION

The Secretariat and the Host Country invited Italy to share their experience on new methods that could be applied for checking the quality of fruit and vegetables.

Presentations of the Section:

– Optoelectronics / biophotonics for quality of fruit and vegetables
OPTOELECTRONICS / BIOPHOTONICS FOR QUALITY OF FRUIT AND VEGETABLES

by Dr. Paolo Menesatti, Director of the CRA-ING, Italy

Abstract:
Dr. Paolo Menesatti (CRA-ING) presented the latest developments in image technology to test fruit and vegetables quality. The presentation covered electronic senses and technologies, biophotonics, non-imaging application, imaging applications, printing on food and infotracing. Germany enquired about the idea of barcode labelling directly on the produce. This is allowed, but Germany noted that there is a risk in the case the information is incorrect. When you have a box, you can change the label in the box, but when you label directly the product it becomes much more complex and costly to rectify. Italy (CRA-ING) acknowledged that this is a risk and currently they are working to find a solution.
OPTOELECTRONICS / BIOPHOTONICS FOR QUALITY OF FRUIT AND VEGETABLES

Presentation by Dr. Paolo Menesatti, Director of the CRA-ING, Italy
Section VIII - New technologies for fruit and vegetables inspection

Optoelectronics / Biophotonics for Quality of Fruit and Vegetables

Paolo Menesatti, Francesca Antonucci, Federico Pallottino, Simone Figorilli, Corrado Costa
Paolo Menesatti, Ph.D. – Director CREA-ING
Contact info: https://sites.google.com/site/paolomenesatti/

Who we are
- Who we are
- Quality of Fruit and Vegetables
- Standard technique for inspection
- Electronic senses and technologies
- Biophotonics
- Non Imaging application
- Imaging applications
- Printing on food
- Infotracining

CREA Council for agricultural research and economics
It is the most important Italian research institution in the agro-food (2300 employees), supervised by Mipaaf scientific expertise in agriculture, fisheries, forestry, nutrition and socioeconomic

The REFORM involves 12 research centers
- Genomics and bioinformatics
- Agriculture and environment
- Defense and certification
- Engineering and agro-food processing
- Food and Nutrition
- Policies and the bio-economy

6 supply chain CENTERS:
- Cereal and industrial crops
- Tree crops (fruit, citrus and olive)
- Viticulture and enology
- Horticulture and floriculture
- Animal husbandry and aquaculture
- Forests and timber production

Mission CREA-ING
CREA-ING deals with technology and methodology developments inherent to agricultural engineering in agricultural and forestry sectors with prevailing activity in agricultural mechanization, in environmental management, in food and nutrition, in policies and the bio-economy, with particular reference to the innovation which support is to be given to the sector and the processes of certification and normative harmonization.

Staff
- Director 1
- Researchers / Scientists 21
- Technicians 16
- Administratives 7
- Research Collaborators 14
- Postdoctoral 7

Research activities
- Non-destructive sensors, sensing technologies for quality evaluation of agro-food products and agricultural production parameters (fertilizers, plant nutritional status, spraying)
- Optoelectronics and imaging applications (chromatic, hyperspectral, thermal, morphometry, multivariate modeling)
**Merceological/organoleptic quality**

<table>
<thead>
<tr>
<th>Property</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taste</td>
<td>Odour, aroma, flavor</td>
</tr>
<tr>
<td>Texture</td>
<td>Hardness, Softness, Stiffness</td>
</tr>
<tr>
<td>Color</td>
<td>Hue, luminosity, Saturation, intensity</td>
</tr>
<tr>
<td>Aspect</td>
<td>Shape, size, surface</td>
</tr>
</tbody>
</table>

**External / internal quality**

The appearance deeply conditions the marketing:
- Size
- Shape
- Colour
- Freshness condition
- Absence of visual defects

Internal quality of fruits and vegetables can normally only be determined by destructive testing.

**Standard techniques for inspection**

**Needs / PRO**
- Rapid process
- "In-field / outdoor conditions
- Reliable, easy, handheld and objective instruments/techniques

**CONS**
- "Analogic" measurements (hand recording on PC)
- Human transcription error possibility
- Low accuracy and precision
- Small sample
- Destructive

**Electronic senses/technologies**

For a better understanding of applied sensors types, it is possible to carry out a comparison with biological senses...

