



Schola Europaea / Office of the Secretary-General

Pedagogical Development Unit

Réf.: 2019-01-D-52-en-2

Orig.: EN

Handbook for the European Schools' Science Symposium (ESSS)

Approved by the Joint Teaching Committee at its meeting on 7 and 8 February 2019 in Brussels

Immediate entry into force

Table of contents

1. Introduction.....	3
2. Program.....	3
3. Procedures and Guidelines.....	3
4. Important documents.....	4
5. People involved in the organisation of the ESSS.....	4
6. Jobs and responsibilities of the organising team.....	5
7. Important steps in the organisation of the ESSS.....	7
8. Timeline for the organisation of the ESSS.....	9
9. The ESSS website.....	10
10. Budget.....	12
11. Sponsors.....	13
12. Judging panel.....	14
13. Guest speakers.....	14
14. Excursions and extra-activities.....	15
15. Transport to and from the ESSS venue.....	15
16. Transport during the ESSS event.....	16
17. ESSS booklet.....	16
18. Public relations.....	17
19. ESSS logo.....	17
20. Participation of senior project winner at EUCYS.....	17
21. SharePoint.....	18
22. Organising school.....	18
23. Appendix.....	18

1.Introduction

The European Schools' Science Symposium is an annual competition open to students from years 1 to 7 of Type1 and Accredited European Schools. Individuals or groups of students, guided by a teacher-mentor, are encouraged to explore an area of scientific interest of their choice, not normally covered by the European Schools' science syllabus. Projects fall broadly into two types:

- Scientific Investigations
- Engineering/Design projects

The projects will be showcased during the symposium and judged by teachers and subject experts. Prizes will be awarded for the best projects. Juniors and seniors will be judged separately.

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

2.Program

The program of the symposium will take place over 4 days, starting on Sunday afternoon and ending on Wednesday noon.

A possible timetable of the 4 days ESSS event can be found in *Appendix 1* (example of ESSS2018).

A possible timetable of the Opening & Closing Ceremonies can be found in *Appendix 2* (example of ESSS2018).

3.Procedures and guidelines

The complete procedures and guidelines of the ESSS can be found in *Appendix 3*. This document should be forwarded each year by the ESSS organizers to the coordinators of the ESSS projects of the different schools, either per e-mail or via the Office365 SharePoint.

4.Important documents

The following documents will be needed in preparation and during the symposium and should also be forwarded each year by the ESSS organizers to the coordinators of the ESSS projects of the different schools:

- Registration form (see *Appendix 4*)
- Assessment criteria and Competition rounds (see *Appendix 5*)
- Evaluation sheets for the jury members (see *Appendix 6 and 7*)

5.People involved in the organisation of the ESSS

The list below is an example of the different people that will need to be involved in the organisation of the symposium:

- 1 ESSS coordinator *
- 1 ESSS assistant coordinator
- 8 permanent members of the organizing committee (Science and Non-Science teachers)
- 1 Inspector
- 3 Administrative members (Director, Deputy Director, Executive Assistant)
- 3 Secretaries (secretary of the Director, secretary of the Deputy Director, accountant)
- 2 ICT members of which one webmaster
- 2 Technicians
- 2-3 Music teachers + choir + musicians
- 1-2 Arts teachers + classes
- 1-2 representatives of the parents committee
- 1 responsible of the school canteen
- 1 responsible for taking pictures (could be a student)
- Approximately 12 students that help during the 4 days

* Every school designates an ESSS coordinator. The ESSS coordinator of the organising school receives a discharge.

6. Jobs and responsibilities of the organising team

The list below is an example of the different job and responsibilities that will need to be taken care of by the organising team of the symposium:

Job / Responsibility	Description
ESSS coordinator and assistant coordinator	<ul style="list-style-type: none">• Overview and knowledge of everything about all areas of the symposium• Regular communication with the direction and the organising committee• Central point between working groups• Contact person for all the schools that participate• Collection of all information about participating projects• Control of plans for transport and accommodation• Selection of locations for the event• Set up of official programme• Management of the budget and finding sponsors
Arts department	<ul style="list-style-type: none">• Design of ESSS logo and t-shirts
Music department	<ul style="list-style-type: none">• Repertoire selection for opening and closing ceremonies• Scheduling of rehearsals• Preparation of list of material needed• Communication of necessary information to ESSS coordinator
Accommodation	<ul style="list-style-type: none">• Selection and booking of accommodation• Organisation of bus parking at accommodation• Management of invoice
Transport	<ul style="list-style-type: none">• Gathering of cost estimate from different bus companies• Selection of bus company• Booking of buses• Communication of schedules to bus companies• Management of invoice

Goodies	<ul style="list-style-type: none"> • Gathering of cost estimate from different companies • Ordering of goodies • Management of invoice
Catering	<ul style="list-style-type: none"> • Organisation of meals/coffee breaks • In contact with canteen responsible
Parents comity	<ul style="list-style-type: none"> • Organisation of refreshments during oral presentations • Organising coffee breaks
Communication	<ul style="list-style-type: none"> • Printing of banners, flags, path signalling etc. • Printing of info tables during symposium • Printing of bus info sheets
PR	<ul style="list-style-type: none"> • Invites local radio/TV to symposium
ICT	<ul style="list-style-type: none"> • Update of the ESSS website • Help with ICT issues during the symposium (computers, beamers, projections...)
Photo, video	<ul style="list-style-type: none"> • Taking pictures and videos during symposium
Secretaries	<ul style="list-style-type: none"> • Help with logistics throughout the symposium and the preparation phase • Invitation of guests for opening and closing • Ordering flowers and gifts
Security	<ul style="list-style-type: none"> • Help with orientation • Identification of guests • Explain facilities to teachers etc. if necessary
Finances	<ul style="list-style-type: none"> • Bookkeeping, payments, calculation before the event, procedure of payment...
Technicians / stage management	<ul style="list-style-type: none"> • Preparation of stage, sound & light throughout the symposium • Installation of poster panels

7.Important steps in the organisation of the ESSS

- **18 months before the event:**

The following most important tasks need to be allocated as early as possible:

