

ECE/TRADE/C/WP.7/GE.1/2009/INF.6

Specialized Section on Standardization of Fresh Fruit and Vegetables

Fifty-fifth session

Geneva, 4 - 8 May 2009

Items 3 and 4(a) of the provisional agenda

REVISION OF UNECE STANDARDS

Citrus Fruit

This document, summarized by Israel, presents proposals collected from countries on how to update the standard.

NOTE BY THE SECRETARIAT:

The text is based on document TRADE/WP.7/GE.1/2004/25/Add.7.

UNECE STANDARD FFV-14
concerning the marketing and commercial
quality control of

CITRUS FRUIT

(Note by the Delegation of Israel)

At the fifty-fourth session of the specialized section meeting on standardization of fresh fruit and vegetables, Geneva, May 2008, the delegation of Israel was asked to collect and put together, in a working document, the OECD Working Group and countries' suggestions on reviewing the UN/ECE Standard for Citrus fruit.

Proposals for amendments were received from:

- Cuba
- Dominica, Commonwealth of
- France
- Iran
- Israel
- OECD Working Group
- South Africa
- Spain
- United Kingdom
- The United States of America

In addition, the Reportuer has added two proposals for amendments.

Some proposals were received for amendments to the 'standard layout' text. These have been forwarded to the secretariat.

The following document presents proposals for amendments. The following conventions have been used:

Country Name	Proposals appear in grey boxes, as close to the proposed point of amendment.	<u>Red, underlined – text to be added</u> Grey, crossed out – text to be deleted <i>Italics – explanatory commentary</i>
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I. DEFINITION OF PRODUCE¹

This standard applies to the following fruit, classified as “citrus fruit”, to be supplied fresh to the consumer, citrus fruit for industrial processing being excluded:

- lemons of varieties (cultivars) grown from the species *Citrus limon* (L.) Burm. f.
- limes of varieties (cultivars) grown from the species *Citrus latifolia* (Yu. Tanaka) Tanaka which is a large fruited acid lime known also as Bearss, Persian, Tahiti and its hybrids.

Iran	limes of varieties (cultivars) grown from the species <i>Citrus latifolia</i> (Yu. Tanaka) Tanaka which is a large fruited acid lime known also as Bearss, Persian, Tahiti and its hybrids, <u><i>Citrus limettioides</i> Tanaka(Sweet lime)</u> , <u><i>Caurantifolia</i>(Christm.) Swingle (Key lime)</u> .	<i>Iran recommends increasing more produce of Citrus Fruit to the list... Sweet lime and Mexican (Key) lime...</i>
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- mandarins (*Citrus reticulata* Blanco), including satsumas (*Citrus unshiu* Marcow.), clementines (*Citrus clementina* hort. ex Tanaka), common mandarins (*Citrus deliciosa* Ten.) and tangerines (*Citrus tangerina* hort. ex Tanaka) grown from these species and its hybrids.
- oranges of varieties (cultivars) grown from the species *Citrus sinensis* (L.) Osbeck

Iran	oranges of varieties (cultivars) grown from the species <i>Citrus sinensis</i> (L.) Osbeck, <u><i>citrus auran tinum</i> L.(Sour orange)</u> .	<i>Iran recommends increasing more produce of Citrus Fruit to the list... sour orange</i>
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- grapefruit of the varieties (cultivars) grown from the species *Citrus paradisi* Macfad. and its hybrids.
- pummelos or Shaddock of varieties (cultivars) grown from the species *Citrus maxima* (Burm.) Merr. and their hybrids.

¹ Information on botanical names taken from the GRIN database. See www.ars-grin.gov.

II. PROVISIONS CONCERNING QUALITY

The purpose of the standard is to define the quality requirements for **citrus fruit** at the export-control stage after preparation and packaging.

However, if applied at stages following export, products may show in relation to the requirements of the standard:

- a slight lack of freshness and turgidity
- for products graded in classes other than the “Extra” Class, a slight deterioration due to their development and their tendency to perish.

The holder/seller of products may not display such products or offer them for sale, or deliver or market them in any manner other than in conformity with this standard. The holder shall be responsible for observing such conformity.

A. Minimum requirements

In all classes, subject to the special provisions for each class and the tolerances allowed, the citrus fruit must be:

- intact
- free of bruising and/or extensive healed over cuts
- sound; produce affected by rotting or deterioration such as to make it unfit for consumption is excluded
- clean, practically free of any visible foreign matter
- practically free from pests
- free from damage caused by pests affecting the flesh
- free of signs of internal shrivelling
- free of damage caused by low temperature or frost
- free of abnormal external moisture
- free of any foreign smell and/or taste.

