PROCEDURES & GUIDELINES

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1. Background

1.1 Criteria for entry

The projects should demonstrate that the student(s) has/have undertaken some significant original work.

Examples include an experiment based practical investigation made by the students, original design of an item or process, and survey based investigations involving the first-hand collection and processing of meaningful statistics.

Projects that are not suitable include those reproducing text-book science experiments, or those exclusively quoting second-hand data or information from books and the internet. If, from the information given on the Abstract, the working party deem the proposal to be unsuitable for the competition, they reserve the right to decline the entry.

1.2 Regulations

- Each competitor may only submit one entry to the ESSS, either as an individual or as part of a team.
- If school resources have been used to develop a project, the project has to be submitted to the ESSS before it goes to another competition.
- The language of entry must be one of the working languages of the European Schools.
- Projects which have previously been entered into the ESSS, or a national or international competition such as EUCYS, are not eligible for resubmission. However, a follow-up project of a previously submitted project can be submitted.
- Participation in the ESSS does not exclude participation in subsequent competitions.

- The overall winning project in the senior category will represent the European Schools at the European Union Contest for Young Scientists later in the year.

- Students can only enter a project as exclusively theirs if it is carried out without any contribution from other students.

- Projects must be genuinely extra-curricular, in that they have not formed part of the compulsory components of any European School course, nor been used to establish a student's A or B mark.

- There must be evidence, to the satisfaction of the selection committee, that the project is the original and individual work of the student(s), and that only reasonable levels of guidance have been given.

- Entry forms must be completed with all relevant information. Incomplete entry forms will not be accepted. It is the responsibility of the entrant to inform the ESSS of any change of contact details.

- The judges' decisions are final and no appeals will be heard or correspondence entered into.

- A full list of prize winners will be published on the ESSS website and in any other publications selected by the organisers.

- By entering the competition, entrants agree that any document submitted to the organisers of the competition can appear on public display and be used on the internet and in printed form to promote the competition.

- During the event, students are bound by the rules of the host school. The organisers reserve the right to send home at his or her parent's expense any student breaking these rules.

- By entering, entrants will be deemed to have agreed to be bound by these rules.

- The ESSS reserves the right to revise these rules at any time. Any changes will be communicated.

1.3 The judging process

The judges come from a range of scientific backgrounds, working in both academia and industry, and will be looking for evidence of genuine scientific achievement, taking into account the ages of the entrants.

The judges will be looking for projects that score highly in the following areas. As their projects develop students should consider questions such as:

- *The concept* - what was the motivation behind your project and what were your aims? How original is your project?

- *The process* - how well did you plan and organise your work? What research did you do? What experiments did you undertake? Were you innovative or creative in your approach? What skills did you use?

- *The outcome* - how well did your project achieve its aims? What conclusions did you draw? Personal skills - how well did you deal with any problems or challenges you encountered, individually or as a group?

- *Presentation* - how well is your project communicated? Do you demonstrate understanding and reason clearly? Is your final report of high quality?

- *Significance* - What is the wider impact of your project?

2. Submission of entries

The following are the guidelines to submitting an entry to the ESSS 2019:

- First, pupils should submit their project to the ESSS coordinator of their own school.

- To promote STEM in European schools, science teachers should be ambassadors of science projects in their school.
- The people responsible in each school will decide which projects will go forward to the symposium. All the schools are expected to run a quality check before submitting their projects to the school organising the symposium. Schools are encouraged to aim for high standards of work, and, whenever possible, to organise their own in-house competition in order to select the best entries.

- Each school can submit **3 projects plus 1 reserve.**

- Please send a **separate entry form for each project.**

- **Download the ESSS 2019 entry form**

- **Entry forms must be sent to our coordinator, Mr. Christophe Melzassard christophe.melzassard@teacher.eursc.eu or Mrs Sonia Mohan Sonia.mohan@teacher.eursc.eu**

- Projects will be grouped according to pupils' year level:

    - Junior Projects: Years 1 - 4

    - Senior Projects: Years 5 – 7

- Projects may be submitted by an individual or a group of **maximum 3 students**.

- A project will be judged as a senior project if at least one member of the group is in years 5 – 7.

