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WELMEC

Informative Document

Screening project on non-automatic weighing instrument with point of sale devices

Prepared by Working Group 5 Metrological Supervision

March 2019

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The data and information are provided for informational purposes.



A SCREENING PROJECT ON NON AUTOMATIC WEIGHING INSTRUMENTS (NAWI) WITH POINT OF SALE (POS) DEVICES

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WELMEC, WG 5/ADCO MI meeting, 21-23, March, Paris



Content:

- ➤ Background
- ➤ Definition of the project tasks
- > The results of the surveillance/supervision
- Results of the metrological tests
- Results of the formal examination
- Where we discover the biggest non conformities
- > Follow actions
- Summary



Background and rationale for the study

- NAWI + POS devices are part of the daily life of millions of Europeans
- Devices need to fulfil the requirements described in the Directive 2014/31/EU
- Lack of knowledge and experience by market surveillance authorities
- Surveillance of these devices in France 2013



Definition of the project tasks

Formal test

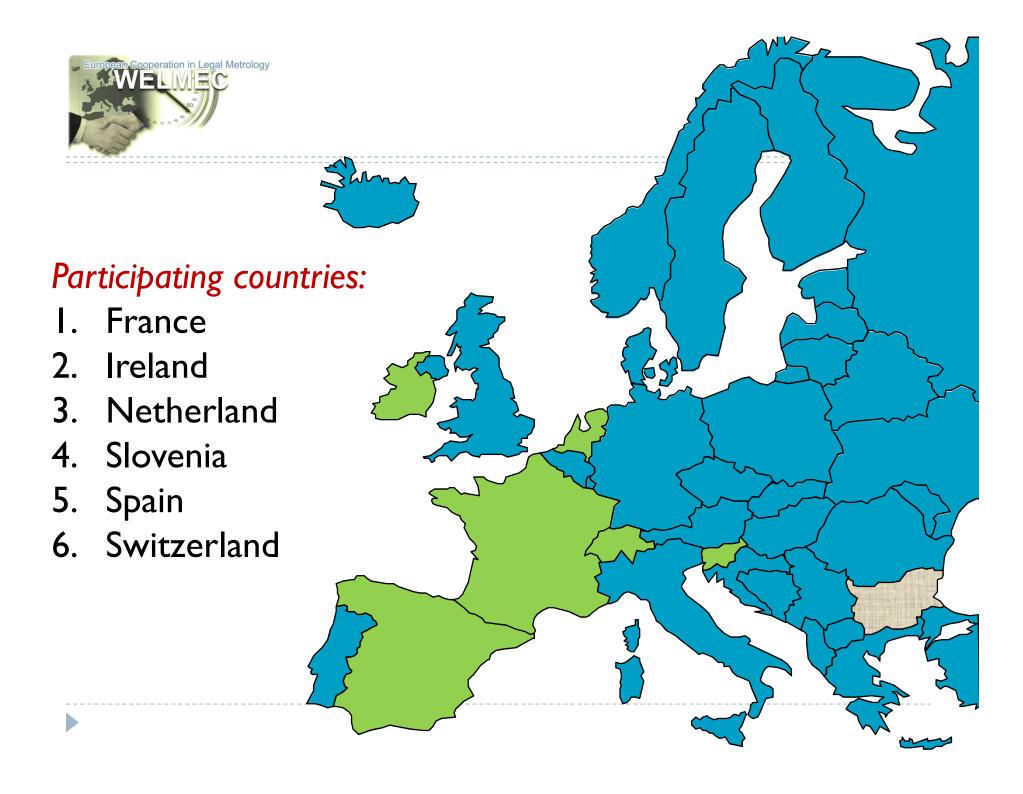
- Device identification (manufacturer, type designation, serial number, year of CE marking, TC number for POS system)
- Documents declaration of conformity and by whom it was issued
- Visual inspection/ conformity marking
- Software version (NAWI/POS)
- Visibility to both vendor and customer: weight/unit/price to pay