OECD Working Group	<ul style="list-style-type: none"> - practically free of bruising and/or extensive healed over cuts - free of signs of internal and external shrivelling 	
South Africa	<p>practically free from damage caused by pests affecting the flesh</p>	<p><i>In the case of the Republic of South Africa new version will negatively affect all major fruit types exported to European market. South Africa has very stringent legislation pertaining to quality and phytosanitary standards that governs the export of fruit all over the world including Europe. All though every care is taken that fruit comply in all aspects to requirements of the importing countries it is virtually impossible to export citrus fruit without having a tolerance for damage to the flesh caused by organisms. Although thorough examination of the fruit takes place before export, in many cases the puncture wounds made by the organisms, for example Mediterranean fruit fly, are not detected during packing and inspection at the export stage as it is not visible. Some of these wounds or entry points only manifests later in the supply chain.</i></p> <p><i>Against the above background South Africa requests that this change that was brought about by the adoption of the standard layout for UNECE standards be placed on the agenda of the UNECE Specialised Section (G.E.1) meeting that is scheduled for May 2009.</i></p>

The citrus fruit must have been carefully picked and have reached an appropriate degree of development and ripeness account being taken of criteria proper to the variety, the time of picking

and the growing area.

OECD Working Group	The citrus fruit must have been carefully picked and have reached an appropriate degree of development and ripeness account being taken of criteria proper to the variety, the time of picking and the growing area.
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The development and condition of the citrus fruit must be such as to enable them:

- to withstand transport and handling, and
- to arrive in satisfactory condition at the place of destination.

Citrus fruit meeting this ripeness requirement may be “degreened”. This treatment is permitted only if the other natural organoleptic characteristics are not modified.

United Kingdom	Citrus fruit meeting this ripeness requirement may be “degreened”. This treatment is permitted only if the other natural organoleptic characteristics are not modified <u>and the skin finish is not affected.</u>
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B. Maturity requirements

Maturity of citrus fruit is defined by the following parameters specified for each species below:²

1. minimum juice content
2. minimum total soluble solids content (TSS), i.e. minimum sugar content
3. colouring.

Cuba	(Footnote ²) Reservation of Israel: The parameter of sugar/acid ratio should be included in the standard	<i>Some studies of Bioclimatology were conducted by the Interamerican Citrus Network (IACNET-FAO) in commercial plantations of 'Valencia' orange in several countries during 5 years. Its indicated that the maturity index o ratio varies in the same cultivar from one region to the other and even in the same country, due fundamentally to the variations of the Total soluble Solids (TSS). More work is still necessary to determine maturity criteria other than juice content, and their respective values for varieties and region of production.</i>
Israel	4. minimum sugar:acid ratio (TSS: TA) (Total soluble solids: Titratable Acid)	<i>Delete footnote 2 "Reservation of Israel..."</i>
Spain	1. minimum juice content 2. minimum total soluble solids content (TSS), i.e. minimum sugar content 3. colouring. <u>4. minimum maturity index, calculated as the Soluble solids content/Titratable acidity ratio (SSC/TA). The SSC expressed as °Brix and the TA expressed as grams of citric acid per 100 ml of juice.</u>	<i>We propose to include the following objective maturity parameter: a minimum sugar/acid ratio (Soluble solid content/Titrable acidity) for oranges and mandarins. The proposed figures are based on the producing and marketing experience and also on a piece of research on sensory acceptance of citrus fruit carried out in Spain.</i>

The degree of colouring shall be such that, following normal development the citrus fruit reach the colour typical of the variety at their destination point.

Lemons

Minimum juice content	
Verdelli and Primofiore lemons	20%
Other lemons	25%
Colouring	
Must be typical of the variety. However fruit with a green (but not dark green) colour are allowed provided they satisfy the minimum requirements as to juice content.	

France	Minimum juice content	<i>The minimal content in juice of lemons should be to unify in 20 %</i>
	20%	
Spain		<i>For lemons, we propose to unify the minimum content of juice for all the commercial types in 20 %. For some varieties and at particular moments during the campaign, it</i>

² Reservation of Israel: The parameter of sugar/acid ratio should be included in the standard

	Minimum juice content	<i>is difficult to reach the established 25 %.</i>
	20%	

Limes

Minimum juice content
42%
Colouring
Must be typical of the variety on at least two-thirds of the total fruit surface. The fruit should be green but may show discolouring (yellow patches) up to 30% of its surface.

Satsumas, clementines, other mandarin varieties and their hybrids

Minimum juice content	
Satsumas, other mandarin varieties and their hybrids	33%
Clementines	40%
Colouring	
Must be typical of the variety on at least one-third of the surface of the fruit.	

Israel	Minimum sugar:acid ratio (TSS: TA)	
		<u>6.5</u>
Spain	Minimum maturity index (SSC/TA)	
	<u>Satsumas</u>	<u>6.5</u>
	<u>Clementines</u>	<u>7</u>
	<u>Other mandarins and their hybrids</u>	<u>7.5</u>

Oranges³

Minimum juice content	
Blood oranges	30%
Navels group	33%
Other varieties	35%
Colouring	
Must be typical of the variety. However, fruit with light green colour not exceeding one-fifth of the total surface area of the fruit are allowed, provided they satisfy the minimum requirements as to juice content mentioned above.	
Oranges produced in areas with high temperatures and high relative humidity conditions during the developing period having a green colour exceeding one-fifth of the surface area of the fruit are allowed provided they satisfy the minimum requirements as to juice content mentioned below.	
Minimum juice content	

³ Reservation of Israel: A minimum sugar/acid ratio of 6.0:1 for oranges and 5.5:1 for pigmented oranges should be included in the standard.