- **Touch**
- Texture, hardness, elasticity
- **Nose**
- Smell, volatile compounds
- **Eye**
- Vision, image analysis, Colour, Spectroscopy, Thermography
- **BioPHOTONICS**

**Electronic Instruments**

**PROS**
- High informative ability
- Multichannel quantitative & qualitative information
- Complex modeling
- No contact non-destructive tests (NDT)
- Fast
- Relationship cost/power in constant decrease due to technological progress speed
- Good discrimination of chemical-physical product characteristics

**CONS**
- Elaborative complexity (data amount, algorithmic)
- Indirect relation with chemical-physical characteristics
- Difficulty in models’ applicability to different agricultural productive systems
- High specialization and difficult standardization of measure

**Digital dynamometers**

Texture is measured for:
- Hardness
- Crunchyness
- Elasticity
- Deformation
- Stress/strain

**Bench equipment**

Portable Tester
Photonics is a field of applied physics, which is derived from optics. It's the science and technology associated with light generation, manipulation, transmission and detection. Field of activity: optics, laser, optoelectronics, imagery and biophotonics.

Photonics with specific reference to applications in biology and earth sciences, including agriculture, agri-environment and food.

Wide margin of application of advanced biophotonics for agri-food and bio-environmental, with poor developed integration between the different technological and biological disciplines.

- Computerized real color image analysis
- Standard colorimetric CIE L*a*b*
- Spectrometry and spectrophotometry VIS-NIR (punctual and imaging)
- Infrared thermography
- X-ray, NMR analysis

Biophotonics at CREA-ING

NON-IMAGING
- Colorimetry (CIELAB), spectrometry (VIS, NIR), infrared thermometry, internal quality assessment
- RGB imaging
- Image enhancement, restitution,
- Morphobiometry, geometric morphometry
- Quantitative image analysis and metrology
- Hyperspectral and/or multispectral imaging
- Visible range, NIR range
- Thermography (thermoimage analysis)

LIGHTENING AN OBJECT, EACH LIGHT ELECTROMAGNETIC BAND IS REFLECTED IN DIFFERENT AMOUNT, DEPENDING ON ITS CHEMICAL COMPOSITION AND SUPERFICIAL CHARACTERISTICS - VARIABLE ALSO IN FUNCTION OF TIME.

Qualitative analysis of reflected light amount from an object for each band (spectrophotometry) is a sophisticated technique that allows the measure of surface chemical-physical variations during time, also minimal.

Colorimetry

Quantitative color evaluation could be extracted using different digital instruments:
- Digital camera associated with colorimetric standards
- Colorimeters
- Spectrophotometers

Standard CIELab colorimetry

- Standard (CIE) color space
- L*a*b* tristimulus color coordinates
- Device independent
- Reliable
- Fast
- Portable
- Data sharing
- High cost
- Knowledge training
Developing of a colorimetric calibration algorithm (3D Thin-Plate Spline)


Non standard color space
Red Green Blue color coordinates
Many devices
Fast
Portable
Data sharing
Low cost

Device dependent
Low reliability

Developing of a colorimetric calibration algorithm (3D Thin-Plate Spline)

Spectral based
Visible and Near Infrared
Acidity and sugar content
Fast
Data sharing
Need modeling

High cost
Knowledge training

Commercial equipment

Analysis system of internal quality of the fruit through the spectral reflectance

SACMI

UNITEC

160 €

Trends in spectral systems

VS-NIR portable spectrometer (Hamamatsu)

10000 €

Finger-tip size, ultra-compact, low cost, VIS spectrometer head
Integrating MEMS and image sensor technologies

Rome, 12-14 October 2016

Imaging

not only visible images, but also concerned to different electromagnetic bands
Methodology of quantitative-qualitative image analysis
Similarity to visual sense evaluation of human eyes, representing the most developed sense and over 70% of information reaching brain
Process carried out by digital computer science elaboration
Images acquired by opto-electronic technology systems

Optical measures through image analysis and artificial Vision

Finger-tip size, ultra-compact, low cost, VIS spectrometer head
Integrating MEMS and image sensor technologies

Rome, 12-14 October 2016
On the market

Postharvest plant

lab

Where to measure?

What to measure?

basic morphometric parameters

Why to analyse shape?

Shape is a perceptive component that could be used to discriminate between objects; it has a relevant meaning either in systematic knowledges than in adimensional classification (i.e. traditional experiences).

Genotypes (Species, populations, hybrids)

production (climate, soil, environmental) conditions

Quality (defect, damage, asymmetry)

shape of agroproducts are linked to:

Patented procedure for automated shape analysis of agricultural products

digital image

Elaboration and segmentation

Morphometry on profile by EFA

Object profile extraction from image

Data set of shape parameters

Classification shape based multivariate modeling

Surface defects detection

Optical multisensor bench to monitor fruit and vegetables quality

Opto-electrical multi sensor grain-coulter prototype, with a low cost open source Arduino feedback control, for multi-qualitative selection (shape, size, color, defects, damage) of agri-food products (e.g., Rice).