- **Abstracts and Reports have to be submitted through the platform Microsoft Office 365 (O365).** Each participating school will have rights to edit only on their respective O365 folder. Accredited European schools can submit their project(s) directly to the coordinator of the school organising the symposium.

- **Each participating school needs to provide us with the names of up to 2 people to whom we will give the rights to submit the abstracts and reports on O365. Please**

send these names to our coordinator, Mr. Christophe Melzassard christophe.melzassard@teacher.eursc.eu or Mrs Sonia Mohan Sonia.mohan@teacher.eursc.eu

- **Uploading files on O365.** The following file naming system has to be used when uploading files on O365:
    - Name examples for Abstracts: (SCHOOL CODE-ABSTRACT-NUMBER OR RESERVE-JUNIOR OR SENIOR)
        - LUX-ABSTRACT-1-JUNorSEN
        - LUX-ABSTRACT-2-JUNorSEN
        - LUX-ABSTRACT-3-JUNorSEN
        - LUX-ABSTRACT-RESERVE-JUNorSEN
    - Name examples for Reports: (SCHOOL CODE-REPORT-NUMBER OR RESERVE)
        - LUX-REPORT-1
        - LUX-REPORT-2
        - LUX-REPORT-3
        - LUX-REPORT-RESERVE

EUROPEAN SCHOOL CODE :

EUROPEAN SCHOOL	SCHOOL CODE
Alicante	ALI
Bergen	BER
Bruxelles I - Uccle	UCC
Bruxelles II – Woluwe-saint-lambert	WOL
Bruxelles III - Ixelles	IXL
Bruxelles IV - Laeken	LAE
Francfort-sur-le-Main	FRF
Karlsruhe	KAR
Luxembourg I - Luxembourg	LUX
Luxembourg II - Mamer	MAM
Mol	MOL
Munich	MUN
Varese	VAR

ACCREDITED EUROPEAN SCHOOL CODE :

ACCREDITED EUROPEAN SCHOOL	SCHOOL CODE
European Education Brussels-Argenteuil	EEBA
Brindisi	BRI
Copenhague	COP

Differdange	DIF
Dunshaughlin	DUN
Helsinki	HEL
Heraklion	HER
Manosque	MAN
Parma	PAR
The Hague	HAG
Europäische Schule RheinMain	RHM
Strasbourg	STR
Tallinn	TAL
Europa School UK	CUL

- **The deadline for the submission of entries to the ESSS 2019 is 7th December 2018. By then, schools must send the entry form and the abstract of each project being submitted.**

- **The confirmation of projects acceptance will be communicated to schools by 20th December 2018.**
- **For those projects that have been accepted, the full report must be submitted by 28th February 2019.**

- All students must prepare for the symposium itself:

  - A written report
  - A poster
  - An oral presentation

3. Your Project

Examples of an abstract and of a report and a poster template will be shared with the participating schools through O365. Here are the guidelines that **have to be followed** when preparing these documents.

3.1 Your Abstract

The Abstract will be a **one-page document**. It must include only the following features:

- The Title, Authors and Abstract. A concise summary of your project which includes the purpose, methods, results and conclusion of your work between 100 and 300 words maximum.

- A picture representative of the work carried out, or the results obtained.

- The Abstract has to be a Microsoft Word document and the picture included has to be in JPEG or PNG format

3.2 Your Report

The length of your report will depend on what you have done. There is no minimum or maximum length, but as a scientist you should be concise and very precise in what you say, so don't use more words than you really need. Don't be satisfied with a first draft. Rewrite your report as many times as necessary!

Please follow the guidelines below when preparing your report.

3.2.1 Language

You can write your report in any language but you will need to provide a translation in English, French or German for the judges.

Your writing must be error-free and grammatically correct. Ask somebody to proof read your report for errors.

If you are writing in your second language, have your work checked by a native speaker.

The people who read your report will be scientists or student like you with some understanding of science, so you don't need to over-simplify your report. You should use the correct technical terms as appropriate.