Mosambi, Sathgudi and Pacitan	33%
Other varieties	45%

Cuba	(Footnote ³) A minimum sugar/acid ratio of 6.0:1 for oranges and 5.5:1 for pigmented oranges should be included in the standard.	<i>Oranges with a minimum ratio of 6.0:1 can have a low TTS and/or a high acidity. The UNECE Citrus Standard will govern the trade of an important region of the world, the use of this maturity ratio in orange, could favor the entrance of immature fruit to this international market. . You can revise to: Davies, F.S. and G.L. Albrigo. 1994. Fruit quality, harvesting and postharvest technology. In Citrus. Great Britain. CAB International (ed).</i>																				
Dominica, Commonwealth of	<i>Our concern lies particularly with the section which speaks to oranges and maturity as it relates to color. The section needs to be reviewed to take into consideration factors related to climatic conditions which may be directly linked to the skin color and maturity; there are varieties of oranges that are completely green when mature such as Valencia and Washington navel. Green skin is not always correlated to maturity. Factors related to maturity should be based on the Brix.</i>																					
Iran	<table border="1"> <tr> <td colspan="2">Minimum juice content</td> </tr> <tr> <td>Blood oranges</td> <td>30%</td> </tr> <tr> <td>Navels group</td> <td>33%</td> </tr> <tr> <td>Other varieties</td> <td>35%</td> </tr> <tr> <td><u>Other varieties with more than one-fifth green color</u></td> <td><u>45%</u></td> </tr> <tr> <td>Minimum sugar content (TSS)</td> <td>7%</td> </tr> </table>	Minimum juice content		Blood oranges	30%	Navels group	33%	Other varieties	35%	<u>Other varieties with more than one-fifth green color</u>	<u>45%</u>	Minimum sugar content (TSS)	7%	<i>Iran suggest the minimum total soluble solids content (TSS) FOR "oranges" based on researches on some varieties in Iran. The minimum total soluble solids content (TSS) :7%</i>								
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Spain	<table border="1"> <tr> <td colspan="2">Minimum juice content</td> </tr> <tr> <td>Mosambi, Sathgudi and Pacitan</td> <td>33%</td> </tr> <tr> <td>Other varieties</td> <td>45%</td> </tr> <tr> <td>Minimum maturity index (SSC/TA)</td> <td>6.5</td> </tr> </table>		Minimum juice content		Mosambi, Sathgudi and Pacitan	33%	Other varieties	45%	Minimum maturity index (SSC/TA)	6.5												
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Reporture	<p>Oranges</p> <p>(a) For Oranges produced in non-tropical climates:</p> <table border="1"> <tr> <td colspan="2">Minimum juice content</td> </tr> <tr> <td>Blood oranges</td> <td>30%</td> </tr> <tr> <td>Navels group</td> <td>33%</td> </tr> <tr> <td>Other varieties</td> <td>35%</td> </tr> <tr> <td colspan="2">Colouring</td> </tr> <tr> <td colspan="2">Must be typical of the variety. However, fruit with light green colour not exceeding one-fifth of the total surface area of the fruit are allowed, provided they satisfy the minimum requirements as to juice content.</td> </tr> </table> <p>(b) For Oranges produced in tropical climates:</p> <table border="1"> <tr> <td colspan="2">Minimum juice content</td> </tr> <tr> <td>Mosambi, Sathgudi and Pacitan</td> <td>33%</td> </tr> <tr> <td>Other varieties</td> <td>45%</td> </tr> <tr> <td colspan="2">Colouring</td> </tr> </table>	Minimum juice content		Blood oranges	30%	Navels group	33%	Other varieties	35%	Colouring		Must be typical of the variety. However, fruit with light green colour not exceeding one-fifth of the total surface area of the fruit are allowed, provided they satisfy the minimum requirements as to juice content.		Minimum juice content		Mosambi, Sathgudi and Pacitan	33%	Other varieties	45%	Colouring		<i>To clarify the differences between "Non-Tropical" Oranges and "Tropical" Oranges (produced in areas with high temperatures and high relative humidity) the reporture proposes to consider separating Oranges into two sub-points.</i>
Minimum juice content																						
Blood oranges	30%																					
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	<p>Must be typical of the variety. Oranges produced in areas with high temperatures and high relative humidity conditions during the developing period having a green colour exceeding one-fifth of the surface area of the fruit are allowed provided they satisfy the minimum requirements as to juice content.</p>	
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Grapefruit and its hybrids

Minimum juice content	
	33%
Minimum sugar content (TSS)	
Oroblanco	9%
Colouring	
Must be typical of the variety. However, fruit with a greenish colour (green in Oroblanco) are allowed, provided they satisfy the minimum requirements as to juice content.	