Definition of the project tasks

Metrological examination

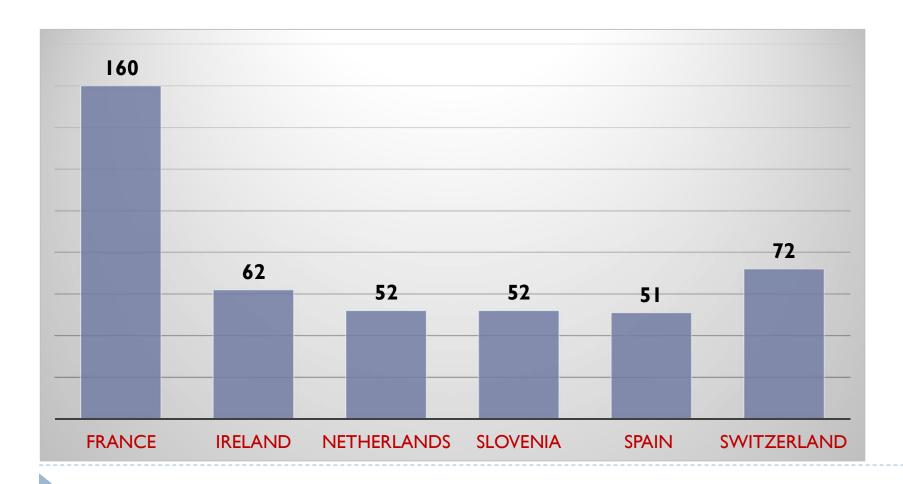
- Test of stability of equilibrium possible differences between digital indication and print-out
- Accuracy test at 10 g and 1 kg
- Test of price calculation- possible differences between digital indication and print-out
- Multiple print out possibility
- Other remarks





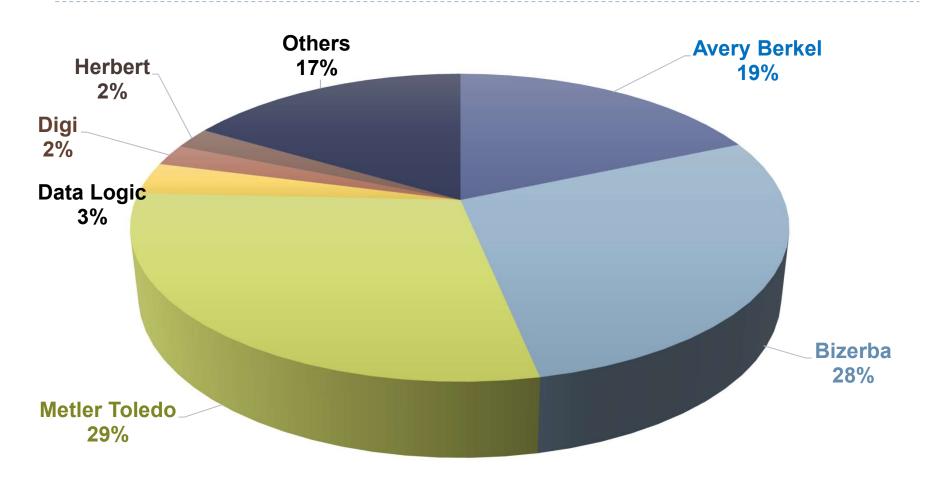
Number of the tested measuring instruments

