## Study related to school capacity

## European School - EEB1

Final report
September 2021

pwc

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## Introduction

## 1. Introduction

## The mission was aimed at identifying the maximum capacity of the school both in terms of pupils and staff



Disclaimer: There are various ways in which school capacity can be evaluated. The methodology used to computed school capacity is that approved by the contracting authority as set out in PwC's tender. The outcome of this study results of the most optimal solutions and/or combination of solutions possible to compute school capacity. Additionally, the objective of this study is not to carry out an organisational audit of the school's operations, nor to provide a dynamic vision of school capacity. The school capacity is computed at a specific point in time based on the latest data available and it does not consider any potential evolution of school population, organization and/or infrastructure.

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## 1. Introduction

The mission lasted six months and was carried out according to an integrated approach


The mission was launched on Thursday 4 February 2021 with a kick-off meeting. A school visit was organised on Tuesday 23 February 2021. The end of the mission was marked by the delivery of a first version of the final report on 30 July 2021.

The mission was carried out according to an integrated approach in successive phases

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## Methodology

## 2. Overview of the methodology

## The capacity of the school was studied for 10 well-chosen parameters

| 1. Normal and special classrooms | 2. Sport facilities | 3. Canteen | 4. Recreational areas | 5. Library |
| :---: | :---: | :---: | :---: | :---: |
| $\longrightarrow \mathrm{CB}^{2}$ <br> This parameter includes all classrooms. Special classrooms are ICT, arts and music classrooms, and labs. | Sport facilities include all indoor rooms used to teach Physical Education courses. It does not include outside areas. | This parameter concerns the canteens and cafeterias for pupils and the canteens for teachers. | Both covered and  <br> lucovered areas are <br> included in this <br> parameter.   | This parameter only includes the school libraries. |


| 6. Study rooms and polyvalent rooms | 7. Sanitary rooms | 8. Teachers' rooms | 9. Event halls | 10. Administrative offices |
| :---: | :---: | :---: | :---: | :---: |
| This parameter includes all spaces in which pupils can spend their free-time at school. Polyvalent rooms can be used for different purposes (relaxing, meetings, events, etc.). | Sanitary rooms include the surface of sanitary rooms as well as the number of toilets, urinals and sinks. | All rooms which are reserved for teachers are included in this parameter. | This parameter looks at the rooms which are big enough to welcome a school event (e.g. event hall but also sport halls, canteen, etc.). | This parameter looks at the space available for administrative staffs. |

Other parameters may be taken into consideration (buses, entrances, etc.), but their influence on the effective capacity of the infrastructure is limited because it is external to the school.

## 2. Overview of the methodology

## The calculation model is based on standards and norms, data made available to us by the school, and specific school organizational information.

In order to compute the maximum capacity of the European School, PwC has built a descriptive Excel model (provided in the Annexes of the final report). This model evaluates school capacity based on three inputs: (1) norms and standards applying to educational infrastructure and organisation at different government levels (i.e. European, national, regional) ; (2) data on infrastructure, population and organisation that was provided by the school ; (2) specific organisational structure of European Schools (i.e. language section, size constraints of groups, special education needs).


## 2. Overview of the methodology

## The sources and the scope of norms and standards are various

As mentioned previously, the school capacity was computed using norms and standards applying to educational infrastructure and organisation at different government levels. Three government levels were identified:
(1) Norms implemented by European Schools which relate specifically to the organisation and structure of education;
(2) Norms implemented by the Federal government which provide a framework to ensure workers' well-being;
(3) Norms implemented by the regional governments (Fédération Wallonie-Bruxelles \& Agentschap voor Infrastructuur in het Onderwijs) which relate to infrastructure and organisation in schools.

In addition, several ad-hoc standards concerning pupils' and staff's well-being were used to compute the maximum capacity of the school.

Finally, the school capacity is limited by firefighters limitations (if applicable) to ensure pupils' and staffs' safety and security.

| Different levels of norms |  |
| :---: | :---: |
| Federal Government (Code du Travail) |  |
| Agentschap voor <br> Infrastructur in het <br> Onderwijs (AGION) | Fédération <br> Wallonie-Bruxelles - <br> Direction Générale des <br> Infrastructures (FWB) |
| Suropean <br> Soard of <br> Governors |  |

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|  | European Schools | Federal Government | FWB | AGION | Ad-hoc | Firefighters audit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Normal classrooms | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |
| Special classrooms | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |
| Sport facilities | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |
| Canteen |  |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Recreation areas |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |
| Library |  |  | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |
| Study/polyvalent rooms |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |
| Sanitary |  | $\checkmark$ |  | $\checkmark$ |  |  |
| Teachers room |  | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ |
| Event hall |  | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ |
| Administrative offices |  |  |  | $\checkmark$ |  | $\checkmark$ |

When several norms apply to a single parameter, the model computes a range of the smallest to the largest maximum school capacity.