Cuba	<table border="1"> <tr> <td>Minimum juice content</td> </tr> <tr> <td style="text-align: center;">33% 35%</td> </tr> </table>	Minimum juice content	33% 35%	<p><i>The Minimum juice content should be 35 % harmonized with the Codex Standard for Citrus paradisi Macfad that is the same parameter in the UNECE Citrus Standard (CX/FFV 03/4 July 2003). The juice content is the internal quality indicator that limits the grapefruit harvest; when it is smaller than 35 %, the fruit hasn't reached an appropriate development. For their origin, the fruit is well developed in tropical climate but it requires the water supply during the growth phase with the objective of increasing the juice content. Is a practice to use located irrigation in Cuba.</i></p> <p><i>In our Institute we have many reports about the influence of the meteorological variables variation annual on variables related with the fruit growth of Marsh and Ruby Red grapefruits.</i></p> <p><i>You can revise some international reports by Dr. Manual Agustí, from the Valencia polytechnic University, Spain (Levante Agrícola, Proc. Int. Soc. Citriculture).</i></p>
Minimum juice content				
33% 35%				
Iran	<table border="1"> <tr> <td>Minimum juice content</td> </tr> <tr> <td style="text-align: center;">33% 35%</td> </tr> </table>	Minimum juice content	33% 35%	
Minimum juice content				
33% 35%				

Pummelos (Shaddock) and their hybrids

Minimum sugar content (TSS)	
	8%
Colouring	
Must be typical of the variety on at least two-thirds of the surface of the fruit.	

Iran	<table border="1"> <tr> <td>Minimum sugar content (TSS)</td> </tr> <tr> <td style="text-align: center;">8%</td> </tr> <tr> <td>Colouring</td> </tr> <tr> <td>Must be typical of the variety on at least two-thirds of the surface of the fruit <u>account being taken of the variety and/or commercial type and of the time of picking .</u></td> </tr> </table>	Minimum sugar content (TSS)	8%	Colouring	Must be typical of the variety on at least two-thirds of the surface of the fruit <u>account being taken of the variety and/or commercial type and of the time of picking .</u>	
Minimum sugar content (TSS)						
8%						
Colouring						
Must be typical of the variety on at least two-thirds of the surface of the fruit <u>account being taken of the variety and/or commercial type and of the time of picking .</u>						

C. Classification

Citrus fruit are classified in three classes, as defined below:

(i) "Extra" Class

Citrus fruit in this class must be of superior quality. In shape, external appearance, development and colouring they must be characteristic of the variety and/or commercial type.

They must be free from defects with the exception of very slight superficial defects, provided these do not affect the general appearance of the produce, the quality, the keeping quality and presentation in the package.

(ii) Class I

Citrus fruit in this class must be of good quality. They must be characteristic of the variety and/or commercial type.

The following slight defects, however, may be allowed, provided these do not affect the general appearance of the produce, the quality, the keeping quality and presentation in the package:

- a slight defect in shape
- slight defects in colouring
- slight skin defects occurring during the formation of the fruit, such as silver scurfs, russets, etc.
- slight healed defects due to a mechanical cause such as hail damage, rubbing, damage from handling, etc.

Cuba	<u>The defects must not, in any case, affect the pulp of the fruit.</u>	<i>Our Committee proposes to amend the classes I and II in order to align with the Codex Standards, with the addition of the following paragraph at the end of the defects may be allowed : "The defects must not, in any case, affect the pulp of the fruit"</i>
Iran	- <u>The defects must not, in any case affect the pulp/flesh of the fruit.</u>	<i>Iran suggested to added as "The defects must not, in any case affect the pulp/flesh of the fruit" to this part because the defects must not affect on the flesh/pulp of the produce and it decrease the quality of the produce.</i>
OECD Working Group	<ul style="list-style-type: none"> - slight defect in shape - slight defect in colouring - <u>slight progressive skin defects, provided they do not affect the flesh</u> - slight skin defects occurring during the formation of the fruit, such as silver scurfs, russets, <u>pest damage</u>, etc. - slight healed defects due to a mechanical cause such as hail damage, rubbing, damage from handling, etc. - <u>slight sunburn</u> - <u>a slight and partial detachment of the peel (or rind) for all fruit of the mandarin group.</u> 	

(iii) Class II

This class includes citrus fruit which do not qualify for inclusion in the higher classes but satisfy the minimum requirements specified above.

The following defects may be allowed, provided the citrus fruit retain their essential characteristics as regards the quality, the keeping quality and presentation:

- defects in shape
- defects in colouring
- skin defects occurring during the formation of the fruit, such as silver scurfs, russets, etc.
- healed defects due to a mechanical cause such as hail damage, rubbing, damage from handling, etc.
- superficial healed skin alterations
- rough skin
- slight and partial detachment of the pericarp for oranges (which is allowed for satsumas, clementines, and other mandarin varieties and their hybrids).