Tested: 449 NAWI + POS



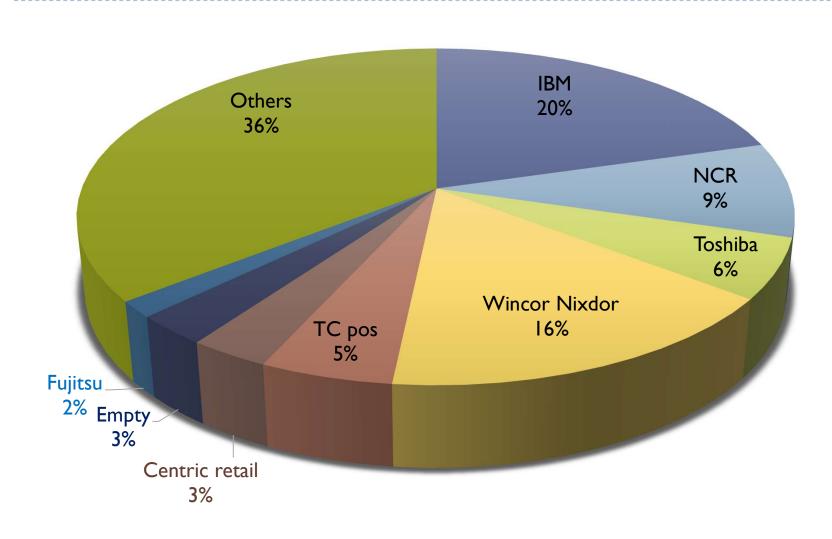


Tested NAWI by manufacturers



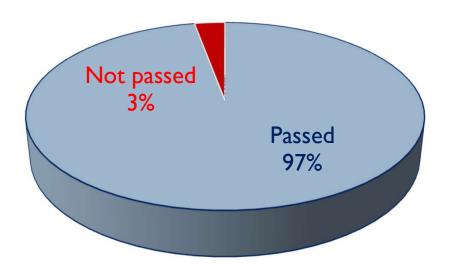


Tested POS by manufacturers

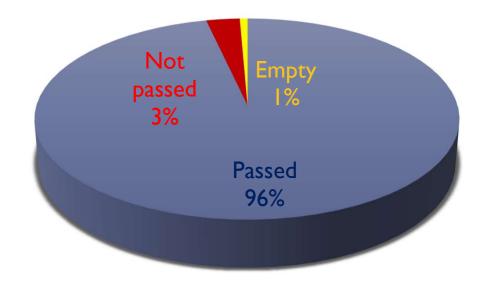




Test of stability equilibrium

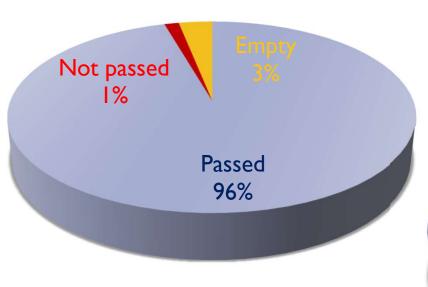


Test of stability equilibrium any differences (between digital indication and print-outs)





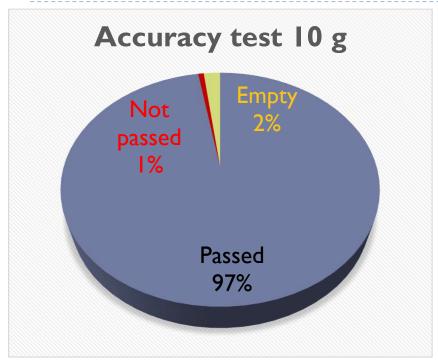
Test of price calculation I (one load and three different price)

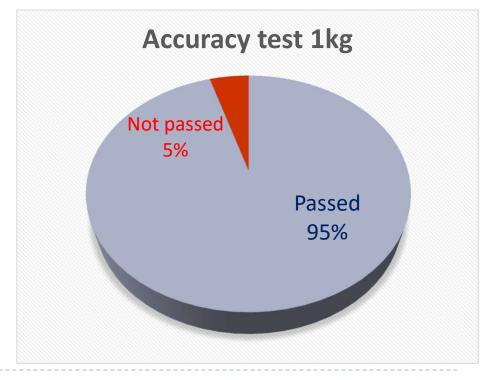


Test of price calculation 2 (one fixed unit price and three different loads)