Rome, 12-14 October 2016

Up to 60 different quality characteristics for single measurement

Power supply

and separator kernels

Touch screen for monitoring the selection system with Matlab graphical interface

Video Camera Manta G504-c Sony

Conveyor belt

Blowing nozzles for qualitative separation kernels controlled in feedback with Arduino

Encoder checked with Arduino

Opto-mechanical multi-sensor grain-coulter prototype, with a low cost open source Arduino feedback control, for multi-qualitative selection (shape, size, color, defects, damage) of agri-food products (e.g., Rice).
**Combined multioptical system**

- Imaging spectrometer
- CCD camera
- Light source
- Samples

**Printing on food**

- Direct printing on agricultural raw products and/or food processed
  - **why?**
    - No label in foreign material interposition (reduce packaging waste)
    - Natural product appealing
    - New direct message to consumer
    - Product promotion / new marketing
  - **what message?**
    - Product / production information
    - Direct/indirect promotion/advertising
    - Health, cultural and social information
  - **how print?**
    - Edible inks

**Printing on food - technical aspects**

- **Printing**
  - System availability
  - Inkjet food printers
  - Online machines, rapidity, adaptability to selection lines and to product shape and size variation
  - Food inks
  - Stability, color, safety, organic or natural, printing type
  - Small codes, figures, labels, monochromatic/color, phrases or alphanumeric information
  - In the next future chromogenic edible inks??

- **Medium**
  - Consumer impact and acceptance
  - Cultural and economics
  - Costs VS benefits

**Infotracing**

Collection of all product digital information along the whole supply-chain

- Cloud/web data and their accessibility through smart system (augmented reality)
- QR-code
- RFID talking labels

Infotracing is the procedure that integrates information related to the quality of the product along the supply-chain with those linked to traceability within a web platform.

**Printing on food: examples**

- Production and quality information
  - Production/expiry date
  - (Edible) barcode
  - Quality characteristics
  - Production origin
  - Producer website
  - Health info
- Tracking & Tracing
- QR codes (link to digital)

**Thank you for your attention**

paolo.menesatti@crea.gov.it
FINAL DISCUSSION AND CONCLUSION

The discussions have been very fruitful and have raised a series of new challenges that Inspection Services of participating countries are facing. In particular, the lack of clear policies and regulations on how to address growing internet sales of fruit and vegetables, and the need to agree and harmonise tolerances use and interpretation amongst participating countries.

Mr. Jan van de Wijnboom from the Netherlands took the floor and thanked Italy on behalf of all delegates for their hospitality and the excellent organisation of the meeting. Mr Antonio Fallacara (Italy) thanked all delegates for their participation at the meeting. He noted that the success of the meeting was in large part due to the quality of the various presentations and the interventions and discussions led by highly experienced and skilled delegates. He thanked Carla Magarotto from Agecontrol for her collaboration and all the Italian colleagues who made possible the meeting.

Proposal of the Heads of National Inspection Services to the 2016 Plenary Meeting:

- The role of the OECD in internet sales of fruit and vegetables should be:
  a) to work on "operating rules" for internet sales.
  b) to encourage harmonisation amongst participating countries.

- The role of the OECD on tolerances:

OECD already has a Sub-working Group on tolerances. Discussions should continue in order to enable participating countries to reach an agreement that facilitates common understanding on the application and use of tolerances.
ANNEX I
SOME PHOTOS OF THE EVENT

Figure 1. St. Peter’s Basilica above the skyline in Rome
Figure 2. Delegates at the Ministry of Agricultural, Food and Forestry Policies, Rome
Figure 3. Delegates discussing kiwifruit quality in the orchard, APOFRUIT LAZIO, Aprilia

Figure 4. Overview of the kiwifruit orchard, APOFRUIT LAZIO, Aprilia
Figure 5. Guided tour of APOFRUIT LAZIO facilities, Aprilia

Figure 6. Delegates inspecting APOFRUIT LAZIO facilities, Aprilia
Figure 7. Inspection material, APOFRUIT LAZIO facilities, Aprilia

Figure 8. Refractometer
Figure 9. Quirinal Palace, Rome
### ANNEX II

**DRAFT AGENDA**

**17TH OECD MEETING OF HEADS OF NATIONAL INSPECTION SERVICES**

**12-14 October 2016**

*Venue of the meeting: Ministry of Agricultural, Food and Forestry Policies, Rome, Italy*

