

Virtual Regional Workshop – Machinery and Equipment Survey for Latin America and the Caribbean

January 25-28, 2022
10:00 AM to 12:30 PM (Chilean time)



UNITED NATIONS



Session 4: Recommendations for data compilation – “Do’s” and “Dont’s”

Acknowledgements

Parts of the material shown were taken from presentations made during the

Fourth Virtual Regional Workshop
22, 23 and 25 June 2021
International Comparison Program
for Asia and the Pacific 2021

We thank Asian Development Bank for the permission to use this material.



UNITED NATIONS

ECLAC

Outline

- Data collection form
 - Index tab
 - Country data tab
 - Item tabs
 - Item-related PDF documents
- Recommendations
 - “Do”s
 - “Don’t”s
- Data Validation



UNITED NATIONS

ECLAC

Data collection form – Index tab

INDEX (Click the link below to access the sheet)	
0.	Cover Page
1.	Index
2.	Instructions
3.	Country Data
15.01.11.1.01.020	Double skinned underground horizontal cylindrical storage tank - Unspecified - larger
15.01.11.1.01.030	Double skinned underground horizontal cylindrical storage tank - Unspecified - smaller
15.01.11.1.01.040	Stainless steel beer keg - Unspecified
15.01.11.1.01.050	Packaged steam boiler - Unspecified
15.01.11.1.01.060	Hacksaw - Unspecified
15.01.11.1.01.070	Hacksaw - Bahco (Sweden) - 325
15.01.11.1.01.080	Hacksaw - Unspecified
15.01.11.1.01.090	Hacksaw - Stanley (USA) - Turbocut (1-20-110)
15.01.11.1.01.100	Automotive tool set - Unspecified
15.01.11.1.01.110	Automotive tool set - Facom (France) - Tool set CM.138 without box

From the Index tab, the other tabs (Instructions, Country Data and the tabs for the items can be selected by clicking on the associated hyperlink.



UNITED NATIONS

ECLAC

Data collection form – Country Data tab

[Go To Index](#)

Country Name	
ISO Country Code (three-letter)	
Currency	
Reference Year	

Please fill in the country name, the three-letter ISO country code, the local currency and the reference year (2021).

Please remember: All prices should be reported in local currency units (LCU).



UNITED NATIONS

ECLAC

Data collection form – Item tab (1)

Item Code	15.01.11.5.01.240		DATA ENTRY
Item Name	Dry powder fire extinguisher		
	Proposed		Observed
Make (and nationality)	Gloria (Germany)		1
Model	PD 6 GA with PG		
	Metric	Imperial	Observed
Extinguishing agent:	ABC powder	ABC powder	2
Propellant:	Nitrogen	Nitrogen	
Max. working pressure:	15 bar	218 psi	
Fire rating:	34A 233BC	34A 233BC	
Quantity of powder:	6 kg	13.2 lbs	
Duration of discharge:	20 sec	20 sec	
Range of discharge:	6 m	20 ft	
With controllable discharge:	yes	yes	
Excluding maintenance contract:	yes	yes	
With pressure gauge:	yes	yes	
Diameter:	160 mm	6.3 in	
Width:	285 mm	11.2 in	
Height:	505 mm	19.9 in	
Depth:	160 mm	6.3 in	
Weight:	9.1 kg	20 lb	
Company website:	www.gloria.de	www.gloria.de	3
Type of price information	(1-4)	(1-4)	
Price from the Internet	yes/no	yes/no	

1: Please provide make (brand) and model

2: Please fill in the specifications of what was priced



UNITED NATIONS

ECLAC

Data collection form – Item tab (2)

3: Company website / Type of price information / Price from the internet

Company website: Provided for specified items only

Type of price information: 1: List price, discount separate.
2: List price, no discount offered.
3: The unit price includes the discount.
4: Unknown

Price from the internet: yes or no



UNITED NATIONS

ECLAC

Data collection form – Item tab (3)