Task	Responsible	Example
Coordination of all the different tasks	2 persons	Coordinator + Deputy Director
Preparing and updating the website	1 person	ICT unit
Preparing and managing ICT tasks	1 person	ICT unit
Managing the budget	1-2 persons	coordinator / accountant
Finding sponsors	1-2 persons	coordinator / assistant
Inviting VIP	1-2 persons	Director / secretary
Selecting judges for the judging panel	1-2 persons	coordinator + assistant
Selecting scientific guest speakers	1-2 persons	coordinator / science teacher
Contact with schools	1 person	coordinator
Managing registrations	1 person	coordinator / assistant
Selecting projects (preliminary round)	2 persons	coordinator / assistant / teacher
Finding and organising accommodation	1-2 persons	assistant + secretary
Organising meals and coffee breaks	1 person	teacher / parents committee...
Organising transport	1 person	teacher / secretary...
Organising excursions and activities	3 persons	science teacher / other teachers
Designing ESSS logo and t-shirts	1-2 persons	Arts teacher(s) + students
Ordering t-shirts, goodies and badges	1-2 persons	assistant / teacher / secretary
Ordering trophies and preparing certificates	1 person	assistant / teacher / secretary
Preparing the location (chairs, lights, sound, screens, beamers, poster panels...)	1-2 person	Technical unit
Preparing musical interludes for opening and closing ceremonies	2-4 persons	Music teachers + choir + musicians
Ordering flowers and gifts for VIP	1 person	secretary
Taking pictures	1 person	teacher / student
Printing out documents needed during symposium	1 person	secretary
Managing transport logistics of arrival and departures of participants	2-3 persons	coordinator / assistant / secretary
Check with security responsible and guards	1 person	coordinator / assistant

• **6 months before the event (beginning of school year):**

Immediately at the beginning of the school year, an invitation to the ESSS event should be sent out via e-mail by the organisers to the ESSS project coordinators in the different schools. This e-mail contains the link to the O365 SharePoint where the entry forms and all other important documents (e.g. Procedures & Guidelines, Assessment criteria & Competition rounds) can be found.

The list of all the European and Accredited European schools can be found in the Appendix 3 page 5 (to be updated regularly) or on the webpage of the European Schools. The ESSS organisers should contact the ESSS representative for an updated list of schools (Type I & Accredited).

Below are additional tasks that should be allocated 6 months before the event.

- 3 Music teachers responsible of choice of music tracks, choirs and orchestra
- 1 person in charge of managing the registration (coordinator, if necessary with assistant)
- 2 persons in charge of organising the opening and closing ceremony
- 1-2 persons in charge to design the abstract booklet and gather all information that needs to be contained in the booklet (see section 17 on page 15)

• **4 months before the event (before the Christmas holidays):**

Before the Christmas holidays, the entry forms and the project abstracts should all have been received.

Below are additional tasks that should be allocated 4 months before the event.

- 2 persons in charge of reviewing all the abstracts
- 2 technicians to organise light and sound for opening and closing ceremonies
- ICT group in charge of everything linked to ICT issues

• **2 months before the event:**

The final program of opening and closing ceremonies should be finished as well as the organization of poster sessions and oral presentations.

Below are additional tasks that should be allocated 2 months before the event.

- 2 persons in charge of the competitions days (1 for poster session / 1 for oral session)
- 12 pupils from S6-S7 responsible for the poster and oral sessions

IMPORTANT:

All the charges described above should be supervised at a regular basis by the coordinator and his assistant.

8. Timeline for the organisation of the ESSS

Below is an example of the timeline that was followed to prepare ESSS 2017 edition in LUXI (from June 2015 until June 2017). This timeline is of course not compulsory but should give a good overview of the different major steps in the organisation of the ESSS.



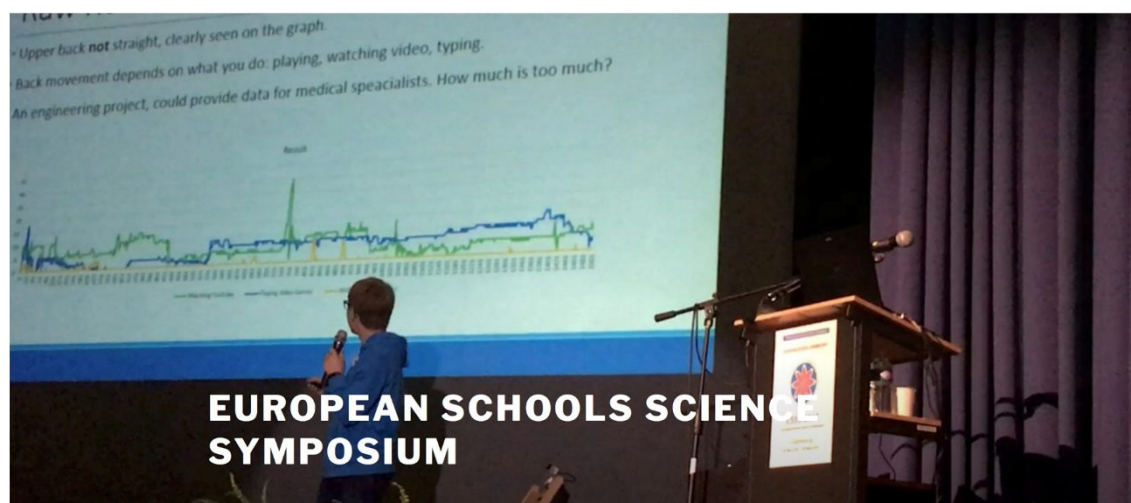
9. The ESSS website

An official ESSS website has been set up so that every school organising an ESSS event should not need to start from scratch in preparing a website.

The official website's address is the following:

esss.wp.eurisc.eu

When entering the website, you will see the following page:



Each year, the ESSS organisers as well as the ICT webmaster of the organising school will receive access to the ESSS website that has been set up using the program WordPress.

At the beginning of the school year, the website has to be updated and all necessary information has to be uploaded.

The organisers of the ESSS from the previous years transfer their information to the topic *Archive* (see explanation below).