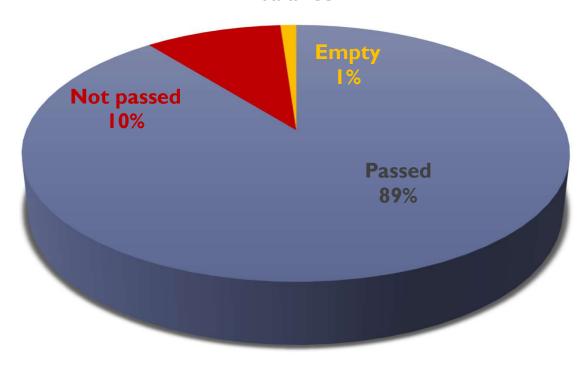






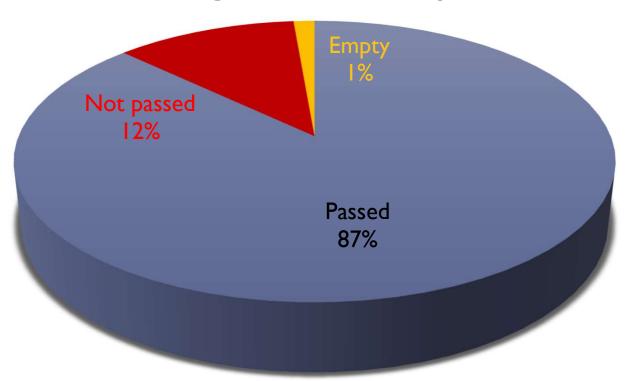


Multiple print out possible, without unloaded balance

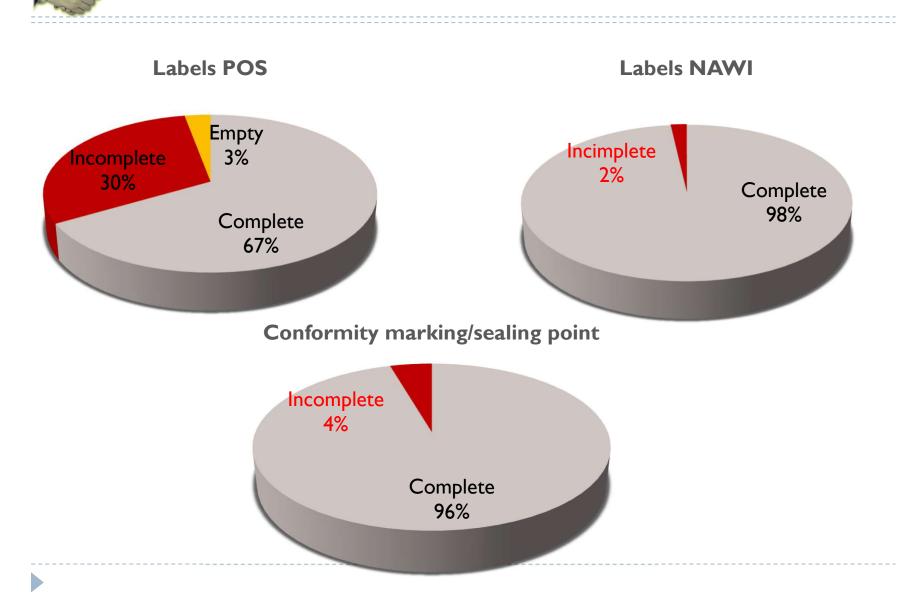




Metrological examination passed



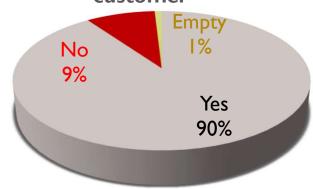
Formal Checks – POS / NAWI Labels/ conformity marking