You can write in the first person ('I analysed the samples.' or 'We measured the temperature every hour '…) or in the passive ('The temperature was measured every hour'…)

3.2.2 Format

- **Font:** Calibri 11 point or Times New Roman 11 point.
- **Line spacing:** 1.5 lines.
- **Margins:** 2.5 cm all round (top, bottom, left and right)

3.2.3 Structure

The following is a standard structure for a scientific paper. You are not obliged to follow it, but you are advised to keep your report as clear and scientific as possible.

- **Title**
  Your title should describe what your project is about, e.g. *The effect of temperature on the activity of grasshoppers*.

- **Authors**
  List the students who participated in alphabetical order with their class and school name.

- **Abstract**
  An abstract is a one-paragraph summary of the purpose, methods, results and conclusion of your work in 100-250 words. In the world of science an abstract is always included with a research paper, so that a reader can quickly see whether the paper is relevant for him/her. A scientist working in research does not have time to read every paper that

might be related to his/her work, so reading abstracts saves a lot of time. In our competition the abstract will be published in the programme, and every student and teacher will receive a copy, but your full report will only be read by the judges and anyone who asks for a copy.

- **Introduction**
  This should clearly state your research question. You should describe the purpose of your study or experiment, and any background information that the reader needs to know.

- **Materials and Methods**
  Describe what you did in enough detail that another scientist could repeat it from your description alone. If you have conducted experiments and taken readings, you should describe how you did this, and why. If you have designed an item then you should describe how you approached the design, what experiments you did and how you developed or improved it through the design cycle. Use diagrams if they are helpful, and label them carefully. Include safety considerations and describe help you had from a mentor, parent or other assistant, and any permission you needed to obtain. Do not include your actual data in this section, but you can report preliminary findings that affected that way you conducted the main experiment or design.
  If you used information from the internet or other research groups, you must be very careful to say so. If you use other people's work without acknowledging it, this is plagiarism, and your project will be disqualified from the competition.

- **Results**
  Present your results using tables, graphs, diagrams and descriptions as appropriate. If you have an engineering design project, this is the place to describe the detail of your design.
  If you have made measurements from an experiment, you should describe the precision of your measurements, and if you are using them in calculations, be sure to estimate your errors correctly. (This is especially important for a senior project.)
  Be honest – only present what you really saw or measured, not what you hoped to see!
  Make sure you use correct units and labels. Don't discuss the results here – wait until the next section!

- **Discussion**
  Look at your research question and ask yourself what your results show. If you didn't get the result you expected, discuss why this might have happened. Perhaps you made a dramatic new discovery … or you just didn't get good measurements! What further work would you need to do to improve your experiment or verify your results?

- **Conclusion**
  This should be very short – often only one sentence. It should state clearly what you have found, and should relate to your research question.

- **Acknowledgments**
  List of people who helped you with a brief description of their contribution.

- **References**
  This section should include any books, publications and internet sources you made use of.

- For a book or magazine article please state the author(s) first, then the year of publication, title of the work, publisher and the pages you consulted, e.g. *Baines D. and Gallas F. 2013. Great science experiments. Oxford University Press. p876-913.*

- For an internet site you should try to find the author. If you cannot, then state the name of the site first, then the name of the article, the url and the date you accessed it (internet sites change all the time!), e.g. European Research Council. https://www.erc.europa.eu/. Accessed 28/09/2016.

3.3 Your Poster

The poster should be a visual presentation of your project and should meet the following criteria:

- **Title**
  The title should be the same as in the submitted abstract. Character should be a minimum of 48 point font size. Your name and the name of your school should also be displayed on the poster.

- **Size**
  The maximum size of poster is A0 (841 mm x 1189 mm).

- **Orientation**
  Your poster must be in portrait orientation.

- **Headings**
  32 to 48 font size is recommended for headings.
- **Content**
  24 to 32 font size single spaced is recommended. The text should be concise and easy to read.

In case a project group needs to use their poster during the first round of presentations, please make sure to bring a digital version of the poster.

3.4 Your Presentation

Every participating team must prepare a presentation in either English, French or German.

Finalists will be selected to give their presentations in the plenary session to all the judges, teachers and students. Please follow the guidelines below when preparing your presentation:

- Presentations may not exceed 10 minutes for both junior and senior finalists. You may be stopped after this time.
- It is up to the project members on how to present their work. However the presentation should be clear and structured.