On the official ESSS page, the following topics are available and should NOT be changed:

What is ESSS?	Procedures & Guidelines	ESSS "year"	Archive	Contact	EUCYS
---------------	-------------------------	-------------	---------	---------	-------

The content of each topic is explained below.

- **What is ESSS?:**

This topic contains the following small introduction to the ESSS with a short explanation of what the ESSS is as well as a link to the European Union Contest for Young Scientists (EUCYS):

The European School Science Symposium is a competition open to students of the European Schools years 1 to 7 inclusive. Individuals or groups of maximum 3 students, guided by a teacher-mentor, are encouraged to explore an area of scientific interest of their choice, not normally covered by the European Schools' science syllabus.

The projects will be showcased during the symposium and judged by teachers and subject experts. Prizes will be awarded for the best entries. Juniors and seniors will be judged separately.

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.

- **Procedures & Guidelines:**

This topic contains the Procedures & Guidelines that guide the coordinators in the different schools and the participants to organize their participation to the event. The Procedures & Guidelines can be found in Appendix 1 and have to be completed and uploaded to the website for each ESSS edition with the specific information of the school organising the event.

- **ESSS “year”:**

This topic contains the following subtopics:

- Welcome to the ESSS “year”
- Program
- Sponsors
- Projects
- Winners and finalists
- Gallery
- Useful documents

Here one should find the official program of the ESSS event with the day and time schedule showing the major activities without going to much into detail. It should also contain, as soon as available, the official program of the opening and closing ceremonies.

As soon as the participating projects are known, their abstracts should be uploaded to the website.

After the symposium, the winners and finalists should be listed.

In the gallery, pictures of the symposium should be posted.

- **Archive:**

This topic should contain the logos from the previous ESSS events, their general program, the list of winners, selected pictures from the event (e.g. group picture)...

- **Contact:**

This topic should contain the contact details (name, surname, e-mail) of the active ESSS organisers.

10. Budget

The ESSS organising school should foresee a total budget of 40.000 - 50.000 Euros.

An example of expenses and revenues from ESSS2018 can be found in *Appendix 8*.

It should be avoided that students need to participate financially in the participation of the ESSS.

Financial statement:

The budget for ESSS is based on the same financial model and principles as for Eurosport and FAMES. **The host school receives a budget of € 15.000** and this budget can be divided into:

1. Organisational costs
2. Travel costs for the visiting schools

The financing plan relates to:

1) Organisational costs:

- all necessary equipment,
- prizes,
- transport costs on the spot,
- catering (meals, snacks, drinks, etc.) for pupils and teachers,
- expenditure on accommodation
- administrative costs,
- cultural activities,
- etc.

2) Travel costs for participants.

50% of the travel costs of the participating schools will be subsidised proportionally divided between the participating schools.

The other schools, for their part, have to earmark in their budgets a sum corresponding to 50% of the travel costs entailed by their participation in the event. Participating schools are responsible for arranging transport and the related costs.

The rest of the financing has to be done by sponsoring and that can also be a mean of supporting the event if applicable/needed.

11. Sponsors

The ESSS organisers should start early with looking for sponsors. The Budget of the European schools will provide each ESSS organising school with 15.000 Euros. The remaining budget needs to be gathered by the school hosting the event.

Possible sponsors are:

- Ministry of Education
- Parents association
- Local science institutes
- Local town
- ...

12. Judging panel

The judging panel contains 12 judges coming from research and/or education. The different judges should be of different scientific backgrounds (Specialists Sciences, IT, Engineering, Maths ...) and be fluent in at least two of the three working languages (English, French and German).

The judges thus need to be present on Monday and Tuesday morning and should also be invited to the Opening and Closing ceremony.

The judges will need to evaluate:

- the project reports as soon as they have been handed in
- the poster presentations on Monday morning
- the plenary stage presentations on Tuesday morning

The judges will need to evaluate the reports, poster presentations and plenary stage presentations according to the criteria listed in *Appendix 5*.

Each projects will need to be assigned to 2 judges of the judging panel. The judges should be attributed to the different projects with respect to their scientific background and the language in which the report is written.

Each project report needs to be sent to the selected judges via e-mail **at least 2 weeks before the symposium** together with the evaluation sheet (see *Appendix 7*).

The same two judges will need to evaluate the oral poster presentation, using the scoring sheet provided (see *Appendix 6*).

The plenary stage presentations will be evaluated by the full judging panel. Previous scorings will not be discarded for this final round.

Judges should not have any family relationship to the project members which they have to evaluate.

13. Guest speakers

Both for the Opening and the Closing ceremony, guest speakers with a scientific background should be invited. The speakers will be asked to give a presentation about a scientific subject in English.

The language and presentation should be adapted to the level of students.

The time attributed to the scientific presentation is 45 min.

14. Excursions and extra-activities

On Monday and Tuesday afternoon, excursions and scientific activities should be organised. The excursions should allow the students to get to know parts of the history and traditions of the country/city of the organising school

The activities need to have a scientific background and must not consist in shopping sessions or individual visits or activities.

Below are examples of excursions and activities that have been proposed in previous years:

- visits of the local Science centre
- visit of the Natural history museum
- guided historical walk through the city
- visit of local mineral mine
- visit of blast furnace
- Science show
- scientific quiz
- scientific Escape room
- ...

15. Transport to and from the ESSS venue

Each participating school is responsible to organise the transport to and from the ESSS venue!!

50% of the travel costs of the participating schools will be subsidised proportionally divided between the participating schools (from the 15.000€ ES budget).

The other schools, for their part, have to earmark in their budgets a sum corresponding to 50% of the travel costs entailed by their participation in the event.

To reduce fees, closely located schools (e.g. schools in Brussels, in Luxembourg...) should organise if possible a combined transport.

It is VERY IMPORTANT that the participating schools respect the beginning and ending times of the ESSS symposium, as stated in the official program, when organising their transport.

Although the ESSS organisers may help the schools traveling by train or plane in organising their transport from the train station or the airport to the venue by informing them about bus lines and schedules, the participating schools should make sure that their groups arrive on time and that there is enough spare time left in case of a delay in transport.