Prices	Observed
Unit base price	
Order quantity	4
Delivery cost/unit	
Installation cost per unit	
Other unit costs (please specify here)	
Discount per unit (%)	
Non-deductible taxes	
Total unit price net of deductible taxes and discount	0 5
Notes	Comments
No changes. Please note: We search for the model with fire rating 34A 233BC and equipped with pressure gauge (with PG). The product code for this item is 002111.1791.	6 7
Importance	Importance
Is the item priced important (1) or less important (0)?	8
Date of collection	Date of collection
Date of collection (mm/dd/yyyy)	9

- 4: Remember to report prices etc. in local currency units
- 5: The “Total unit price” is calculated automatically.
- 6: Check the notes for valuable hints (manufacturer IDs, ...)
- 7: Use the extra input field for comments.
- 8: Indicate if the item is important (1) or less important (0).
- 9: Please record when the price was collected.



UNITED NATIONS

ECLAC

Data collection form – Additional information

For each of the specified items an item-related PDF document is available. These documents can be obtained from ECLAC.

COLOUR MULTI-FUNCTION PRINTERS FOR DEMANDING BUSINESSES



i-SENSYS MF740 Series
Optimised for small and medium businesses, this multi-function printer range takes productivity to the next level

- CONTROL**
Universal Login Manager
- FAST PRINT SPEED**
27ppm single-sided A4
- INTUITIVE CONTROLS**
12.7cm touchscreen
- APPLICATION LIBRARY**
Selectable on screen application
- SECURITY**
PIN document release
- PRODUCTIVITY**
Automatic double-sided printing

Productivity

Businesses have so many things to focus on that hanging around waiting for their printers to perform shouldn't be one of them. Canon's i-SENSYS MF740 Series more than meets the requirements of even the most demanding businesses by taking productivity to the highest levels. They can deliver up to 27 printed A4 pages per minute and 47 scans per minute, thanks to simultaneous scanning of both sides in a single pass (MF746Cx and MF744Cdw). All models also have automatic double-sided printing to reduce the amount of paper used.

Customisation

The Application Library further increases efficiency by automating and speeding up everyday tasks. Printing stored forms, scanning to email and copying documents can be undertaken with a single tap. Five new application functions have been added to this series to further boost productivity.

Control

The Universal Login Manager on the MF746Cx enables business owners to track exactly who is printing what and when, potentially saving money by reducing unnecessary output. You can also control access and protect sensitive documents with secure PIN print.

Mobile connectivity

Business owners and staff are always on the move. That's why the Canon i-SENSYS MF740 Series is packed with a versatile range of mobile connection options. The Canon PRINT Business app enables users to print wirelessly from smartphones and tablets (iOS and Android). Compatibility with Apple AirPrint and Mopria for Android means fast access without the user having to download any additional apps.

Canon

PROJECT	QUANTITY	ITEM NO
Open Fryers with auto lift		
		OEA 321 1-well electric OEA 322 2-well electric OEA 323 3-well electric

Open Fryers with auto lift



OEA 322 2-well electric auto lift open fryer

Standard Features

- Heavy-duty stainless steel vats with 7-year warranty
- Rugged direct drive lift mechanism powered by quiet, low-voltage motor
- Motor and drive built into existing cabinet—footprint NOT increased
- Two filters per well programmed to operate half baskets independently or together at the touch of a button
- High-efficiency heating elements generate fast recovery and energy savings
- Cold zone below heating elements helps extend oil life
- High-limit temperature protection
- Built-in filtration system
- Easy basket set and release
- Stainless steel construction for easy-cleaning and long life
- 4 heavy-duty casters, 2 locking

- Compton™ 8000 control
 - 10 programmable cook cycles
 - Melt mode
 - Idle mode
 - Clean-out mode
 - Water detection alert
 - Load compensation
 - Proportional control
 - Optional filter prompt and customizable filter tracking
 - 16-character digital display with multiple language settings

Accessories shipped with unit

- Fry baskets—please select one
 - 1 full basket per well
 - 2 half baskets per well
- 1 basket support for each vat
- Filter screen and filter envelope