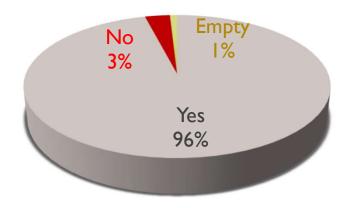


Formal Checks – Visibility

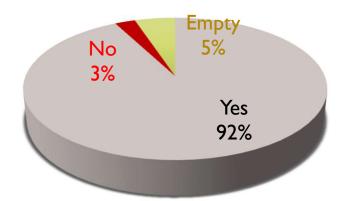
Visible currency to user and customer



Visible price to user and customer



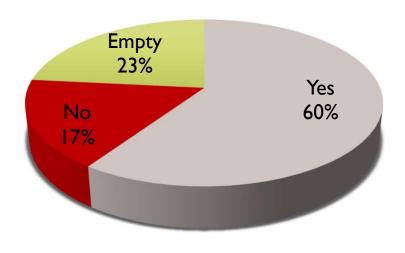
Visible weight to uuser and customer



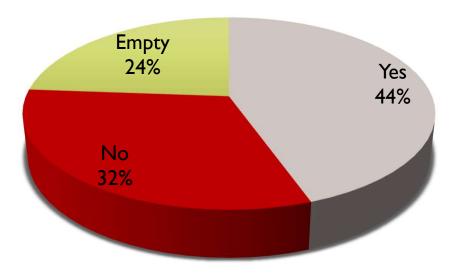