Cuba	<u>The defects must not, in any case, affect the pulp of the fruit.</u>	<i>Our Committee proposes to amend the classes I and II in order to align with the Codex Standards, with the addition of the following paragraph at the end of the defects may be allowed : “The defects must not, in any case, affect the pulp of the fruit”</i>
OECD Working Group	<ul style="list-style-type: none"> - defect in shape - defect in colouring - <u>progressive skin defects, provided they do not affect the flesh</u> - skin defects occurring during the formation of the fruit, such as silver scurfs, russets, etc. - healed defects due to a mechanical cause such as hail damage, rubbing, damage from handling, etc. - superficial healed skin alterations - rough skin - <u>sunburn</u> - <u>a slight and partial detachment of the peel (or rind) for oranges and a partial detachment of the peel (or rind) for fruit of the mandarin group.</u> 	

III. PROVISIONS CONCERNING SIZING

Size is determined by the maximum diameter of the equatorial section of the fruit.

A. Minimum size

Fruit of less than the following minimum sizes are excluded:

Lemons	45 mm
Limes	42 mm
Satsumas, other mandarin varieties and their hybrids	45 mm
Clementines	35 mm
Oranges	53 mm
Grapefruit and its hybrids	70 mm
Pummelos and their hybrids	100 mm

Iran	A. Minimum size Fruit of less than the following minimum sizes are excluded:	<i>In this table, for "LEMON" if the variety of Mexican lime adds, it will be necessary to correct the minimum size of the lemon and decrease it to 25 mm.</i>
	<table border="1"> <tr> <td>Limes</td> <td>42 25 mm</td> </tr> </table>	
Limes	42 25 mm	

B. Size scales

United Kingdom	B. Size scales B. Sizing Citrus fruit may be sized by either of the 2 options indicated below: Option (a) _____ To ensure there is uniformity in size: <u>The maximum difference in diameter between fruit in the same package shall be limited to:</u> - <u>10 mm, if the diameter of the smallest fruit (as indicated on the package) is under 60 mm</u> - <u>15 mm, if the diameter of the smallest fruit (as indicated on the package) is 60 mm and over but under 80 mm</u> - <u>20 mm, if the diameter of the smallest fruit (as indicated on the package) is 80 mm and over but under 110 mm</u> - <u>there is no limitation of difference in diameter for fruit equal or over 110 mm.</u> Option (b) _____ Where size codes are applied, the codes and ranges in the following tables have to be respected:	<i>An alternative method of sizing... [allowing for] sizing either by the traditional size ranges or by a simple uniformity of size. Further the sizing proposals should make it easier to market citrus that falls between size scales. I propose allowing packers to pack either to a size scale or a level of uniformity as we have previously agreed in tomatoes.</i>

Lemons		Limes	
Size Code	Diameter in mm	Size Code	Diameter in mm
0	79 - 90		
1	72 - 83	1	58 – 67
2	68 - 78	2	53 – 62
3	63 - 72	3	48 – 57
4	58 - 67	4	45 – 52
5	53 - 62	5	42 – 49

6	48 - 57		
7	45 - 52		

Iran	<i>If the variety of Mexican lime add, it will be necessary to revise the minimum diameter of the lemon and refer it to below 42 mm.</i>
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Satsumas, clementines, and other mandarin varieties and their hybrids		Oranges	
Size Code	Diameter in mm	Size Code	Diameter in mm
1 - XXX	78 and above	0	92 – 110
1 - XX	67 - 78	1	87 – 100
1 or 1 - X	63 - 74	2	84 – 96
2	58 - 69	3	81 – 92
3	54 - 64	4	77 – 88
4	50 - 60	5	73 – 84
5	46 - 56	6	70 – 80
6 ⁴	43 - 52	7	67 – 76
7	41 - 48	8	64 – 73
8	39 - 46	9	62 – 70
9	37 - 44	10	60 – 68
10	35 - 42	11	58 – 66
		12	56 – 63
		13	53 – 60

Grapefruit and its hybrids		Pummelos and their hybrids	
Size Code	Diameter in mm	Size Code	Diameter in mm
0	>139	0	>170
1	109 – 139	1	156 – 170
2	100 – 119	2	148 – 162
3	93 – 110	3	140 – 154
4	88 – 102	4	132 – 146
5	84 – 97	5	123 – 138
6	81 – 93	6	116 – 129
7	77 – 89	7	100 – 118
8	73 – 85		
9	70 – 80		

Citrus fruit may be packed by count. In this case, provided the size uniformity required by the standard is retained, the size range in the package may fall outside a single size code, but within two adjacent codes.

Spain	<p>Citrus fruit may be packed by count. In this case, provided the size uniformity required by the standard is retained, the size range in the package may fall outside a single size code, but within two adjacent codes. It is allowed to group two adjacent sizes codes in rigid packages or three sizes codes in non rigid packages or in bulk bins.</p> <p><i>In response to the request for simplification, we propose several changes of the sizing provisions, but we find it necessary to maintain the citrus fruit sizing scale, as it is in the current standard.</i></p> <p><i>With the aim of facilitating the interpretation of the scales by consumers and controllers, not only the sizing code should be marked, but also the minimum and maximum diameter in mm.</i></p> <p><i>The main reason for maintaining the sizing scale is that it is a reference for producers and traders involved</i></p>
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⁴ Sizes below 45 mm refer only to clementines.

in marketing citrus fruit. It is also very important for the price fixing, as for the same variety and quality, the price is fixed according to the size of the fruit. If we change the scales of sizes, the market will lose this reference. Another reason is that deleting the sizing scale would complicate the managing of the fruit in the packaging houses. The current sizing scale includes, let us say for oranges, 13 different sizes, although 8 of them, from 64 mm to 110 mm diameter are usually marketed. If we delete the size scale and leave only a uniformity requirement of 10 mm for example, the number of possible combinations that exist within this bandwidth of 10 mm, increases from 8 to 36 (if we consider a bandwidth of 5 mm, the combinations rise to 72). That means a wide range of different likely orders from different clients, which makes it quite impossible to manage for the packing stations.