#### WORKING GROUP MEETINGS

**WEDNESDAY 12 OCTOBER 9:00 - 12:30**

<table>
<thead>
<tr>
<th>Order</th>
<th>Time</th>
<th>Description</th>
<th>Documents</th>
</tr>
</thead>
</table>
| 1     | 9:00 - 12:30 | **Working Group Meeting on Leeks and Tomatoes**  
Discussion on Leeks Brochure - Rapporteur: Germany  
Discussion on Tomatoes Brochure - Rapporteur: Netherlands |           |

#### MEETING OF HEADS OF NATIONAL INSPECTION SERVICES

**WEDNESDAY 12 OCTOBER 2016, 14:00 - 18:00**

<table>
<thead>
<tr>
<th>Order</th>
<th>Time</th>
<th>Description</th>
<th>Documents</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>13:30</td>
<td><strong>Registration and welcome coffee</strong></td>
<td></td>
</tr>
</tbody>
</table>
| 3     | 14:00| **Opening of the Meeting**  
By the Director General for international and European policies, Italian Ministry of Agricultural, Food and Forestry Policies |           |
| 4     | 14:10| **OECD Secretariat**  
Opening statement by the Secretariat                                          |           |
| 5     | 14:20| **Presentations of other international organisations**  
Presentation by Codex Alimentarius Commission |           |
| 6     | 14:50| **Characteristics of the Italian Fresh Fruit and Vegetables Sector**  
Presentation by the Ministry of Agricultural, Food and Forestry Policies |           |
| 7     | 15:30| **Overview of the New Zealand kiwifruit industry**  
Presentation by New Zealand (Zespri) |           |
<table>
<thead>
<tr>
<th>Order</th>
<th>Time</th>
<th>Description</th>
<th>Documents</th>
</tr>
</thead>
<tbody>
<tr>
<td>16:00</td>
<td>Coffee Break</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>16:15</td>
<td><strong>Fresh Fruit and Vegetables Control System in Italy</strong>&lt;br&gt;Presentation by Agecontrol spa</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>16:45</td>
<td><strong>Activities of Agricultural and Food Quality Inspection on the Italian Fresh Fruit and Vegetables Sector</strong>&lt;br&gt;Two presentations by Agecontrol spa</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>17:15</td>
<td><strong>Romanian Fruit and Vegetables Inspection System</strong>&lt;br&gt;Presentation by Romania</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>18:00</td>
<td><strong>End of Session</strong></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>20:00</td>
<td><strong>Welcome Dinner</strong>&lt;br&gt;The welcome dinner was hosted by the Italian National Designated Authority.</td>
<td></td>
</tr>
</tbody>
</table>

**TECHNICAL VISIT**<br>**THURSDAY 13 OCTOBER 2016, 9:00-17:00**

<table>
<thead>
<tr>
<th>Order</th>
<th>Time</th>
<th>Description</th>
<th>Documents</th>
</tr>
</thead>
</table>
| 13    | 9:00  - 17:00 | **Technical Visit and lunch (theme: Kiwi)**<br>APOFRUIT LAZIO, Aprilia (LT)<br>  
  - Visit of a kiwi orchard  
  - Lunch hosted at Apofruit production facilities  
  - Presentation by Apofruit of their organisation  
  - Visit of Apofruit production facilities |           |
### CHALLENGES FOR INSPECTION SERVICES
**FRIDAY 14 OCTOBER 2016, 9:00 - 12:30**

<table>
<thead>
<tr>
<th>Order</th>
<th>Time</th>
<th>Description</th>
<th>Documents</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>9:00</td>
<td><strong>Traceability</strong>&lt;br&gt;Presentation by GS1</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>10:00</td>
<td><strong>National and International Management of Food Following a Nuclear Accident: A NEA Framework Proposal</strong>&lt;br&gt;Presentation by the OECD Nuclear Energy Agency (NEA) of a framework for managing post-accident food.&lt;br&gt;The framework covers all aspects from production on contaminated land, to its consumption by people living in contaminated zones, to its consumption by people living in non-contaminated areas of the accident country, to export from the accident country, and to import by non-accident countries.</td>
<td></td>
</tr>
<tr>
<td>16a</td>
<td>11:20</td>
<td><strong>Tolerances</strong>&lt;br&gt;Presentation by the Netherlands&lt;br&gt;Presentation by the US</td>
<td></td>
</tr>
<tr>
<td>16b</td>
<td></td>
<td><strong>Risk based inspection Methodologies</strong>&lt;br&gt;Presentation by the Netherlands</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>12:30</td>
<td><strong>Lunch Break</strong></td>
<td></td>
</tr>
</tbody>
</table>

