



**OIML R 87 edition 2016**  
**Annex A**  
**Sampling Procedure**

Hans-Peter Vaterlaus, formerly METAS, Switzerland

# Sampling Procedure (1)

1. Define the inspection lot. An inspection lot consists of prepackages that have been produced under the same conditions within 1 h defined by a number  $N$ .
2. Determine the corresponding sample size defined by the number  $n$  for inspection given by table 2 in OIML R87 or in Annex I (detailed sampling plan).
3. Determine the tolerable deficiency  $T$  appropriate for the nominal content  $Q_{nom}$  of the prepackages.

## Sampling Procedure (2)

4. Determine the number of prepackages allowed to have a deficiency of T1 error. For this number refer to table 2 or to Annex I.
5. Measure and record the *AGM* (Actual Gross Mass) for each prepackage to be opened for tare determination.  
Now determine the *ATM* (Average Tare Mass)  
-> see Annex B  
This step is only used when non-destructive testing is applied

## Sampling Procedure (3)

6. Measure and record the AGM of the remaining prepackages in the sample and determine the error  $e_i$  for all prepackages.

**Note 1:** In case of non-destructive testing the value  $e_i$  is defined as  $e_i = AGM - CGM$  with  $CGM$  the Calculated Gross Mass given by:

$$CGM = \text{Average Tare Mass} + \text{Nominal Quantity } Q_{nom}$$

**Note 2:** In case of destructive testing  $CGM$  is not required. In this case the individual error is given by:

$$e_i = q_i - Q_{Nom}$$

## Sampling Procedure (3)

- Determine** now if the test results meet the **individual prepackage requirement** for the allowed number of T1 errors  $n_{T1}$ . -> see table 2 or Annex I.

### **This means:**

- identify all prepackages with  $e_i < 0$
- Are there any with  $e_i < -2T$ ? If so, the lot is rejected
- If  $n_{T1}$  exceeds the corresponding number in table 2, then the lot shall be rejected

## Sampling Procedure (3)

8. **Determine** now if the test results meet the average prepackage requirement. **Calculate**  $e_{ave}$  by summing the individual prepackage errors  $e_i$ , with  $e_i = AGM - CGM$   
or  $e_i = q_i - Q_{Nom}$  in the case of destructive testing.

### Important:

- If  $e_{ave}$  is 0 or a positive number, the average rule is satisfied, the lot is accepted.
- If  $e_{ave}$  is  $< 0$ , then the calculation of the standard deviation  $s$  is needed to check whether the condition  $e_{ave}/s + SCF < 0$  is fulfilled for rejection or not.



**Thank you for your  
attention**