C. Uniformity

Uniformity in size is achieved by the above mentioned size scales, unless otherwise stated as follows:

United Kingdom	<p>C. Uniformity</p> <p><u>(a) If sizing is by Option (a) above:</u></p> <p><u>The uniformity criteria in Option (a) apply.</u></p> <p><u>(b) If sizing is by Option (b) above:</u></p> <p>Uniformity in size is achieved by the above mentioned size scales, unless otherwise stated as follows:</p>
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(i) For fruit arranged in regular layers in the package, including unit consumer packages, the maximum difference between the smallest and the largest fruit, within a single size code or, in the case of citrus fruit packed by count, within two adjacent codes, must not exceed the following maxima:

	Size Code	Maximum difference between fruit in the same package in mm
Lemons	0 – 7	7
Limes	1 – 5	7
Satsumas, clementines, other mandarin varieties and their hybrids	1-XXX - 4	9
	5 - 6	8
	7 – 10	7
Oranges	0 - 2	11
	3 - 6	9
	7 – 13	7

(ii) For fruit not arranged in regular layers in packages and in individual rigid packages for direct sale to the consumer, the difference between the smallest and the largest fruit in the same package must not exceed the range of the appropriate size code in the size scale or, in the case of citrus fruit packed by count, the range in mm of one of the two adjacent consecutive size codes concerned.

(iii) For fruit in bulk bins and fruit in individual non-rigid (nets, bags,...) packages for direct sale to the consumer, the difference between the smallest and the largest fruit in the same package must not exceed the range obtained by grouping three consecutive size codes in the size scale.

Spain	Uniformity in size is achieved by the above mentioned size scales,	Uniformity in size is achieved by the above mentioned size scales, unless otherwise stated as follows:
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	unless otherwise stated as follows: Delete C(i), (ii) and (iii)	a) <u>For fruit in the same package that the size range falls outside a single size code but within two adjacent codes, the difference between the smallest and the largest fruit must not exceed the range in mm of one of the two adjacent codes concerned.</u> b) <u>For fruit in bulk bins and fruit in non rigid (nets, bags, etc) unit consumer packages of a maximum weight of 5 kg, the maximum difference must not exceed the range obtained by grouping three consecutive sizes in the size scale.</u>
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IV. PROVISIONS CONCERNING TOLERANCES

Tolerances in respect of quality and size shall be allowed in each lot for produce not satisfying the requirements of the class indicated.

A. Quality tolerances

(i) "Extra" Class

A total tolerance of 5 per cent, by number or weight, of citrus fruit not satisfying the requirements of the class but meeting those of Class I is allowed. Within this tolerance not more than 0.5 per cent in total may consist of produce satisfying the requirements of Class II quality.

United States of America	<i>[We believe there should be added flexibility in the tolerances of defects (Skin Defects) for citrus fruits in all three classes. In this regard we propose an increased Total Tolerance of Defects for fruit in "Extra" class to ten percent, Class I and Class II to twenty percent; the added percentage to be applied solely for non-progressive skin defects- that do not affect eating quality- as widely accepted in citrus trade.</i>
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(ii) Class I

A total tolerance of 10 per cent, by number or weight, of citrus fruit not satisfying the requirements of the class, but meeting those of Class II is allowed. Within this tolerance not more than 1 per cent in total may consist of produce satisfying neither the requirements of Class II quality nor the minimum requirements. Produce affected by rotting or any other deterioration rendering it unfit for consumption is excluded.

(iii) Class II

A total tolerance of 10 per cent, by number or weight, of citrus fruit satisfying neither the requirements of the class nor the minimum requirements is allowed. Produce affected by rotting or any other deterioration rendering it unfit for consumption is excluded.

B. Size tolerances

For all classes and types of presentation: a total tolerance of 10 per cent, by number or weight, of citrus fruit corresponding to the size immediately below and/or above that (or those, in the case of the combination of three sizes) mentioned on the package is allowed.

In any case, the tolerance of 10 per cent applies only to fruit not smaller than the following minima:

Lemons	43 mm
Limes	40 mm
Satsumas, other mandarin varieties and their hybrids	43 mm
Clementines	34 mm
Oranges	50 mm
Grapefruit and its hybrids	67 mm
Pummelos and their hybrids	98 mm

Iran	<i>If the variety of Mexican lime add, it will be necessary to correct the tolerance of ten percent applies to fruit not smaller than the following in the table for Limes.</i>
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V. PROVISIONS CONCERNING PRESENTATION

A. Uniformity

The contents of each package must be uniform and contain only citrus fruit of the same origin, variety or commercial type, quality, and size, and appreciably of the same degree of ripeness and development.