### CHALLENGES FOR INSPECTION SERVICES
**FRIDAY 14 OCTOBER 2016, 14:00 - 17:30**

<table>
<thead>
<tr>
<th>Order</th>
<th>Time</th>
<th>Description</th>
<th>Documents</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>14:00</td>
<td><strong>Conformity Checks for Internet Sales (Distance selling)</strong>&lt;br&gt;Presentation by the UK</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>14:45</td>
<td><strong>Optoelectronics / Biophotonics for Quality of Fruit and Vegetables</strong></td>
<td></td>
</tr>
<tr>
<td>Order</td>
<td>Time</td>
<td>Description</td>
<td>Documents</td>
</tr>
<tr>
<td>-------</td>
<td>-------</td>
<td>--------------------------------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Presentation by Italy (CRA-ING)</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>15:30</td>
<td><strong>Discussion on Tomatoes Brochure</strong> <em>(followed)</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rapporteur: Netherlands</td>
<td></td>
</tr>
<tr>
<td></td>
<td>16:00</td>
<td><strong>Coffee Break</strong></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>16:20</td>
<td><strong>Phytosanitary Inspections in New Zealand</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Presentation by New Zealand</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>17:00</td>
<td><strong>Final Discussion and Conclusions</strong></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>17:30</td>
<td><strong>Close of Session</strong></td>
<td></td>
</tr>
</tbody>
</table>
### Final List of Participants

<table>
<thead>
<tr>
<th>Country</th>
<th>Name</th>
<th>Position</th>
<th>Address</th>
<th>Phone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria/Aturiche</td>
<td>Mr. Martin GINDL</td>
<td>Coordinator</td>
<td>Stubenring 1, A-1010 Vienna, Austria</td>
<td>+43 1 71100 602782</td>
<td><a href="mailto:martin.gindl@bmlfuw.gv.at">martin.gindl@bmlfuw.gv.at</a></td>
</tr>
<tr>
<td></td>
<td>Mr. Günter JESSL</td>
<td>Coordinator</td>
<td>Stubenring 1, A-1010 Vienna, Austria</td>
<td>+43 1 71100 602745</td>
<td><a href="mailto:guenter.jessl@bmlfuw.gv.at">guenter.jessl@bmlfuw.gv.at</a></td>
</tr>
<tr>
<td>Finland/Finlande</td>
<td>Ms. Kristiina ALA-FOSSI-AALTO</td>
<td>Head of Section</td>
<td>P.O. Box 512, FI-00101, Finland</td>
<td>+358.40.332.3211</td>
<td><a href="mailto:kristiina.ala-fossi-alto@tulli.fi">kristiina.ala-fossi-alto@tulli.fi</a></td>
</tr>
</tbody>
</table>
**Finland/Finlande**  
(Continued)  
Ms. Niina MATILAINEN  
Senior Inspector  
Control Department  
Finnish Food Safety Authority Evira  
Product Safety Unit  
Mustialankatu 3  
FI - 00790 Helsinki  
Finland  
Tel: +358.400.706.173  
Fax: +358.000.000.000  
Email: niina.matilainen@evira.fi

**France**  
Mme Emilie MAIRE  
Inspecteur  
Ministère de l'Économie et des finances (DGCCRF)  
59, Boulevard Vincent Auriol  
75013 Paris  
France  
Tel: +33144972854  
Email: emilie.maire@dgccrf.finances.gouv.fr

**Germany/Allemagne**  
Dr. Ulrike BICKELMANN  
Head of Unit 223  
Bundesanstalt für Landwirtschaft und Ernährung  
Deichmanns Aue 29  
53179 Bonn  
Germany  
Tel: +49-228-6845-3357  
Fax: 49-228-6845-3945  
Email: ulrike.bickelmann@ble.de

**Italy/Italie**  
Dr. Felice ASSENZA  
Ministry of Agricultural, Food and Forestry Policies  
Dipartimento delle Politiche Europee e Internazionali e dello Sviluppo Rurale  
Direzione Generale delle Politiche Internazionali e dell’UE  
General Director  
Via XX Settembre 20  
00187 Rome  
Italy  
Tel: +390646654048  
Email: f.assenza@politicheagricole.it
Italy/Italie

(Continued)

Dr. Eleonora IACOVONI
Ministry of Agricultural, Food and Forestry Policies
Dipartimento delle Politiche Europee e Internazionali e dello Sviluppo Rurale
Direzione Generale delle Politiche Internazionali e dell’UE
Ufficio PIUE V fruit and vegetables– Head office
Via XX Settembre 20
00187 Rome
Italy
Tel: +390646652467
Email: e.iacovoni@politicheagricole.it