The ESSS organisers should gather as early as possible all information of transport including arrival and departure times from the participating schools.

16. Transport during the ESSS event

The different transports during the 4 days need to be thoroughly planned.

It is important that the ESSS organisers plan the transports as soon as the program is known and the activities are planned.

Each transport to and from an activity will most probably involve 2-4 buses.

Make sure to inform the bus companies about the correct departure and arrival times as well as the number of participants.

In *Appendix 9* can be found an example of the transport schedule from the ESSS2018.

The organisers may prepare small cards to be displayed in the front of the bus that should allow each participant and the accompanying teachers to be allocated to a specific bus. This will allow an easy and rapid filling of the busses each day and avoid participants to get lost and separated from their accompanying teachers.

For each transport from and to the venue, there should be one responsible of the organising school accompanying the participants present in each bus in order to coordinate the departures and arrivals.

17. ESSS booklet

The ESSS abstracts booklet needs to be prepared in advance by the coordinator and his assistant. The design may be done together with an arts teacher or a student.

In order for the booklet to be ready in time for printing, the following data have to be gathered:

- Welcome note from e.g. the Director or Deputy Director (including picture)
- Note from the ESSS Inspector (including picture)
- Short descriptions of the guest speakers and their presentation (including pictures)
- Short description of the judges (including picture)
- Assessment criteria
- General program of the symposium
- Program of the opening and closing ceremonies
- List of participating schools and titles of projects
- Abstracts of all junior and senior projects
- Acknowledgments from e.g. the Director or Deputy Director (including picture)

The booklet needs to be printed out on paper and will be handed out to every participant, accompanying teacher, jury member, scientific speaker, VIP, Direction etc. during the Opening Ceremony.

An example of the table of contents of the booklet of ESSS 2018 can be found in *Appendix 10*.

18. Public relations

The ESSS symposium should have a good visibility to the national and international education and science community. This visibility is made possible by inviting local press (radio, TV...) as well as Directors from other schools as well as VIP such as Ministers of Education.

Examples of invitation letters for judges and sponsors can be found in *Appendix 11*.

19. ESSS logo

The visibility is be linked to a logo that should be designed each year by the organising school. The logo should refer to the scientific character of the symposium and contain the word "ESSS", the date as well as the city or school name.

The logo should be clear and not too detailed and be printed on t-shirts, gadgets, official ESSS documents and the ESSS booklet.

20. Participation of the senior project winner at EUCYS

The European Contest of Young Scientists (EUCYS) is an EU contest, held each year in a different European city, that was set up to promote the ideals of cooperation and information exchange between young scientists. It gives the students the opportunity to compete with the best of their contemporaries at European level, to meet others with similar abilities and interests and to get guidance from some of the most prominent scientists in Europe.

Further information about EUCYS can be found the EUCYS official website:

https://ec.europa.eu/info/research-and-innovation/funding/funding-opportunities/eucys_en#how

The overall winning project in the senior category will represent the European Schools at the EUCYS later in the same year. The winners of the ESSS should contact the EUCYS coordinator (see procedure on the website) as soon as the ESSS symposium is over.

21. SharePoint

Each year, the organising school will receive access to the SharePoint where all important documents needed for the organisation of the symposium can be found. Access will be given by the Inspector in charge of the ESSS.

22. Organising school

European schools and accredited European school need to apply for hosting the ESSS at the Inspector in charge of the ESSS.

The upcoming ESSS symposia of the next years can be found on the ESSS website.

23. Appendix

Appendix 1: Example of 4-days ESSS timetable (ESSS 2018)

Appendix 2: Example of Opening & Closing Ceremony program (ESSS2018)

Appendix 3: Procedures & Guidelines for the ESSS

Appendix 4: Registration form

Appendix 5: ESSS Assessment Criteria and Competition rounds

Appendix 6: Scoring sheet - Poster presentation

Appendix 7: Scoring sheet - Report work

Appendix 8: Example of budget (ESSS 2018)

Appendix 9: Example of transport schedule (ESSS 2018)

Appendix 10: Example of the ESSS booklet's table of contents (ESSS 2018)

Appendix 11: *Example of invitation letter for judges and sponsors*

Appendix 12: Examples of certificates (ESSS 2018)

All of these documents are available via the O365 SharePoint to the organisers of the ESSS.

APPENDIX 1:

Example of ESSS2018 timetable

Days	Activities
Day 1 (Sunday)	<p>Afternoon:</p> <ul style="list-style-type: none"> - Management of arrivals - Opening ceremony that includes a scientific conference and speeches of the Officials. - Invite press, official representatives, VIP... - Invite students, family and teachers from the organising school
Day 2 (Monday)	<p>Morning:</p> <ul style="list-style-type: none"> - During the Qualification phase, Junior & Senior participants will individually present their projects to a panel of 2 judges. - In parallel, Poster presentations take place and should be open to the whole school community. The participants will vote for the best poster in both the junior and senior category which will be rewarded with the "Student prize" at the end of the symposium. <p>Afternoon:</p> <ul style="list-style-type: none"> - Excursion or extra-symposium activities and/or evening animation for students with local cultural/scientific background (1). - Announcement of the five best Junior and Senior projects.
Day 3 (Tuesday)	<p>Morning:</p> <ul style="list-style-type: none"> - During the final round of the competition, the five best Junior and the five best Senior groups will present their projects to all members of the jury and the participants. At the end of the presentations, the jury members decide on the best Junior and Senior projects. <p>Afternoon:</p> <ul style="list-style-type: none"> - Excursion or extra-symposium activities and/or evening animation for students with local cultural/scientific background (1).
Day 4 (Wednesday)	<p>Morning:</p> <ul style="list-style-type: none"> - Closing ceremony that includes a scientific conference and speeches of the Officials. - Award ceremony to announce the 3 Junior prizes, the 3 Senior prizes, the Junior Student prize and the Senior Student prize. - Invite press, official representatives, VIP... - Invite students from the organising school - Farewell and Departure of groups

(1) One of the excursion or extra-symposium activities proposed during the ESSS should be about a scientific topic or in relation with sciences.

