General rules for the National phase of the European Statistics Competition, organized by the Statistical Service of Cyprus, the Department of Secondary General Education of the Ministry of Education and Culture and the University of Cyprus

## 1. Objectives

The general objectives of the European Statistics Competition are:

- To promote curiosity and interest in statistics among students.
- To encourage teachers to use new materials for teaching statistics by promoting the use of real data and search for applications of acquired statistical knowledge.
- To show the role of statistics to students and teachers in various aspects of society, making it known as a university study.
- To promote teamwork and collaboration to achieve common goals.

## 2. Participation

Participation in the national phase of the competition is open to all secondary-age students who are studying at any officially recognized educational institution of Cyprus. Students will participate in teams of 2 to 3 persons. All students of the team should belong to the same school and category. Each team should have a teacher from their institution acting as their tutor, who will supervise their work and generally perform a coordinating role and communicate with the organizers.

There can be a maximum of 3 teams from the same institution. There is no limitation on teams supervised by the same tutor. Students are not allowed to participate in more than one team.

The participation of each team will take place in one of two categories:

Category A: Upper Secondary [up to 18 years on 31/12/2017]

Category B: Lower Secondary [up to 16 years on 31/12/2017]

The national phase of the competition will be conducted in Greek.

# 3. Registration

Tutors of teams wishing to participate in the competition must register their teams online at <a href="http://eso2018-cyprus.cystat.gov.cy">http://eso2018-cyprus.cystat.gov.cy</a>. The registration must include all the information requested in the form (name of educational institution, district, group name, category of participation, tutor name, number of students, e-mail address). More information on participants (i.e. students' names, birth dates) will be requested from the organizers at a later stage. Tutors can send their questions by email to <a href="mailto:eso-cy@cystat.mof.gov.cy">eso-cy@cystat.mof.gov.cy</a>.

## 4. Assignments

Participants in the national phase of the competition will take 2 (two) assignments. Only those teams that teams that will be successful in both assignments will be eligible for participation in the European phase of the competition.

The first assignment will be carried out online through a web form and will consist of three tests with closed questions. Each question will have 4 (four) possible answers of which only 1 (one) will be correct.

The second assignment will consist of a presentation and should to be sent as specified hereinafter.

## First assignment:

#### a. Basic knowledge test

The goal is to answer 10 (ten) questions on understanding of basic statistical concepts, interpretation of graphs, basic probability etc.

#### b. Use of official statistical data sources test

The goal is to answer 10 (ten) questions on various statistical data. This will require navigation through the website of the Statistical Service of Cyprus.

#### c. Interpretation of statistical reports test

The goal is to answer 10 (ten) questions on the publication "Women and Men in the EU" published by Eurostat. This publication is also available in Greek.

## Second assignment:

#### Statistical research output

In this assignment the teams will have to prepare a statistical report based on the processing of a statistical dataset that will be provided by the organizers. The dataset will be comprehensive and will allow exploration of different facets of information according to the participants' judgment. The dataset will be in Excel/pdf format.

The results of the assignment will be presented in a PowerPoint presentation or in a similar format and should be printed as a pdf that includes the following sections:

- Objectives of exploitation / analysis.
- Method of work: tools used, techniques of information analysis, etc.
- Results: tables, graphs, results of analysis, etc.
- Conclusions.

An initial slide will be included in the presentation indicating the name of the team, the name of the school, district, and the category in which the team participates. The presentation in pdf format for the second assignment will have a total number of 8 slides maximum (including the initial slide with general information). Such pdf will be named with the exact name of the team, and will be uploaded on the platform within the deadline set (see §9. Calendar).

The jury will only evaluate the printable parts of the pdf file. Elements like links to external contents, embedded videos etc. will not be considered as part of the assignment and therefore will not count for the evaluation.

The analysis will be limited to the specific dataset; no assignment will be accepted if analysis and exploitation of different databases is carried out nor those in which there have been addition of complementary information. There are no restrictions on the software used for the exploitation of the dataset.

## 5. Evaluation Criteria

## First assignment

Each of the three tests of the first assignment will be evaluated in terms of success and failure, taking into account that a correct answer carries a point, an incorrect answer subtracts 0.33 points and a question without answer carries no points.