Dr. Antonio FALLACARA
Ministry of Agricultural, Food and Forestry Policies
Dipartimento delle Politiche Europee e Internazionali e dello Sviluppo Rurale
Direzione Generale delle Politiche Internazionali e dell’UE
Ufficio PIUE V fruit and vegetables - Officer
Via XX Settembre 20
00187 Rome
Italy
Tel: +390646654004
Email: a.fallacara@mpaaf.gov.it

Dr. Carla MAGAROTTO
National Expert
AgeControl S.P.A
Inspection Service Managing And Support
Via Morgagni 10H
00166 Rome
Italy
Tel: +39.348.39.09.278
Fax: +39(06) 3989 4325
Email: carla.magarotto@agecontrol.it

Dr. Roberto CHERUBINI
Ministry of Agricultural, Food and Forestry Policies
Dipartimento delle Politiche Europee e Internazionali e dello Sviluppo Rurale
Direzione Generale delle Politiche Internazionali e dell’UE
Ufficio PIUE V fruit and vegetables - Officer Coordinator
Via XX Settembre 20
00187 Rome
Italy
Tel: +390646654013
Email: r.cherubini@politicheagricole.it
Italy/Italie

(Continued)

Dr. Pellegrino DE IESO
Ministry of Agricultural, Food and Forestry Policies
Dipartimento delle Politiche Europee e Internazionali e dello Sviluppo Rurale
Direzione Generale delle Politiche Internazionali e dell’UE
Ufficio PIUE V fruit and vegetables – Officer
Via XX Settembre 20
00187 Rome
Italy

Tel: +390646654110
Email: p.deieso@politicheagricole.it

Dr. Ciro IMPAGNATIELLO
Ministry of Agricultural, Food and Forestry Policies
Dipartimento delle Politiche Europee e Internazionali e dello Sviluppo Rurale
Direzione Generale delle Politiche Internazionali e dell’UE
Ufficio PIUE II – Rapporti internazionali e con il CSA
Via XX Settembre 20
00187 Rome
Italy

Tel: +390646654058
Email: c.impagnatiello@politicheagricole.it

Dr. Paolo MENESATTI
CRA-ING Director
Unità di Ricerca per l’ingegneria agraria
Consiglio per la ricerca in agricoltura e l’analisi dell’economia agraria
Via della Pascolare 16
00015 Monterotondo Scalo (Roma)
Italy

Tel: +39.0690675 243
Fax: +39.0690625591
Email: paolo.menesatti@entecra.it

Kenya

Mr. Josiah SYANDA
Officer in charge
Plant Inspection Unit - JKIA
Kenya Plant Health Inspectorate Service (KEPHIS)
P.O. Box 49592
00100 Nairobi
Kenya

Tel: +254 724 567 873
Email: jsyanda@kephis.org
Netherlands/Pays-Bas

Mr. Jean CROMBACH
Technical Director
KCB (Kwaliteits-Controle-Bureau)
Kwaliteits-Controle-Bureau (KCB)
P.O. Box 420
2700 AK Zoetermeer
Netherlands

Tel: +31 88 308 82 20
Fax: +31 70 30 88001
Email: j.crombach@kcb.nl

Mr. Fred JACOBS
Specialist Quality affairs
Quality Inspection Bureau (KCB)
P.O Box 420
2700 AK Zoetermeer
Netherlands

Tel: +31 651 421 229
Fax: +31 70 308 8001
Email: f.jacobs@kcb.nl

Mr. Jan VAN DE WIJNBOOM
Senior Policy Officer
European Agricultural and Fisheries Policy and Food Security Department
Ministry of Economic Affairs
P.O. Box 20401
Bezuiden Houtseweg 732594 AC Den Haag
2500 EK 2500 EK Den Haag
Netherlands

Tel: +31 (70) 378 46 42
Fax: +31 (70) 378 61 23
Email: j.a.f.vandewijnboom@minez.nl

New Zealand/Nouvelle-Zélande

Ms. Karen SPARROW
Plant Export Manager
Plants, Food and Environment Directorate
Ministry for Primary Industries
Regulation and Assurance Branch
Pastoral House 25 The Terrace
P.O. Box 2526
Wellington 6011
New Zealand

Tel: +64 4 894 0510
Fax: +64 4 894 0662
Email: Karen.Sparrow@mpi.govt.nz
New Zealand/ Nouvelle-Zélande

(Continued)

Ms. Catherine RICHARDSON
Market and Quality Assurance Manager
Zespri International Ltd
Box 4043
New Zealand
Mt Maunganui, 3149
New Zealand

Tel: +64 27 540 0036
Email: catherine.richardson@zespri.com

Poland/Pologne

Ms. Dorota BALINSKA-HAJDUK
Head of Agricultural and Food Quality Control Department
Agricultural and Food Quality Inspection
Wspolna 30 Str.
00-930 Warsaw
Poland