Options available separately

- Fryer Shortening Shutle®
- Filter rinse hose
- Fry well covers

APPROVED APPROVED AS NOTED RESUBMIT

AUTHORIZED SIGNATURE _____ DATE _____

HENNY PENNY
Engineered to Last

© 2016 Henny Penny Corporation, East, OH 45222 USA. Revised 12/2016

Fire extinguishers with squeeze grip operation

Stored-pressure powder fire extinguishers

DIN EN 3, GS, MED, BSI



Details and performance characteristics of stored pressure extinguishers

- Externally coated with a weatherproof, durable coating made of 100% polyester resin
- Extinguisher nozzle socket integrated in the skirt
- Durable brass fittings with integrated check valve
- Featuring wall bracket
- Suitable for systems up to 1000 V
- Fields of application Powder: **A B C D E F K**

PD 4 GA, PD 6 GA, PD 6 GX, PD 9 GA, PD 12 GA

- Available with or without a pressure gauge
- The pressure gauge allows for constant visual inspection of the pressure
- Featuring a wall bracket as a standard
- Optionally available with a suitable car bracket



Skirt



Wall bracket



Pressure gauge and control valve

Type	Part number	Extinguishing agent/quantity	Material	Propellant	Propellant performance	Extinguishing agent storage/discharge time	Temperature range	Total weight	Skirt WxD (if extender)
PD 4 GA with PG	002071 2048	ABC powder extinguisher 4 kg	PS-4-L	Nitrogen	21 A 89 B C	ca. 6.5 m (ca. 15 s)	-30°C to +60°C	ca. 6.7 kg	ca. 410/300/162 mm (ca. 150 mm)
PD 6 GA with PG	002111 1751	ABC powder extinguisher 6 kg	PS-6-L	Nitrogen	34 A 233 B C	ca. 6 m (ca. 20 s)	-30°C to +60°C	ca. 8.1 kg	ca. 502/270/162 mm (ca. 150 mm)
PD 6 GA	002101 0000	ABC powder extinguisher 6 kg	PS-6-L	Nitrogen	34 A 233 B C	ca. 6 m (ca. 20 s)	-30°C to +60°C	ca. 8.1 kg	ca. 502/270/162 mm (ca. 150 mm)
PD 6 GX	002110 0000	ABC powder extinguisher 6 kg	PS-6-L	Nitrogen	30 A 233 B C	ca. 6 m (ca. 20 s)	-30°C to +60°C	ca. 8.1 kg	ca. 502/270/162 mm (ca. 150 mm)
PD 9 GA with PG	004041 2207	ABC powder extinguisher 9 kg	PS-9-L	Nitrogen	43 A 233 B C	ca. 6 m (ca. 17 s)	-30°C to +60°C	ca. 13.7 kg	ca. 530/265/162 mm (ca. 150 mm)
PD 12 GA with PG	002101 2048	ABC powder extinguisher 12 kg	PS-12-L	Nitrogen	50 A 233 B C	ca. 6 m (ca. 21 s)	-30°C to +60°C	ca. 17.3 kg	ca. 580/265/202 mm (ca. 150 mm)
PD 12 GA	002141 0000	ABC powder extinguisher 12 kg	PS-12-L	Nitrogen	50 A 233 B C	ca. 6 m (ca. 21 s)	-30°C to +60°C	ca. 17.3 kg	ca. 580/265/202 mm (ca. 150 mm)

* Featuring a pressure gauge (PG) as a standard

When seconds count...

GLORIA

27 Portable fire extinguishers I



ECLAC

Recommendations - “Do”s (1)

- **Used/new:** Please price new items only – used equipment must not be priced in the Machinery and Equipment survey
- **Sources:** Use prices from reliable sources only. When using prices from a website, please make sure this is a popular website which commercial purchasers would use. Please also make sure to use the price a commercial purchaser would have to pay.
- **Item availability:** Check if the item priced is available in sufficient quantities. In some web-shops, putting 99 items in the shopping cart might help to see if the item is still well available.
- **Price an item at the “specified” item position** if you find the same make (brand) and model with the same specifications
- **Notes/PDF:** When pricing an unspecified item, please check the notes and item-related PDF document of the counterpart specified item.
- **Documentation:** Please keep records of what was priced for validation purposes.