In addition, for the "Extra" Class, uniformity in colouring is required.

Sales packages of a net weight not exceeding 3 kilogrammes may contain mixtures of citrus fruit of different species, provided they are uniform in quality and, for each species concerned, they are uniform in origin, variety or commercial type and size, and appreciably of the same degree of ripeness and development.

The visible part of the contents of the package must be representative of the entire contents.

B. Packaging

The citrus fruit must be packed in such a way as to protect the produce properly.

The materials used inside the package must be clean and of a quality such as to avoid causing any external or internal damage to the produce. The use of materials, particularly of paper or stamps bearing trade specifications, is allowed provided the printing or labelling has been done with non-toxic ink or glue.

Stickers individually affixed on the produce shall be such that, when removed, they neither leave visible traces of glue, nor lead to skin defects.

If the fruit are wrapped, thin, dry, new and odourless⁵ paper must be used.

The use of any substance tending to modify the natural characteristics of the citrus fruit, especially its taste or smell⁵, is prohibited.

Packages must be free of all foreign matter. However, a presentation where a short (not wooden) twig with some green leaves adheres to the fruit is allowed.

Cuba	<p>Packages must be free of all foreign matter. However, a presentation where a short (not wooden) twig with some green leaves adheres to the fruit is allowed.</p>	<p><i>This practice could only be applied to select varieties and production area, for example: the Clementines from Corse, France. The leaves can transmit vectorial insects, pathogenic fungus, diseases of high economical impact as citrus canker, leprosis and others. The climatic change has increased the presence of these diseases in different parts of the world. To allow the use of vegetable material like leaves with the fruits it constitutes a risk for the citrus Industry to Mediterranean countries, member of CLAM.</i></p>
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C. Presentation

⁵ The use of preserving agents or any other chemical substance liable to leave a foreign smell on the skin of the fruit is permitted where it is compatible with the regulations of the importing country.

The citrus fruit may be presented:

- (a) arranged in regular layers in packages.
- (b) not arranged in regular layers in packages or in bulk bins. This type of presentation is only allowed for Classes I and II.
- (c) in individual packages for direct sale to the consumer of a weight less than 5 kg either
 - made up by number of fruit or
 - made up by weight of fruit.

Israel	C. — Presentation
Spain	<p>The citrus fruit may be presented:</p> <p>(a) — arranged in regular layers in packages.</p> <p>(b) — not arranged in regular layers in packages or in bulk bins. This type of presentation is only allowed for Classes I and II.</p> <p>(c) — in individual packages for direct sale to the consumer of a weight less than 5 kg either</p> <p>— made up by number of fruit or</p> <p>— made up by weight of fruit.</p>

VI. PROVISIONS CONCERNING MARKING

Each package⁶ must bear the following particulars, in letters grouped on the same side, legibly and indelibly marked, and visible from the outside.

A. Identification

- Packer) Name and physical address (e.g. street/city/region/postal code and,
and/or) if different from the country of origin, the country) or
Dispatcher/shipper) a code mark officially recognized by the national authority⁷.

B. Nature of produce

- Name of the species if the produce is not visible from the outside, except for satsumas, clementines, other mandarin varieties and their hybrids for which the name of the species or variety is compulsory.
- Name of the variety, for oranges.
- Name of the type:
 - for lemons: the indication “Verdelli” and “Primofiore” where appropriate,
 - for clementines: the indication “Clementines, pipless”, “Clementines” (1 to 10 pips), “Clementines with pips” (more than 10 pips) where appropriate,
 - for grapefruit and its hybrids: the indication “pink” or “red” where appropriate,
 - for pummelos and their hybrids: the indication “pink” or “red” where appropriate.
- “Mixture of citrus fruit” or equivalent denomination, in case of sales units containing a mixture of citrus fruit of distinctly different species. The names of the different species shall appear in addition to the details listed above.

France	<i>We would like to clarify the labelling of mandarins and lemons in order to describe clearly the fruit being traded mainly with the new hybrids in the mandarins group.</i>	
Iran	<ul style="list-style-type: none"> - Name of the species if the produce is not visible from the outside, except for satsumas, clementines, other mandarin varieties and their hybrids for which the name of the species or variety is compulsory. —— Name of the variety, for oranges: —— Name of the type: <ul style="list-style-type: none"> —— for lemons: the indication “Verdelli” and “Primofiore” where appropriate, —— for clementines: the indication “Clementines, pipless”, “Clementines” (1 to 10 pips), “Clementines with pips” (more than 10 pips) where appropriate, —— for grapefruit and its hybrids: the indication “pink” or “red” where appropriate, —— for pummelos and their hybrids: the indication 	<i>Iran is suggesting deleting the name of the type of Citrus fruit because we believe that it would cause the citrus fruit to be limited to some varieties and we cannot add the other varieties to the list.</i>

⁶ According to the Geneva Protocol, footnote 2, “Package units of produce prepacked for direct sale to the consumer shall not be subject to these marking provisions but shall conform to the national requirements. However, the markings referred to shall in any event be shown on the transport packaging containing such package units”.