The smallest maximum capacity is defined by a combination of the most demanding norms ${ }^{1}$ and the largest maximum is defined by a combination of the least demanding norms ${ }^{2}$.
${ }^{1}$ In the model, the combination of most demanding norms is called the upper boundary
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${ }^{2}$ In the model, the combination of least demanding norms is called the lower boundary

## 2. Overview of the methodology

## The sources and the scope of norms and standards are various

As this study could be used by the school as a decision-making tool, a distinction has been made between pedagogical, well-being, and safety and security norms and standards. This ensures that the school can take knowledgeable choices.

These categories of norms will allow to distinguish: (1) school capacity limitations which are due to the non-respect of well-being, safety and security of pupils and staff from (2) school capacity limitations which prevent the school from achieving its primary objective (i.e. pupils' education).

## Pedagogical norms and standards

Pedagogical norms and standards relate to aspects which are essential to ensure the smooth and efficient working of a school and the achievement of its key objective (i.e. pupils' education).

For example, norms and standards on the minimum surface/pupil needed in a classroom, or the maximum number of pupils per class are both pedagogical norms and standards.

## Well-being norms and standards

Well-being norms and standards ensure that the well-being of pupils and staff members is respected.

For example, the time needed to eat at lunch, or the respect of pupils' biological rhythm.

## Safety and security norms and standards

Safety and security norms and standards relate to any recommendation or limitation that has been made by an entity which is accredited to give an opinion on technical aspects regarding security and safety.

For example, firefighters limitations are safety and security norms and standards.

## 2. Overview of the methodology

## Data used to compute school capacity relate to school infrastructure, school organization and school population (staff and pupils)

| $\because$ | School population |
| :--- | :--- |
|  | Number of pupils |
| - | Per grade |
| - | Per language group |
| - | Per type of course (primary and secondary) |
| Staff |  |
| - | Per grade |
| - | Per type |
| - | Per hour of course taught |


| $0 \%$ School organisation |
| :---: |
| School buses ${ }^{1}$ <br> - Time of arrival and departure |
| Canteen: <br> - Lunch time per grade <br> - Number of pupils enrolled at canteen |
| Typical schedules <br> - Per grade |
| Courses <br> - Per type and timing <br> - Pergrade |


|  | Total surface of each building/room per pupil and staff |
| :--- | :--- |
| - | Per type |
| - | Per grade |

[^0]Disclaimer: The objective of the visit was not to conduct an audit of each individual building and room of the school.

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${ }^{1}$ While the capacity of school buses was not directly computed in the model, PwC used the September 2021 arrival and departure time of school buses in order to understand the school organisation and
eptember 2021 compute the total time spent at school per week by pupils of each grade

## 2. Overview of the methodology

The study on school capacity takes into account the specific organisation of European Schools

|  | Language sections | Each European School has a number of language sections. Pupils are assigned to the language section which is their mother tongue. In addition, some pupils are assigned to their second language. These pupils are called SWALS. |
| :---: | :---: | :---: |
| In order to gain an understanding of the specific organisation of European Schools, PwC has met with different stakeholders throughout the mission: <br> (1) A meeting with two representatives of secondary students in Uccle on Tuesday 23 | Class size constraints | European Schools' classes are constrained by a lower and an upper limit of pupils per group. These limits can vary among courses. Subjects taught in a foreign language imply a smaller maximum number of pupils per group |
| (2) A meeting with APEEE services in Uccle on Tuesday 23 February 2021, <br> (3) A meeting with a representative of pedagogical aspects in Berkendael on Tuesday 23 February 2021. | Timetable parallelism | To allow all secondary pupils to choose any options they wish, some courses have to be given at the same time. This parallelism constraint the capacity of classrooms. |
|  | Special education needs | The European Schools provide support to pupils with specific education needs (SEN pupils). There are different levels of support. |



## 3. School capacity overview

## 7 out of 10 parameters present capacity issues

In order to assess the capacity of the school ten parameters are analysed catching different aspects of a school functioning. These analysis show that 7 out of 10 ten parameters experience a capacity issue.