APPENDIX 2:

Example of Opening & Closing Ceremony program



Opening Ceremony ESSS2018

Sunday, 22nd April 2018

17:00 - Musical Introduction

European School Luxembourg II Orchestra (Conductor: Mr. Thomas MEUNIER)

- *Into the Clouds! (Richard L. Saucedo)*
- *Ode to Joy (Ludwig van Beethoven)*

17:15 - Speech of the Director of the European School Luxembourg II Mr. Per FRITHIOFSON

17:25 - Musical interlude

European School Luxembourg II Parents and Friends Choir (Conductor: Mrs. Elisabeth PATAK)

- *Calabaca (Spanish folk song from the 15th century)*

17:30 - Speech of the Secondary School Inspector of European Schools Mr. Max WOLFF

17:40 - Musical interlude

European School Luxembourg II Parents and Friends Choir (Conductor: Mrs. Elisabeth PATAK)

- *Swing the "Prélude" (M.A. Charpentier, Arr. Henry O. Millsby)*

17:45 - Scientific presentation of guest speaker Mr. Andrea ACCOMAZZO:

"The Rosetta mission"

18:30 - Musical closing

European School Luxembourg II Orchestra (Conductor: Mr. Thomas MEUNIER)

- *Pirates of the Caribbean (Klaus Badelt, Arr. Michael Sweeney)*



Closing Ceremony ESSS2018

Wednesday, 25th April 2018

9:00 - Musical Introduction

European School Luxembourg II Chamber music ensemble (Isabel JENKIN (clarinet), Paul KERRACHER (piano), Annika KÜSTER (trombone), Mircea MIHAILA (violin), Luca PELACCIA (flute))

- “The young prince and the young princess” from Scheherazade (Rimski-Korsakov)
- “Djurdjevdan” (Serbian traditional)

9:15 - Speech of the Deputy Director of European School Luxembourg II Mrs. Leene SOEKOV

9:25 - Musical interlude

European School Luxembourg II student Paul KERRACHER (piano)

- Impromptu (Frédéric Chopin)

9:30 - Speech of the Deputy Secretary General of European Schools Mr. Andreas BECKMANN

9:40 - Musical interlude

European School Luxembourg II student Luca PELACCIA (flute)

- Sonata (first movement) (Francis Poulenc)

9:45 - Scientific presentation of guest speaker Dr. Boris LENHARD

“Fish-and-Chips Science: Studying the secrets of life using small fish and large computers”

10:30 - Coffee break

11:00 - AWARD CEREMONY

Distribution of awards to participants and winners by Mrs. Leene SOEKOV

12:00 - Musical closing

European School Luxembourg II Chamber music ensemble (Isabel JENKIN, Paul KERRACHER, Annika KÜSTER, Mircea MIHAILA, Despoina NESTORA, Luca PELACCIA)

- “Count on Me” (Bruno Mars)
- S2FRA class of Mrs Nicole SIGARAY-DIESLER presenting 2 extracts of the musical “Verte”*
- “Mon cœur qui bat” (Calogero Maurici)
- “Le portrait” (Calogero & Gioacchino Maurici) (solo by Théodore Tavernier)

APPENDIX 3:

Procedures & Guidelines for the ESSS

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 may 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 (EUCYS) 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 their entry can appear on public display and be used on the internet and in print 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 assessment criteria and the different steps of the competition are described in Annexe 5.

2. Submission of entries

The following are the guidelines to submitting an entry to the ESSS “year”:

- First, pupils should submit their project to a teacher of their own school which will be their tutor.
- The tutor(s) will forward the project abstracts to the school's ESSS coordinator who will decide (after discussion with tutors if needed) which projects will be submitted to the symposium.
- Each school can submit a maximum **3 projects plus 1 reserve**.
- Please send a **separate entry form for each project**.
- The **ESSS entry form can be downloaded from the Microsoft Office 365 (O365) sharepoint** using the link provided by the ESSS organiser.
- **The ESSS coordinator of each school has to attribute a number to each project.** This number has to match the number of the Abstract, respectively that of the Report. (See below **Uploading files on O365**)
- **Completed entry forms must be uploaded to the O365 sharepoint** using the link provided by the ESSS organiser and respecting the deadline provided.
- 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 O365.** Each participating school will have rights to edit only on their respective O365 folder (e.g. LUX, MAM, MOL, ...).
- **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.

- **Uploading files on O365.** The following file naming system has to be used when uploading files on O365:

- Code for **Entry forms**: SCHOOL CODE-ENTRY-NUMBER OR RESERVE

Example:

- LUX-ENTRY-1
- LUX-ENTRY-2
- LUX-ENTRY-3
- LUX-ENTRY-RESERVE

- Code for **Abstracts**: SCHOOL CODE-ABSTRACT-NUMBER OR RESERVE

Example:

- LUX-ABSTRACT-1
- LUX-ABSTRACT-2
- LUX-ABSTRACT-3
- LUX-ABSTRACT-RESERVE

- Code for **Reports**: SCHOOL CODE-REPORT-NUMBER OR RESERVE

Example:

- LUX-REPORT-1
- LUX-REPORT-2
- LUX-REPORT-3
- LUX-REPORT-RESERVE

- The tables of the following page contain the **codes** for the different schools. If no school codes has been defined yet, the code used for your school during the ESSS will be the first 3 letters of the school city. This list will need to be regularly updated together with the help of the ESSS representative. It is thus important for the ESSS organisers to check for additional schools on the website of the Office of the Secretary-General of the European Schools (<https://www.eurisc.eu/en>).