Tel: +48 22 623 29 13
Fax: +48 22 623 29 96
Email: dbalinska@ijhars.gov.pl

Mr. Dariusz LOMOWSKI
Deputy Director – Trade Inspection Department
Office of Competition and Consumer Protection
Plac Powstancow Warszawy 1
00-950 Warsaw
Poland

Tel: +48 22 55 60 176
Email: Dariusz.Lomowski@uokik.gov.pl

Romania/Roumanie

Mr. Dumitru ALEXANDRU
Senior Counsellor
Ministry of Agriculture and Rural Development
Bdul Carol I, Nr 2-4, Sect. 3, Codul Postal 020921, o.p. 37
Bucharest
Romania

Tel: +40.21.3072.340
Email: dumitru.alexandru@madr.ro

Slovak Republic/ République slovaque

Dr. Viera BARICICOVA
Senior Adviser
crop production
Ministry of Agriculture and Rural Development
Dobrovicova 12
812 66 Bratislava
Slovak Republic

Tel: +421 2 59 266 342
Email: viera.baricicova@land.gov.sk
Slovak Republic/République slovaque
(Continued)
Ms. Kristína GENDOVA RUZSIKOVA
Senior Adviser
Foreign Coordination Department
Ministry of Agriculture and Rural Development of the Slovak Republic
Dobrovicová 12
812 66 Bratislava
Slovak Republic
Tel: +421 2 59 266 276
Fax: +421 2 52963 602
Email: kristina.gendova@land.gov.sk

South Africa/Afrique du Sud
Mr. Vijan CHETTY
General Manager: Coastal Region
Perishable Products Export Control Board (South Africa)
45 Silwerboom Avenue
Plattekloof
7506 Cape Town
South Africa
Tel: +27 21 930 11 34
Email: vijanc@ppecb.com

South Africa/Afrique du Sud
Mr. Cyril JULIUS
Chief Operations Officer
Perishable Products Export Control Board (PPECB)
45 Silwerboom Avenue
Plattekloof
7506 Cape Town
South Africa
Tel: +27 21 930 11 34
Email: cyril@ppecb.com

Spain/Espagne
Ms. Maria DE ARMAS
Head of Service of Technical Assistance
Deputy Directorate General of Inspection, Certification and Technical Assistance for Foreign Trade
Ministry of Economic Affairs and Competitiveness
Paseo de la Castellana 162
Madrid
Spain
Tel: +91 3497285
Email: marmas@comercio.mineco.es

Switzerland/Suisse
Ms. Petra SIEGHART
Head Dept. Food Safety
Qualiservice GmbH
Belpstrasse 26, Postfach 7960
3001 Berne
Switzerland
Tel: +41-31-385-36-91
Fax: +41-31-385-36-99
Email: petra.sieghart@qualiservice.ch
Turkey/Turquie

Mr. Zafer SOYLU
Deputy Director Inspection
Ministry of Economy
T.C. Ekonomi Bakanlıgı Söğütözü Mah. 2176. Sk. No:63 06530
Çankaya/Ankara
Turkey

Tel: +903122047500
Email: soyluz@ekonomi.gov.tr

EU/UE

Mr. Rudy VAN DER STAPPEN
Deputy Head of Unit
European Union
Rue de la Loi
B-1049 Brussels
Belgium

Tel: +32 2 2954509
Fax: +32 2 2959306
Email: Rudy.Van-Der-Stappen@ec.europa.eu

Observer Countries

Brazil/Brésil

Mr. Fernando Augusto Pereira MENDES
International Agriculture Surveillance Coordinator
Sanitary Inspection on Agriculture and Livestock
Ministry of Agriculture Livestock and Food Supply
Setor Administrativo Federal Sul, Bloco "D", Anexo do MAPA, Sala 424-B
Brasilia/DF, 70.043-900
Brazil

Tel: +55 061 3218 2829
Email: fernando.mendes@agricultura.gov.br

Ms. Fatima CHIEPPE PARIZZI
Coordenadora Geral de Qualidade Vegetal – CGQV
Departamento de Inspeção de Produtos de Origem Vegetal - DIPOV
Ministry of Agriculture Livestock and Food Supply
Secretaria de Defesa Agropecuária - SDA
Setor Administrativo Federal Sul, Bloco "D", Anexo do MAPA, Sala 338
Brasilia/DF, 70.043-900
Brazil

Tel: +55 61 3218 3249
Fax: +55 61 3224 4322
Email: fatima.parizzi@agricultura.gov.br
Estonia/Estonie
Ms. Saima EVENDI
Head of Horticultural Bureau
Estonian Agricultural Board
Teaduse 2 str.
75501 Saku
Estonia