⁷ The national legislation of a number of countries requires the explicit declaration of the name and address. However, in the case where a code mark is used, the reference “packer and/or dispatcher (or equivalent abbreviations)” has to be indicated in close connection with the code mark, and the code mark should be preceded by the ISO 3166 (alpha) country/area code of the recognizing country, if not the country of origin..

	<p>“pink” or “red” where appropriate.</p> <ul style="list-style-type: none"> - <u>Name of variety or varieties where appropriate (optional).</u> 	
Spain	<ul style="list-style-type: none"> - Name of the species if the produce is not visible from the outside, except for satsumas, clementines, other mandarin varieties and their hybrids for which the name of the species or variety is compulsory. - Name of the variety, for oranges <u>and lemons.</u> - Name of the type: <ul style="list-style-type: none"> ○ for lemons: the indication “Verdelli” and “Primofiore” where appropriate, ○ for clementines: the indication “Clementines, pipless”, “Clementines” (1 to 10 pips), “Clementines with pips” (more than 10 pips) where appropriate, ○ for grapefruit and its hybrids: the indication “pink” or “red” where appropriate, - <u>For the mandarins’ group</u> <ul style="list-style-type: none"> ○ <u>for satsumas: “Satsumas”, which may be followed by the variety.</u> ○ <u>for clementines: “Clementines”, which may be followed by the variety and –where appropriate - by either the indication “seedless” for seedless clementines or “with seeds” for clementines with more than 10 seeds.</u> ○ <u>for other mandarins and their hybrids: the name of the type, preceded by “mandarins” where appropriate.</u> - For pummelos and their hybrids: the indication “pink” or “red” where appropriate. - “Mixture of citrus fruit” or equivalent denomination, in case of sales units containing a mixture of citrus fruit of distinctly different species. The names of the different species shall appear in addition to the details listed above. 	<p><i>We propose to clarify the labelling of mandarins and lemons in order to describe clearly the fruit being traded and to avoid confusion and misunderstanding, mainly with the new hybrids in the mandarins group.</i></p> <p><i>The proposed marking is as follows:</i></p> <ul style="list-style-type: none"> - <i>For mandarins, three groups should be distinguished:</i> <ol style="list-style-type: none"> <i>a. Satsumas</i> <i>b. Clementines</i> <i>c. Other mandarins and their hybrids</i> - <i>For lemons it should be compulsory to mark the name of the variety.</i>

C. Origin of produce

- Country of origin and, optionally, district where grown, or national, regional or local place name.
- In the case of sales packages containing a mixture of citrus fruit of different species of different origins, the indication of each country of origin shall appear next to the name of the species concerned.

D. Commercial specifications

- Class.
- Size code (or, when fruit packed by count fall under two adjacent codes, size codes or minimum and maximum diameter in mm) for fruit presented in accordance with the size scale or the lower and the upper limiting size code in the case of three consecutive sizes of the size scale.
- Size code (or, when fruit packed by count fall under two adjacent codes, size codes or minimum and maximum diameter in mm) and number of fruit, in the case of fruit arranged in layers in the package.
- Where appropriate, mention of the preserving agents or other chemical substance

used, where such use is compatible with the regulations of the importing country.⁸

France	<i>The sizing code should be marked, [including] also the minimum and maximum diameter in mm.</i>	
Iran	<ul style="list-style-type: none"> - <u>Net weight (optional).</u> - <u>Size (if sized).</u> - <u>Any other marking required by the purchaser, such as due to packing (if known).</u> 	
Spain	<ul style="list-style-type: none"> - Class. - Size code (or, when fruit packed by count fall under two adjacent codes, size codes or minimum and maximum diameter in mm) for fruit presented in accordance with the size scale or the lower and the upper limiting size code in the case of three consecutive sizes of the size scale. - <u>Size code/s and minimum and maximum diameter in millimeters of the marked size code/s.</u> Size code (or, when fruit packed by count fall under two adjacent codes, size codes or minimum and maximum diameter in mm) and number of fruit, in the case of fruit arranged in layers in the package. 	
	Where appropriate, mention of the preserving agents or other chemical substance used, where such use is compatible with the regulations of the importing country.	<i>We propose to delete the obligation of marking the preserving agent or other chemical substance used at post harvest stage. This marking is only compulsory for citrus fruit although there are several fruits that are treated with chemicals after harvest in order to address pest and/or disease problems that may arise during transport and storage, whether the storage is short or long term. As it stands now, it is discriminatory for citrus fruits: we are transmitting a wrong message to the consumer, that citrus fruit are the only fresh fruit treated with these chemicals. Moreover, here we are dealing with Quality Standards and this provision is a sanitary issue.</i>
UK	- <u>Where size codes are not applied – Size expressed as minimum and maximum diameters.</u>	<i>An alternative method of sizing... [allowing for] sizing either by the traditional size ranges or by a simple uniformity of size.</i>

E. Official control mark (optional)

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⁸ Reservation from Chile