EUROPEAN SCHOOLS	COUNTRY	SCHOOL CODE
Alicante	Spain	ALI
Bergen N.H. - Petten	Netherlands	BER
Brussels I - Uccle + Berkendael	Belgium	UCC
Brussels II – Woluwé	Belgium	WOL
Brussels III - Ixelles	Belgium	IXL
Brussels IV - Laeken	Belgium	LAE
Frankfurt	Germany	FRA
Karlsruhe	Germany	KAR
Luxembourg I - Luxembourg	Luxembourg	LUX
Luxembourg II - Mamer	Luxembourg	MAM
Mol	Belgium	MOL
Munich	Germany	MUN
Varese	Italy	VAR

ACCREDITED EUROPEAN SCHOOLS	COUNTRY	SCHOOL CODE
Brindisi	Italy	BRI
Brussels - Argenteuil	Belgium	/
Clervaux	Luxembourg	/
Copenhagen	Denmark	COP
Differdange	Luxembourg	DIF
Dunshaughlin	Ireland	DUN
Helsinki	Finland	HEL
Heraklion (Creta)	Greece	HRK
Junglinster	Luxembourg	/
Lille	France	/
Ljubljana	Slovenia	/
Manosque	France	MAN
Mondorf-les Bains	Luxembourg	/
Parma	Italy	PAR
RheinMain	Germany	RHM
Strasbourg	France	STR
Tallinn	Estonia	TAL
The Hague	Netherlands	HAG
United Kingdom	UK	/

- The deadline for the submission of entries to the ESSS “**year**” is “**date**”. By then, schools must have uploaded the entry form and the abstract of each project they want to submit.
- The confirmation of projects acceptance will be communicated to schools by “**date**”.
- For those projects that have been accepted, the full report must be submitted by “**date**”.
- All students must present their findings in 3 formats for the symposium itself:
 - A written report
 - A poster presentation
 - An oral presentation
- Schools are encouraged to aim for **high standards of work**, and to organise their own in-house competition in order to select the best entries. The quality of the project is the fundamental criterium of the qualification of the project.
- The **project tutors** should mainly guide their students in their project and not help them too much while writing their report. They should mainly focus on writing errors and not on the content.

3. Your Project

Below are the guidelines that have to be followed when preparing the documents that have to be prepared.

3.1 Your Abstract

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

- **Title of the project:** A concise summary of your project which should include the purpose and methods and may include results and conclusion of your work between 100 and 300 words maximum
- **Name of author(s), class and school**
- A **picture/graph/table** representative of the work carried out

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

- o **Font:** Calibri 11 point or Times New Roman 11 point.
- o **Line spacing:** 1.5 lines.
- o **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 organised 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 the name of the school.

- **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. The authors' 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.

We ask you to please come with **2 copies** of each poster.

3.4 Your Presentation

Finalists will be selected to present their project in a plenary session in front of a bigger audience, including all the judges, some teachers and students. Every participating team must prepare a presentation in either English, French or German in case they are shortlisted to the final.

Please follow the guidelines below when preparing your presentation:

- Your presentation must be prepared with Microsoft Power Point.
- Your presentation must not exceed 10 minutes. You may be stopped after this time.
- Do not put too much on your slides. Use bullet points and brief headings or phrases. Your audience need to be able to read and listen to you at the same time.
- Don't try to include all your data. Instead give summaries and conclusions.
- Use your slides to aid your oral presentation, not to duplicate it.
- If you include a slide with your acknowledgements, don't read it out.
- Do include a slide with your references, but don't read them out.
- Practice your presentation several times.
- Make sure to bring your presentation on two separate USB sticks.
- Your may arrange to bring a laptop computer with your.

APPENDIX 4:

School logo

ESSS "Year" registration form

ESSS logo

(Deadline: _____)

Please send a separate form for each project (maximum 3 students/group).

PROJECT NUMBER:

☐

1

☐

2

☐

3

☐

RESERVE

Title of project:

.....

School :

Mentor's name(s):

Accompanying teacher's name(s):

Pupils' names and details:

Pupil's name and surname	Class	Male or female M / F	T-shirt size (adult) S/M/L/XL	Nationality	Passport number
1 st					
2 nd					
3 rd					

Special dietary requirements:

1st
2nd
3rd

Health comments (e.g. allergies):

1st
2nd
3rd

Special dietary requirements and health comments for the accompanying teacher(s):

.....
.....
.....

APPENDIX 5:

ESSS Assessment Criteria and Competition rounds

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

Projects should demonstrate that the student(s) has/have undertaken some significant original work. Originality is exceptionally important. Examples must include a practically based experimental investigation carried out by the students, original design of an item or process, or survey based investigations involving the first-hand collection in 2 preliminary rounds to select the five best junior or five best senior projects.

1. PRELIMINARY ROUND

a) 1st preliminary round: Report work

The student/groups will present their written scientific report of their project. The jury members evaluate these papers by giving 50% of the total preliminary points.

Find below the information given to the participants about guidelines for writing their scientific report:

The final report should be a document which describes the investigation carried out by your group. As a suggestion, you can go through the steps in the scientific process including a detailed description of your work and findings.

There is no minimum or maximum length of the report, but the student(s) should be concise and very precise in what they write. The student(s) should not be satisfied with a first draft. The report needs to be written in English, French, or German. The report will be evaluated by the judges according to specific criteria shown on page 2.

SCORING SHEET – REPORT WORK

Name of the jury member: _____

Title of the project: _____

N° of the project: _____

Motivation and Originality: /10

- Motivation and ultimate aim
- Originality

The Process /20

- Planning and organization
- Quality of the research work
- Use of relevant experiments/data/statistics
- Level of innovation and creativity
- Variety of scientific skills used

Data analysis and conclusion /15

- Presentation of data
- Achievement of aims / Answering of research question
- Drawing of conclusion

Significance /5

- Global significance

Short comments on the project if it is applicable:

Total points: **/50 points** Signature of the jury member: _____

b) 2nd preliminary round: Oral presentation

The student/groups will present their scientific project orally to the jury (a panel of judges composed of two experts). The oral presentation could be supported with a slideshow presentation, and/or any technological equipment that the pupils have developed. A poster will be present in the classroom, which students may or may not wish to use in their oral presentation. Each member of the project groups should be able to provide additional information on their project work and answer questions. The oral presentation will be limited to a maximum of 10 minutes and the panel of judges will be invited to ask questions for a maximum of 5 minutes.

40% of the total preliminary points will be attributed by the jury members to the oral presentation itself.

10% of the total preliminary points will be attributed by the jury concerning the readability of the project through the poster.

The criteria for the oral presentation are shown on page 4.