UNITED NATIONS

ECLAC

Recommendations - “Do”s (2)

- **Specifications:** When searching for an item on the internet, please make sure that what you found (and perhaps want to price) has the correct specifications. The item image in the survey catalogue may help.

15.01.11.2.01.660: Professional digital camera (body only) - Canon (Japan) - EOS 90 D

Prescribed item – without lens



Item with lens



UNITED NATIONS

ECLAC

Recommendations - “Do”s (3)

- **Item level validation:** When collecting more than one price observation for the same item, please check the Min-Max-Ratio (MMR) and the Coefficient of Variation of the prices.
- Prices are typically expected to be in a close range, in particular for specified items. Please double-check the prices if the MMR is less than 0.33 or if the CV is greater than 30.
- **Check of consistency with ICP 2017:** If the item has already been priced in ICP 2017, please check the ratio of the price reported in ICP 2021 and the price reported in ICP 2017. For the specified items also covered in ECP 2021, three quarters of the ratios GM_{2021}/GM_{2017} are in the range 0.9 to 1.5.



UNITED NATIONS

ECLAC

Recommendations - “Do”s (4)

- **Item sequence:** When pricing more than one item within the same item group, data entry at the correct item position needs to be ensured (for example for vans, monitors and industrial engines). If you for example receive prices for several items in the same email reply, it is not guaranteed that the respondent provided the prices in the correct sequence.



UNITED NATIONS

ECLAC

Recommendations - “Don’t”s (1)

- Do not report prices for used or refurbished equipment; this is especially critical when obtaining price information from websites which offer used items as well as new ones (examples are agricultural equipment, textile machinery, baking equipment, construction equipment)

15.01.11.6.01.040: Diesel tractor: small - New Holland (Italy) - TD 5.95 Tier 4A



UNITED NATIONS

ECLAC

Recommendations - “Don’t”s (2)

- When the order quantity is not one, please do not report the prices for the “full” order quantity, but the unit price for one.

15.01.11.5.01.240: Dry powder fire extinguisher - Gloria (Germany) - PD 6 GA with PG

Price for 1 unit in an order of 10.

Price for 10 units



UNITED NATIONS

ECLAC

Recommendations - “Don’t”s (3)

Please do not:

- report prices at which commercial buyers would not be allowed to make the purchase, for example special prices for government agencies or students/teachers only
- price DIY (do-it-yourself) level items in particular for tool sets, hand tools like hacksaws and cordless combis; only items suitable for professional use should be priced
- price items including deductible VAT (some internet pages may give the price including VAT only or show both prices, with and without VAT)
- price items which are labeled as “clearance” prices for the last few available items (i.e. not available in sufficient quantities)



UNITED NATIONS

ECLAC

Recommendations - “Don’t”s (4)

- Please do not by mistake price items which are additional accessories or incidentals for equipment like laser printers or photocopiers (for example toner cartridges); this is for example important when using price comparison pages

The screenshot shows the Idealo website interface. At the top, the search bar contains 'M479fdw'. Below the search bar, there are navigation options: 'Sortieren nach: Beste Treffer zuerst', 'Merktzettel', and 'Anmelden'. A category filter bar shows 'Elektroartikel (628)', 'Drucker & Scanner (626)', 'Druckerzubehör (625)', 'Computer (621)', and 'Drucker Zubehör (4)'. The main content area displays four product listings:

Product Name	Price	Shipping
HP Color LaserJet Pro MFP M479fdw (W1A80A) Farblaser-Multifunktionsdrucker, A4, 600 x 600 dpi, 27 Seiten/m... mehr	ab 541,45 €	13 Angebote
HP - Hewlett Packard Color LaserJet Pro MFP M 479 fdw (415A / W2030A) - original - ...	91,12 €	Sofort lieferbar, Lieferzeit 1-3 Werktage Versand ab 4,90 €
HP - Hewlett Packard Color LaserJet Pro MFP M 479 fdw (415X / W2032X) - original - ...	239,20 €	Sofort lieferbar, Lieferzeit 1-3 Werktage versandkostenfrei
HP - Hewlett Packard Color LaserJet Pro MFP M 479 fdw (W9090MC) - original - Toner...	111,95 €	Bestellbar, Lieferzeit 5-14 Werktage Versand ab 4,90 €



