LONG-TERM STUDY OF THE PROFICIENCY TESTING SCHEME IN TEXTILES (2001-2012)

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Introduction
The official methods for the quantitative chemical analysis of binary mixtures of textile fibres are an effective tool with which the market surveillance authorities can detect frauds. It is possible to analyze the correlation between the composition determined in the laboratory and that supplied by those responsible for the product. These methods are essential to ensure compliance in the European framework of the Regulation (EU) No 1007/2011. In order to guarantee the technical competence in this field, this proficiency testing scheme was provided by LCG.

Description
A total of 34 laboratories across 13 countries have participated during the last 8 years. Most of the participants come from Europe and Asia, but in recent years an increment of laboratories from North and South America can be observed.

Experimental
EN ISO/IEC 17043 has been considered in the design phase. The samples were analyzed in accordance with parts 3, 4, 7 and 11 of EN ISO 1833. These methods were selected taking into account the mixtures of fibres more commonly found in the market. Statistical analysis of the quantitative results was performed according to ISO 13528.

Conclusions
The number of laboratories submitting satisfactory results is increasing. However, new laboratories with limited experience still report unsatisfactory results. The challenge is to expand the PT scope. This 2014, five more countries are involved, Canada, Italy, Morocco, Serbia and UK, and two more methods are being compared.

Fig. 1: Fraction of laboratories [% with Z-Score | z 2. The results obtained by this family of textile tests were compared. An increment of 8 percentage points, between the lowest percentages of satisfactory Z-Score, was observed. Arrow pointing to the new minimum value reached.

Fig. 2: Score obtained by each laboratory.