The scores of the written and poster presentations will be added and the highest scored projects (5 from each category) will be qualified to participate in the final round. If the final points are equal, the panel of judges will need make to take a decision.

SCORING SHEET – POSTER PRESENTATION

Name of the jury member: _____

Title of the project: _____

N° of the project: _____

Evaluation of the oral presentation

/40

- How easily did student(s) express themselves? (15)
- Has the use of supports (slideshow, poster and/or equipment) been done clearly and the aim of the project been explained? (10)
- How clear were the answers? (15)

Evaluation of the poster

/10

- How well planned and organized was the poster? (2)
- How well does the poster describe the aim of the project? (4)
- How well were experiments/data/statistics presented? (2)
- How high was the students' level of creativity (2)

Short comments on the project if it is applicable:

Total points: **/50 points** Signature of the jury member: _____

2. FINAL ROUND – PLENARY STAGE PRESENTATION

The best 5 junior and 5 senior projects (selected in the preliminary rounds) will be invited to present their work on stage in front of a bigger audience for a **maximum of 10 minutes**. The audience may be composed of students and teachers, parents of presenters... The jury members will be invited to pose questions for a maximum of 5 minutes after each project presentation.

The stage manager will indicate when the final minute of the presentation/questions-answers starts. The timing must strictly be kept for all participants. Student staff helping in the organisation of the event may be involved in passing the microphones and/or managing the time.

All points and rankings that have been previously attributed are disregarded for the final round.

The jury will attribute rankings to the projects. The projects will be evaluated according to the following criteria:

- **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 organize 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?
- **The presentation** – How well is your project communicated? Do you demonstrate understanding and reason clearly? Is your final report of the high quality?
- **The significance** – What is the wider impact of your project?

Final rankings for each category will be added. In the event that projects have identical rankings, the panel of judges will arbitrate to reach a final common decision.

The three best projects in each category will be attributed the 1st, 2nd or 3rd price. The 4th and 5th places will be rewarded with an 'ESSS finalist certificate'.

The winner of the senior project of ESSS 2018 will participate at the **European Contest for Young Scientists (EUCYS)** and need to be **registered by the EUCYS representative**.

3. PRIZE FOR THE BEST POSTER (election by the audience)

During the poster session, the participants and accompanying teachers can choose their preferred junior or senior project. The choice of best project will be based only on the poster. The choice of method by which the vote is carried out is left to organising school (e.g. electronic vote, voting tickets that will be collected during the event in a voting box...).

The vote will be open on days 2 & 3 during which the posters hang out. Each category (junior and senior) will be awarded a "*Best Poster Prize*". Each project group will need to be present during the morning of day 2 next their poster where they will present their work to the audience, while waiting for their turn for the oral presentation.

APPENDIX 6:

SCORING SHEET – POSTER PRESENTATION

Name of the jury member: _____

Title of the project: _____

N° of the project: _____

Evaluation of the oral presentation

/40

- How easily did student(s) express themselves? (15)
- Has the use of supports (slideshow, poster and/or equipment) been done clearly and the aim of the project been explained? (10)
- How clear were the answers? (15)

Evaluation of the poster

/10

- How well planned and organized was the poster? (2)
- How well does the poster describe the aim of the project? (4)
- How well were experiments/data/statistics presented? (2)
- How high was the students' level of creativity (2)

Short comments on the project if it is applicable:

Total points: **/50 points** Signature of the jury member: _____

APPENDIX 7:

SCORING SHEET – REPORT WORK

Name of the jury member: _____

Title of the project: _____

N° of the project: _____

Motivation and Originality: /10

- Motivation and ultimate aim
- Originality

The Process /20

- Planning and organization
- Quality of the research work
- Use of relevant experiments/data/statistics
- Level of innovation and creativity
- Variety of scientific skills used

Data analysis and conclusion /15

- Presentation of data
- Achievement of aims / Answering of research question
- Drawing of conclusion

Significance /5

- Global significance

Short comments on the project if it is applicable:

Total points: **/50 points** Signature of the jury member: _____

APPENDIX 8:

Example of budget of ESSS 2018 (expenses and revenues)

Expenses	Description	Company
€ 215,00	Gift books for winners	Librairie Ernster
€ 2.600,00	T-shirts and goodies	Kapma
€ 167,71	Medals and trophies	Asign
€ 5.000,00	Advance payment for youth hostel	Luxembourg Youth hostel
€ 20,00	Member card youth hostel	Luxembourg Youth hostel
€ 26,95	Guest book	Librairie Ernster
€ 3.938,60	Meals Eurest	Eurest
€ 6.555,45	Accommodation youth hostel	Luxembourg Youth hostel
€ 400,00	Guided visits	Luxembourg City Tourist Office
€ 1.485,00	Morning bus transfers	Bus company Erny Wewer
€ 3.095,00	Other bus transfers	Bus company Emile Frisch
€ 25,00	Taxi for guest speakers	Benelux Taxi
€ 26,85	Gifts for evening science quizz	n/a
€ 155,00	Tickets for Musée nationale d'histoire naturelle	Musée national d'histoire naturelle
€ 440,00	Visit of Lux Science Center	Luxembourg Science Center
€ 3.440,00	Physikanten Show & Wissenschaftsshow	Physikanten Show & Wissenschaftsshow
€ 655,35	Hotel for guest speakers + Physikantenshow team	Hotel Le Vauban
€ 242,00	Flower decoration for opening and closing ceremonies	Fleurs Wüst
€ 996,61	Dinner on Sunday evening	EUREST
€ 173,96	Airplane ticket for guest speaker	Voyages Flammang
€ 495,21	Basket for VIP	Cactus
€ 120,00	Basket for VIP	Cactus
€ 50,00	Reimbursement staff	Pall Center
€ 30.323,69		

Revenues	Company
€ 20.000,00	CAS
€ 13.000,00	EU Schools
€ 4.000,00	Parents Association
€ 2.500,00	Lux Min of Education
€ 1.000,00	LIST
€ 40.500,00	

APPENDIX 9:

Example of transport schedule (ESSS 2018)