UNITED NATIONS

ECLAC

Recommendations - “Don’t”s (5)

- Even if the Data collection form is not locked, please do not insert rows/columns in the item sheets or delete sheets. This would have an impact on the “Database” sheet and make semi-automatic processing of your data difficult or even impossible.



UNITED NATIONS

ECLAC

Data Validation (1)

1. Checks of the Data collection forms received
 - Are the forms filled in correctly?
2. “Initial cleaning”
 - Are the makes/models priced usable at the respective item position?
 - Are there any obvious typing errors that result in a “way off” price?
 - => This may lead to (temporary) exclusion of prices from the calculation.
3. Quaranta Table calculation
4. Analysis of extreme prices
 - items with very low Min-Max-Ratio
 - items with high coefficients of variation
 - items with extreme XR-Index

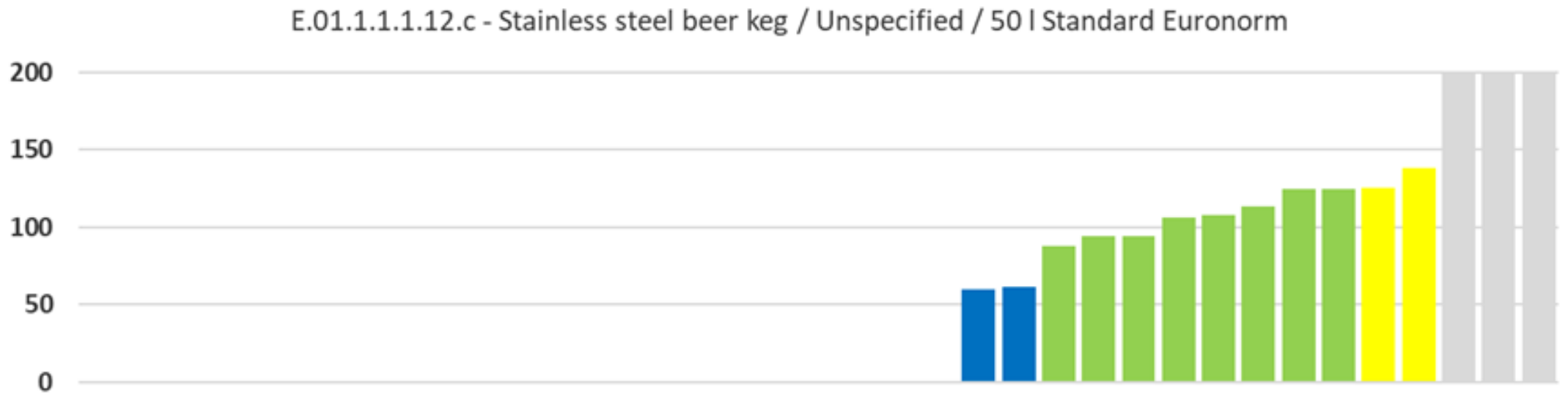


UNITED NATIONS

ECLAC

Data Validation (2)

Example 1: Prices for wine kegs are excluded from the calculation



Please note:

Price indices are color-coded; grey bars correspond to the excluded prices



UNITED NATIONS

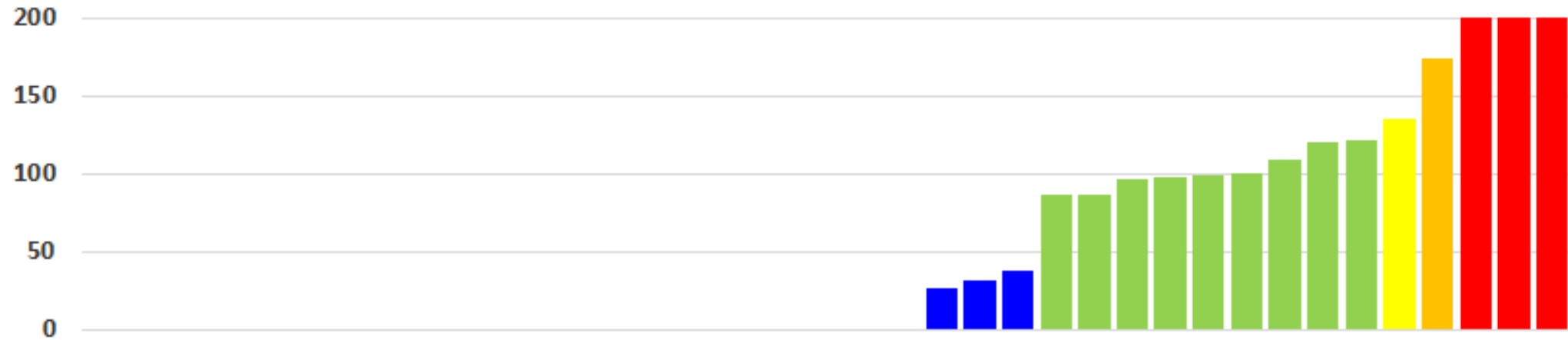
ECLAC

Data Validation (3)

Example 2: Reduction of extreme outliers (not yet finished)

Initial results:

E.01.1.1.1.15.e - Inspection tool set / Teng Tools / TTEX17



Interim results:

E.01.1.1.1.15.e - Inspection tool set / Teng Tools / TTEX17

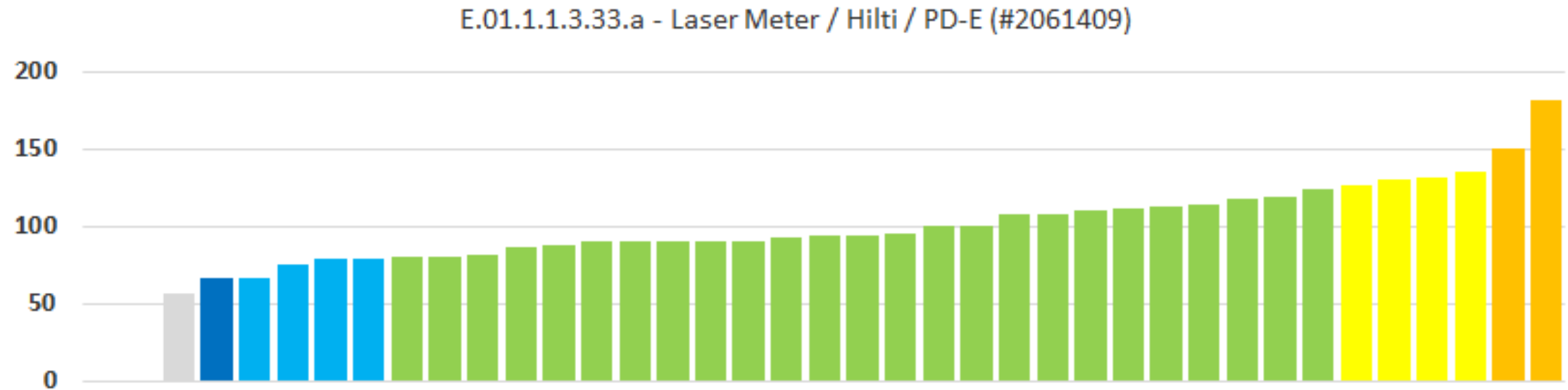


UNITED NATIONS

ECLAC

Data Validation (4)

Example 3: “Specified” item, Min-Max-Ratio = 0.37, VC = 23



The two highest prices are for the countries in Europe with the highest PLI, the results for this item are plausible. Only one reported price is for a different model and thus not included in the calculation.



UNITED NATIONS

ECLAC

THANK YOU !



UNITED NATIONS

ECLAC