Formal Checks - Software in POS/ NAWI

Software POS

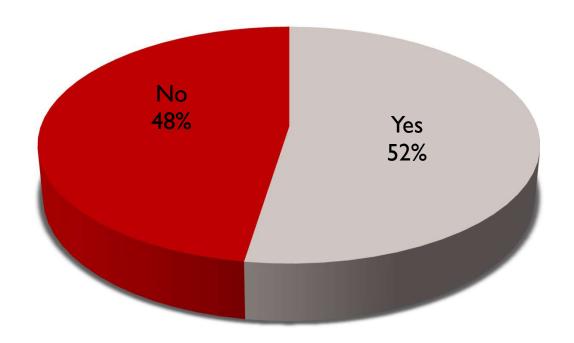


Software NAWI

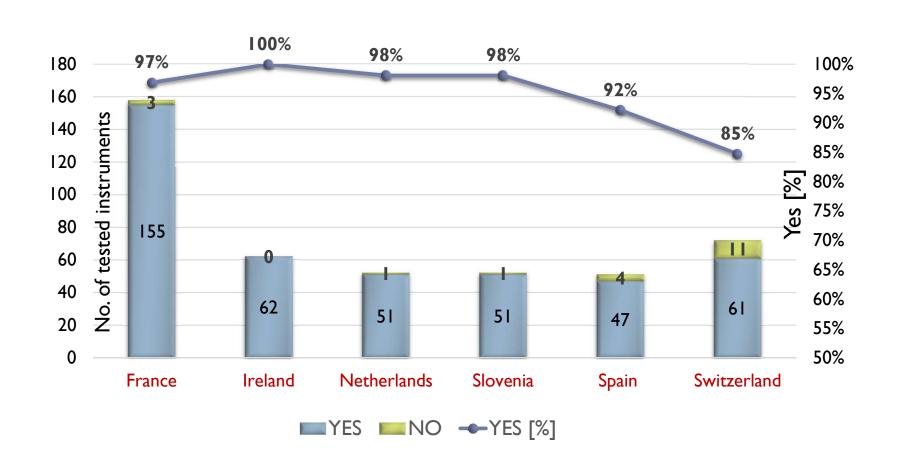


Formal Checks – Declaration of conformities POS + NAWI

Declaration of conformity POS + NAWI

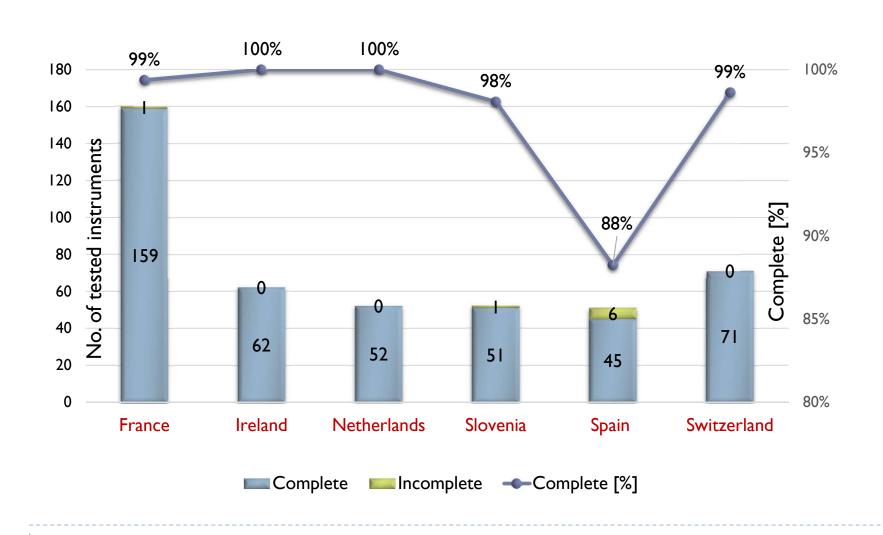


Formal Checks by countries - Visual inspection