	SOCIÉTÉ	HEURES DE DÉPART	LIEU DE DÉPART	HEURES D'ARRIVÉE	LIEU DE DESTINATION	NOMBRE DE BUS	NOMBRE DE PLACES
DIMANCHE 22/04/2018	Emile Frisch	16h30	...	18h00	→ Findel → EEL2 (17h00) → Findel (17h30) → EEL2 (18h00)	1	50
	Emile Frisch	16h00	Auberge *	16h30	EEL2	3	50 / 50 / 50
	Emile Frisch	19h00	EEL2	19h30	Auberge	3	50 / 50 / 50
LUNDI 23/04/2018	Erny Wewer	8h30	Auberge **	9h00	EEL2	3	120 places au total
	Emile Frisch	14h00	EEL2	19h	Destination Rumelange et Differdange Auberge *	4	50 / 50 / 44 / 44
MARDI 24/04/2018	Erny Wewer	8h30	Auberge **	9h00	EEL2	3	120 places au total
	Emile Frisch	14h00	EEL2		Mnhn + tour de ville (bus à notre disposition)	4	50 / 50 / 44 / 44
		18h00	Mnhn + tour de ville	19h00	EEL2		
	Emile Frisch	22h00	EEL2	22h30	Auberge *	3	50 / 44 / 44
MERCREDI 25/04/2018	Erny Wever	8h10	Auberge **	8h40	EEL2	3	120 places au total
	Emile Frisch	12h30	EEL2	13h00	Auberge *	2	50 / 50 / 44
	Emile Frisch	11h30	EEL2	12h00	Findel (emmène PAR, VAR et MUN)	1	50

* When Emile Frisch : busses will come to bus stop “Pfaffenthal Vauban”, 2663 Luxembourg (see map)

** When Erny Wewer: busses will come to rue Vauban (see map)

APPENDIX 10:

Example of the ESSS booklet's table of contents (ESSS 2018)

European Schools Science Symposium 2018 / Luxembourg II Mamer



TABLE OF CONTENTS

Welcome Note	3
Inspector's Note	4
Guest Speakers	6
Judging Panel	8
Assessment Criteria and Running of the Competition	12
Symposium Program	16
Opening Ceremony	18
Closing Ceremony	19
Junior projects participating from the different schools	20
Senior projects participating from the different schools	21
Junior Projects	22
Senior Projects	50
Acknowledgements	69

APPENDIX 11:

Example of invitation letters (ESSS2017)

Luxembourg, September 23rd , 2016
Réf. : 123456789

Name
Adress

Concerns: Participation as a jury member in the European Schools Science Symposium

Dear X,

In March 2017 the European School of Luxembourg I will be hosting the annual European Schools Science Symposium (ESSS). This extraordinary scientific event, in which participants from all the European Schools come together, stimulates an interest in Science and develops a range of skills, giving pupils a great opportunity for achievement and stretching the scientific capabilities of our most talented.

Essentially, a pupil or group of pupils has to think of an original research idea and carry out the necessary practical investigations, collecting and analyzing data, under the guidance of his teachers. A scientific report is then written up and submitted to the jury for initial judging. The groups with the most promising of the projects have to present their work involving a power point presentation in front of a large audience. The winners of the senior groups go on to represent the European Schools at the EU Contest for Young Scientist (EUCYS).

All projects, senior and junior, are displayed during a poster session. Here, the contestants explain their work to the judges and to everyone else visiting the stand. Throughout the preparation and contest, our students are supported by dedicated teachers who freely give off their spare time.

By hosting the event from 26 to 29 March 2017, we hope to increase pupil awareness of the European Schools Science Symposium, promote scientific choices and prospective science careers, treading further on an established reputation of the European Schools for producing excellent scientists.

We are currently looking for scientists to act as judges and would be delighted to have your presence, as a member of the jury, from Monday, 27th March 2017 to Tuesday, 28th March 2017 until 1.00 p.m.

Please let me know if you are interested in taking part to this event, so that we can discuss further details. I look forward to hearing from your side in the near future.

Thank you for the prospective cooperation

Yours sincerely,

Y
Director

Company name
Adress

Regards : Participation as sponsor in the European Schools' Science Symposium

Dear Madam, Dear Sir,

In March 2017 the European School of Luxembourg I will be hosting the annual European Schools' Science Symposium (ESSS). This extraordinary scientific event, in which participants from all the European Schools come together, stimulates an interest in Science and develops a range of skills, giving pupils a great opportunity for achievement and stretching the scientific capabilities of our most talented.

Essentially, a pupil or group of pupils has to think of an original research idea and carry out the necessary practical investigations, collecting and analyzing data, under the guidance of his teachers. A scientific report is then written up and submitted to the jury for initial judging. The groups with the most promising of the projects have to present their work involving a power point presentation in front of a large audience. The winners of the senior groups go on to represent the European Schools at the EU Contest for Young Scientist (EUCYS).

All projects, senior and junior, are displayed during a poster session. Here, the contestants explain their work to the judges and to everyone else visiting the stand. Throughout the preparation and contest, our students are supported by dedicated teachers who freely give off their spare time.

Since the beginning of the ESSS twelve years ago, the European school of Luxembourg has been very succesful including winning the first prize in both the senior and junior competitions several times. It is worth mentionning that our senior project, representing the school in last year's ESSS, went on to win the Luxembourgish Science Contest, and while representing Luxembourg, it was awarded first prize in the China Adolescent Science Competition, which had a broad international participation. By hosting the event from 26 to 29 March 2017, we hope to increase pupil awareness of the European Schools Science Symposium, promote scientific choices and prospective science careers, treading further on an established reputation of the European Schools for producing excellent scientists.

Although the European Schools contribute to the financing of this event, we also rely on donations from benefactors. We would be thus grateful for financial support from your company to help cover the cost of accomodation, scientific invitees, certificates, prizes and scientific trips for approximately 200 participants.

The details of the symposium's programme are available and will be updated on the ESSS website:
<http://esss.wp.eurisc.eu>

Please let me know if you can help us in any way and do not hesitate to ask for any further information if required. I look forward to hearing from your company in the near future.

Yours sincerely,

Y
Director

APPENDIX 12:

Example of certificate (ESSS2018)

