



EUROPEAN CONFERENCE ON QUALITY IN OFFICIAL STATISTICS 2024 ESTORIL - PORTUGAL





EUROPEAN CONFERENCE ON
QUALITY IN OFFICIAL STATISTICS
2024 ESTORIL - PORTUGAL



Applications of Statistical Methods and (Inter)national Standardization

Maria Polidoro¹, Mafalda Costa²

¹SPE ²CCDR Norte

June 5, 2024



EUROPEAN CONFERENCE ON
QUALITY IN OFFICIAL STATISTICS
2024 ESTORIL - PORTUGAL



Standardization is an activity that, in an organized and recognized way, makes it possible to draw up **standard documents**, intending to increase the levels of quality, safety, efficiency, and interoperability of processes.



Instituto
Português
da  Qualidade



Benefits of using standard documents to reach high quality in Official Statistics

- Resulting from a consensus between experts;
- Based on consolidated results of science, technology, and experience;
- Establish guidelines to guarantee the quality, safety, and efficiency of processes;
- Promote the improvement of systems, reduction of errors, and optimization of resources;
- Promote credibility and trust;
- Approved by a recognised international, regional, and national standardisation body.



International Standardization Structure of ISO/TC 69

← Technical Committees

ISO/TC 69

Applications of statistical methods

127

Published ISO standards*
of which 18 under the direct
responsibility of ISO/TC 69

17

ISO standards under
development*

21

Participating members

34

Observing members

* number includes updates

Reference	Title	Type
ISO/TC 69/SC4	Applications of statistical methods in product and process management	Subcommittee
ISO/TC 69/SC5	Acceptance sampling	Subcommittee
ISO/TC 69/SC6	Measurement methods and results	Subcommittee
ISO/TC 69/SC7	Applications of statistical and related techniques for the implementation of Six Sigma	Subcommittee
ISO/TC 69/SC8	Application of statistical and related methodology for new technology and product development	Subcommittee
ISO/TC 69/CAG	Chair's Advisory Group	Working group
ISO/TC 69/CG1	Bayesian methods Coordination Group	Working group
ISO/TC 69/WG3	Statistical interpretation of data	Working group
ISO/TC 69/WG12	Big data analytics	Working group
ISO/TC 69/WG13	Terminology and symbols	Working group



National Standardization Structure of IPQ/CT 225

IPQ/CT 225

Aplicação de métodos estatísticos

Referência	Título	Tipo
IPQ/CT 225/GT 04	Aplicações de métodos estatísticos na gestão de processos e produto	Grupo Trabalho
IPQ/CT 225/GT 05	Amostragem de aceitação	Grupo Trabalho
IPQ/CT 225/GT 06	Métodos de medição e resultados	Grupo Trabalho
IPQ/CT 225/GT 07	Ferramentas estatísticas para a implementação da metodologia Seis Sigma	Grupo Trabalho
IPQ/CT 225/GT 12	Big data	Grupo Trabalho
IPQ/CT 225/GT 13	Terminologia e símbolos	Grupo Trabalho



EUROPEAN CONFERENCE ON
QUALITY IN OFFICIAL STATISTICS
2024 ESTORIL - PORTUGAL



Participations in new projects at ISO level

ISO/TC 69/SC 8

Application of statistical and related methodology for new technology and product development

[ISO/NP 24108-1](#) - Grid Square Statistics and their Applications –
Part 1: Fundamental Principle of Grid Square Statistics

ISO/TC 69/WG 3

Statistical interpretation of data

[ISO/NP 24592](#) – Rules for rounding of numerical values



Projects under development at national level

Project

GT 04 aNP-ISO 7870-1:2019

Control charts - Part 1: General guidelines

GT 05 Draft national standard document on "Sampling plans for survey"

GT 13 aNP-ISO 3534-1:2006

Statistics - Vocabulary and symbols - Part 1: General statistical terms and terms used in probability

aNP-ISO 3534-2:2006

Statistics - Vocabulary and symbols - Part 2: Applied statistics



EUROPEAN CONFERENCE ON
QUALITY IN OFFICIAL STATISTICS
2024 ESTORIL - PORTUGAL

Conclusions

Standard documents

- Supports innovation approaches for getting quality data;
- Supports new challenges for quality in statistical processes;
- Supports the process to improve the quality of official statistics.



EUROPEAN CONFERENCE ON
QUALITY IN OFFICIAL STATISTICS
2024 ESTORIL - PORTUGAL



Thank You



INSTITUTO NACIONAL DE ESTATÍSTICA
STATISTICS PORTUGAL

eurostat 

The conference is partly financed
by the European Union