The result of the first assignment will be obtained by calculating the arithmetic mean, rounded to one decimal place, of the scores obtained in each of the three tests, and multiplying the result by 10, so that the maximum score possible for this assignment will be of 100 points. The ranking of all participating teams will be determined in this way.

The ranking of the teams after the first assignment will be used to select the 10 (ten) teams which will qualify to the second assignment. In addition, the score in the first assignment will be included in the calculation of the final grade with a weight of 25%.

The evaluation of the three tests and the calculation of the final score for the first assignment will be automatically performed by the online system.

The participating teams of the first assignment will receive a participation diploma. The qualified teams to the second assignment will receive a distinction diploma.

## Second assignment

The following aspects will be taken into account when evaluating the pdf file of the second assignment:

- Presentation format (order, clarity of explanation of each section, visual aspects).
- Adequacy of the proposed analysis to the objectives.
- Methodology and analysis (must be in alignment with the educational levels of participants).
- Presentation of the results (balance of tables, graphs, texts, etc.).
- Explanation of findings.

The jury will select the 5 (five) best assignments in each category and will evaluate them with up to 100 points. The score of the second assignment will be included in the calculation of the final grade with a weight of 75%.

#### **Final Score**

The final score for the 5 (five) assignments selected for each category will be obtained as the weighted average, with a maximum of three decimal places, of the scores obtained in the first and second assignments, by the following formula:

Final score = 0.25 \* 1<sup>st</sup> assignment score + 0.75 \* 2<sup>nd</sup> assignment score.

The winning team of each category will be the one that obtains the highest final score. The other 4 (four) teams from each category will be will be declared runners-up of the respective categories.

#### 6. Awards

The winning teams of the national phase, one from the Category A and one from the Category B will receive the following prizes:

- For the tutor: A tablet.
- For each student of the winning team: The amount of €200.
- For the tutor and for each student of the winning team: A number of statistical publications.

In addition, the jury may grant a mention to any team.

In case of having two winning teams with the same tutor, the latter will only receive one prize.

#### 7. Jury

The jury for the national phase will consist of 3 (three) persons, 1 (one) from the Statistical Service of Cyprus, 1 (one) from the Administration of Secondary Education of the Ministry of Education and Culture and 1 (one) from the University of Cyprus.

The jury's decision is final.

The jury may decide not to award any prize.

## 8. Communication of the jury's decision and awards ceremony

The decision of the jury will be announced to the winner and runners-up of each category by e-mail and it will be published on the national competition website and the websites of the organizers on the date indicated by the organizers. The organizers will decide on the date and place for the award ceremony.

#### 9. Calendar

#### Registration period:

20 October – 30 November, 2017.

## First assignment test:

11 January, 2018.

# Publication and communication of the results of the first assignment:

1 February, 2018.

## **Submission of the second assignment:**

15 February – 19 March, 2018.

## Announcement of winning teams:

28 March, 2018.

## 10. Publication of reports

The awarded reports in the second assignment or those received mentions will be announced on the on the national competition website and the websites of the organizers, indicating the names of the teams, the school they come from and their category. The participants will accept these rules and allow the publication of their works. All the material presented at the national phase of the competition will be retained by the organizers.

## 11. European phase of the European Statistics Competition

The European phase of the competition will be conducted in English.

For participation in the European phase of the competition, the jury will use the list to be drawn up by category with the final scores achieved in the national phase (see §5, Final score).

The winning team and 2 (two) runners-up teams with the highest score of each category will be eligible to participate in the European phase of the competition. The organizers of the national phase will contact the teams in due time to inform them about the European phase.

In the event that the proposed teams cannot attend or refuse to participate in the European phase, the jury will communicate with the next runner-up team of the aforementioned list.

# 12. Reservation of rights

The organizers reserve the right to change the terms and conditions of the national phase of the competition, especially the dates that are announced in the calendar, or even cancel the national contest, whenever there is justified cause. Any amendments will be published on the national competition website and the websites of the organizers.

# 13. Acceptance of the rules of the national phase of the European Statistics Competition

Participation in the national phase of the European Statistics Competition assumes the acceptance of all these rules.

Last Update: 27 February 2018

Translation clause

This document has been drafted in the Greek language and translated to the English language for informative purposes. In the event of any translation conflicts or content discrepancy, the Greek version shall prevail.