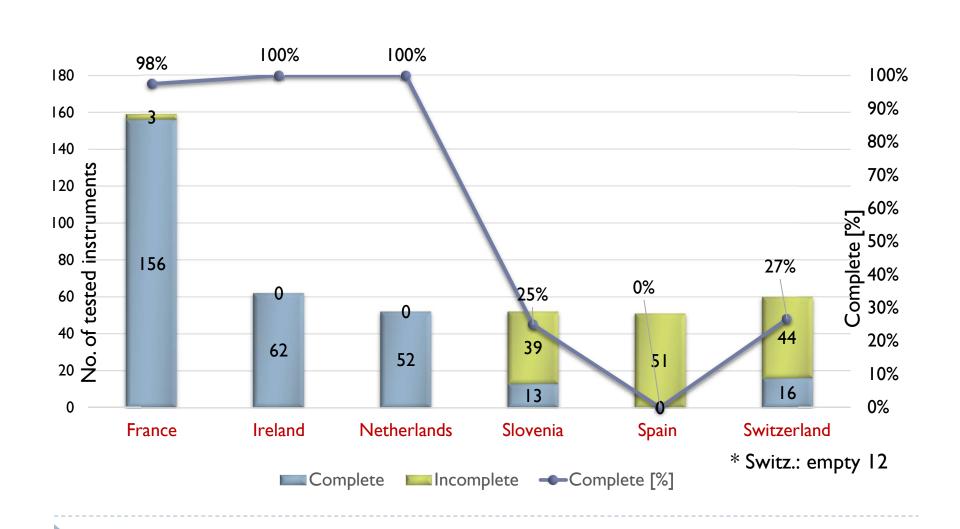


Formal Checks by countries – Labels NAWI

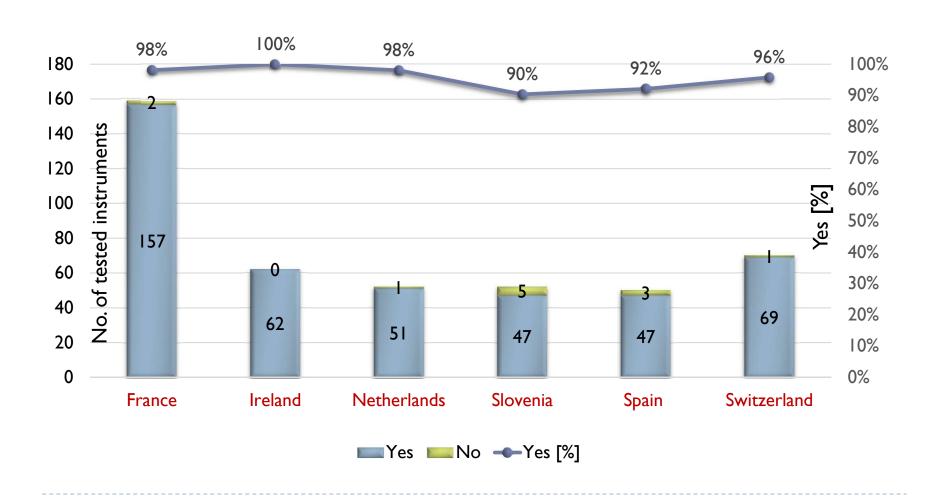




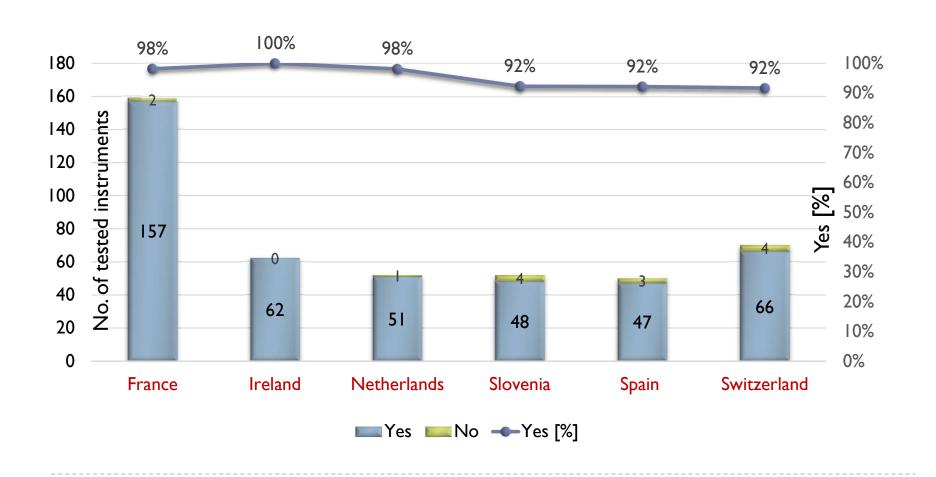
Formal Checks by countries – POS Labels



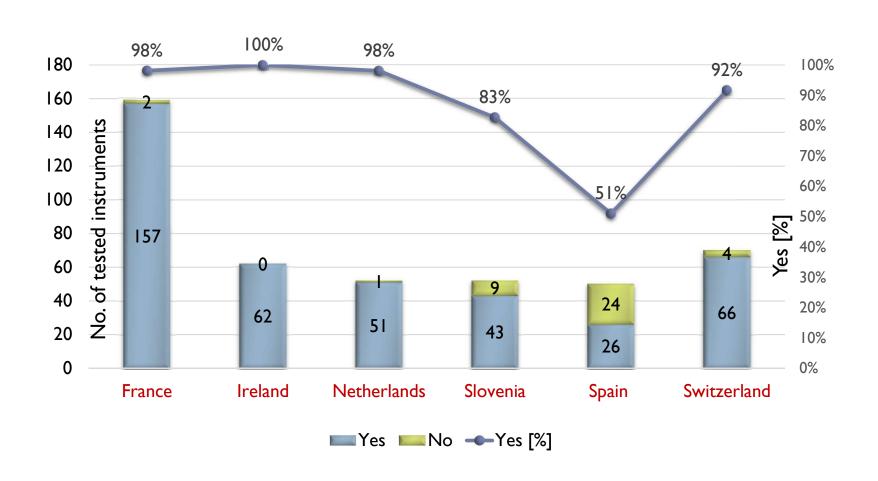
Formal Checks by countries – Visible weight to user and customer



