Independent Control System for the verification of EPCs

As per regulation 32 of S.L.623.01, the Building and Construction Authority, i.e. the Competent Authority, has designated an independent entity to which the responsibility to implement the independent control system for the purposes of making a random selection of energy performance certificates issued annually and subjecting them to verification.

The Malta Competition and Consumer Affairs Authority is responsible for carrying out the sampling of Energy performance certificates and subjecting them to verification according to the stipulations of Schedule II of S.L. 623.01.

The Energy Performance Certificates subjected to verification are sampled from the number of Energy Performance Certificates (EPCs) registered annually, and that the sample size is a random selection of at least a significant percentage of all energy performance certificates issued annually.

The following equation is used to determine the sample size for monitoring and verification purposes:

$$n = N \times \cfrac{\cfrac{Z^2 \times p \times (1-p)}{e^2}}{\left[N-1 + \cfrac{Z^2 \times p \times (1-p)}{e^2} \right]}$$

Where

N = Population size

n = Sample size

Z = Critical value of the normal distribution at the required confidence level

p = Sample proportion

e = Margin of error

For a confidence level of 0.95   Z=1.96

The sample size is established by taking the total number of EPCs registered in a given year, temporary files not considered, with a confidence level of 95% and a confidence interval of 5. The sampling plan is designed so as the number of EPCs to be audited, are weighted as proportionally as possible to the number of EPCs issued yearly by every assessor.