Tel: +372 525 2274
Email: saima.evendi@pma.agri.ee

Namibia/Namibie
Mr. Titus NUUYOMA
Manager: Horticultural and Agronomic Inspectorate
Agro Marketing and Trade Agency (AMTA)
P.Box 350
Windhoek
Namibia

Tel: +264 61 2023319
Email: nuuyomat@amta.na

Paraguay
Ms. Rossana Katherine CENTURION BEDOYA
Phytosanitary Certification Department
Servicio Nacional de Calidad y Sanidad Vegetal y de Semillas (SENAVE)
Yegros y Herrera - Edificio Inter Express Piso 18
Paraguay

Tel: +595 21 450 954
Email: rossana.centurion@senave.gov.py

Mr. Alfredo GRYCIUK ALMEIDA
President
Servicio Nacional de Calidad y Sanidad Vegetal y de Semillas (SENAVE)
Humaita 145 casi Nuestra Senora de la Asuncion
1229
Paraguay

Tel: +595 21 498 872
Email: alfredog@senave.gov.py

United Kingdom/Royaume-Uni
Mr. Ian HEWETT
Market Measures Trade Manager
Inspectorate
HMI - Rural Payments Agency
RPA, Office SCF3, South Core, Produce Hall, Western International Market
Hayes Road
UB2 5XJ Southall
United Kingdom

Tel: +44 208 561 39 45
Email: ian.c.hewett@rpa.gsi.gov.uk
United States/États-Unis
Mr. Dorian. A. LAFOND
International Standards Coordinator
USDA / AMS / Fruit and Vegetable Programs
Stop 0247, 1400 Independence Ave. SW
20250-0247 Washington DC
United States
Tel: +1 202 690 4944
Fax: +1.202.720.00.16
Email: dorian.lafond@ams.usda.gov

Observer Organizations

<table>
<thead>
<tr>
<th>Business and Industry Advisory Committee (BIAC)/Comité consultatif économique et industriel (BIAC)</th>
<th>Ms. Diane TAILLARD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Director Consumer Safety &amp; Traceability Safety and Traceability GS1 Blue Tower Avenue Louise 326 1050 Brussels Belgium</td>
<td>Tel: +32 (2) 788 78 39 Email: <a href="mailto:diane.taillard@gs1.org">diane.taillard@gs1.org</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Food Standards Officer Joint FAO/WHO Food Standards Programme Viale delle Terme di Caracalla Rome Italy</td>
<td>Tel: +39 06570 53218 Email: <a href="mailto:Lingping.zhang@fao.org">Lingping.zhang@fao.org</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Codex Alimentarius Commission (International Food Standards) (FAO/WHO)/Codex Alimentarius Commission (Normes alimentaires internationales) (FAO/OMC)</th>
<th>Mr. Patrick SEKITOLEKO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food Standards Officer AGRICULTURE Joint FAO/WHO Food Standards Programme Viale delle Terme di Caracalla C264 00152 Rome Italy</td>
<td>Tel: +39 06570 56626 Email: <a href="mailto:patrick.sekitoleko@fao.org">patrick.sekitoleko@fao.org</a></td>
</tr>
</tbody>
</table>
### OECD Secretariat

| OECD/OCDE | Mr. Jose BRAMBILA-MACIAS  
Programme Manager  
TAD/COD  
OECD  
Marshall Building 5063  
2 rue André-Pascal  
75016 Paris  
France  
Tel: +(33-1) 45 24 15 40  
Email: Jose.BRAMBILA-MACIAS@oecd.org |
|---|---|
| | Mr. Edward LAZO  
Principal Administrator  
NEA/RAD  
OECD  
OECD (BOULOGNE) 5254  
2 rue André-Pascal  
75016 Paris  
France  
Tel: +(33-1) 45 24 10 42  
Fax: + 33 1 45 24 11 45  
Email: Edward.LAZO@oecd.org |
| | Mme Marie RUSSEL  
Senior Programme Officer  
TAD/COD  
OECD  
Marshall Building 5063  
2 rue André-Pascal  
75016 Paris  
France  
Tel: +(33-1) 45 24 85 09  
Email: Marie.RUSSEL@oecd.org |
| Other/Autre | Ms. Roberta BRUZZECHESSE  
37 rue Raspail  
92300 Levallois Perret  
Tel: +33 6 78 12 50 27  
Email: hello@robertabruzzechesse.com |
| | M. Emiliano PAPPACENA  
16 rue Dugommier  
75012 Paris  
France  
Tel: +33658256856  
Email: emiliano.pappacena@gmail.com |