Formal Checks by countries – Visible price to user and customer



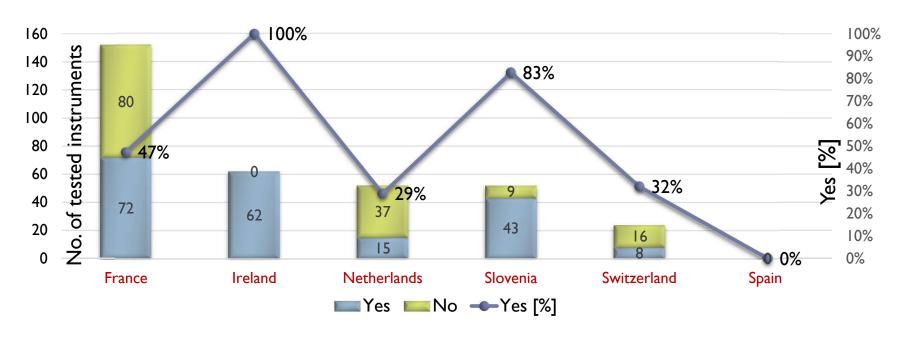
Formal Checks by countries – Visible currency to user and customer



operation in Legal Metrology



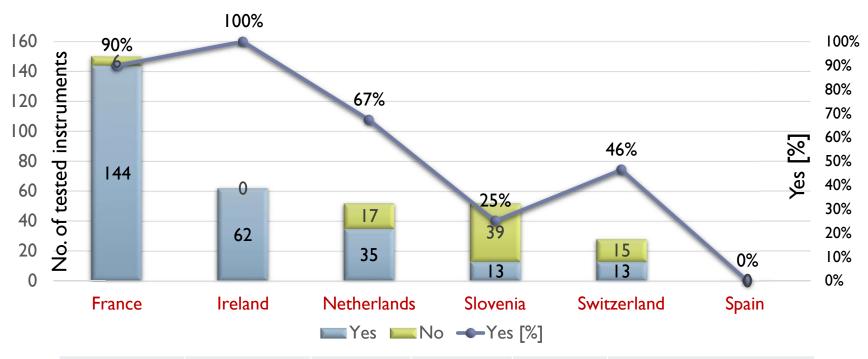
Formal Checks by countries - Software in NAWI (TAC)



Country	Number of tested	Passed	Not passed	Empty	Passed [%]
France	152	72	80	8	47%
Ireland	62	62	0		100%
Netherlands	52	15	37		29%
Slovenia	52	43	9		83%
Switzerland	25	8	16	48	32%
Spain	0	0	0	51	0%



Formal Checks by countries – Software in (TC) POS



Country	Number of tested	Yes	No	Empty	Yes [%]
France	160	144	6	10	90%
Ireland	62	62	0		100%
Netherlands	52	35	17		67%
Slovenia	52	13	39		35%
Switzerland	28	13	15	44	46%
Spain	51	0	0	51	0%



Where we discover the biggest non conformities?

Formal checks:

- ▶ 48 % of measuring instruments were without (accessible) declaration of conformity for all system
- ➤ In 40 % it was not possible to check the software in the (TC or PC) POS device
- ➤ In 50 % it was not possible to check the software in the (TAC) NAWI

Metrological test:

12 % of measuring instruments did not pass metrological test



Following actions

 Following action will depend on national regulation and discovered non conformities...?



Summary

What were our goals?

- Get information if the NAWI + POS device are in accordance with the regulations
- 2. To take all possible measures to eliminate non-compliance devices
- 3. To obtain more knowledge and experience in the field
- 4. To encourage other Member States to join the project or independently verify the conformity of these devices

What we achieved?

- 1. Obtained information (findings) are not encouraging
- 2. Measures will follow
- 3. Through surveillance/inspection we have got a knowledge and experiences
- 4. Based on the findings, it is expected that such supervision will follow in other member countries as well