## 3. School capacity overview

## The school currently respects safety and security aspects but not pedagogical and well-being needs of pupils and staff

## Pedagogical school capacity

To ensure the achievement of the school's primary objective (i.e. pupils' education), the most limiting parameter are:

Nursery classrooms and sport facilities which can only host 210 pupils, which represents a gap of 0 pupils

- Primary recreation areas which can only host 851 pupils, which represents a gap of 264 pupils
- Secondary classrooms which can only host 2.041 pupils, which represents a gap of 57 pupils

In total, the school can host $\mathbf{3 . 1 0 2}$ pupils and $\mathbf{3 2 5}$ staff members.

Well-being school capacity
To ensure pupils' and staffs' well-being, the most limiting parameter are covered recreation areas, which can only host 124 nursery pupils, $\mathbf{7 4 3}$ primary pupils and 431 secondary pupils. This gap is mainly caused by the respect of pupils' well-being when weather conditions are unfavourable.

The most limiting parameter for teachers are teachers' rooms which can only host 172 teachers, which represents a gap of 41 teachers. As a result the maximum number of staff members the school could host while ensuring teachers' well-being would be 284 staff members (172 teachers and 112 other staff).

Another important limiting factor for pupils is the canteen which can only host 2.902 pupils.




## Uccle - School capacity through each parameter



## Classrooms

## 4. School capacity through each parameter

### 4.1 Classrooms

| Parameter 1 |
| :--- |
| Definitions |
|  |
| Norms and |
| standards |


| Classrooms |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Classrooms include normal classrooms, special classro <br> - Normal classrooms are classrooms in which no teacher and a black/white board. <br> - Special classrooms are classrooms in which spe classrooms. <br> - Labs are classrooms specifically designed to teac experiments. | ms and labs: <br> ecific material/equipm <br> fic material/equipment <br> science courses (biol | needed to <br> eded to tea <br> chemistry an | ch. These clas <br> Special classro <br> physics). Labs | ms con <br> includ <br> in specia | chairs and <br> T classro <br> quipment | sks for al <br> , arts cla <br> ich allow | pupils and for the <br> rooms and music <br> perform scientific |
| The capacity of classrooms is limited by two different pedagogical norms : | Minimum classroom surface per pupil/staff Pedagogical norm |  |  |  |  |  |  |
|  |  | European Schools | Federal Government | FWB | AGION | Ad-hoc | Lower boundary |
| (pedagogical norm on infrastructure). For pupils, these norms are defined by the two regional | Normal classrooms |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | FWB/AGION |
| entities: FWB \& AGION. For staff, norms are defined by the Federal Government. | Special classrooms |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | AGION |
| (2) The maximum number of pupils per class | Maximum number of pupils per class Pedagogical norm |  |  |  |  |  |  |
| (pedagogical norm on education). In Belgium, these norms are defined by regional entities (FWB). However, European Schools have their |  | European Schools | Federal Government | FWB | AGION | Ad-hoc | Lower boundary |
| own norms on the maximum number of pupils per class. The maximum number pupils per | Normal classrooms | $\checkmark$ |  | $\checkmark$ |  |  | European Schools |
| class varies among courses. | Special classrooms | $\checkmark$ |  | $\checkmark$ |  |  | European Schools |

## 4. School capacity through each parameter

### 4.1 Classrooms



## 4. School capacity through each parameter

### 4.1 Classrooms - Nursery



## 4. School capacity through each parameter

### 4.1 Classrooms - Primary



## 4. School capacity through each parameter

### 4.1 Classrooms - Secondary



## Exceeding population

assumptions
Each classroom can host pupils for a certain period of time during the week. This time period is equal to the maximum time spent in class by secondary pupils. In EEB1 (Uccle site), this time period equal to 37 periods of courses.

The parallelism effect refers to the particular organisation of European School. In order to allow secondary pupils to choose any options they would like to take, some courses must be given at the same time. As a result, there are moments during which some types of classrooms cannot be used because all pupils follow other courses.
Some rooms host groups which are above their capacity. Here are the shares of courses provided in too small classrooms

- Classroom : 0\% (lower limit), 17,2\% (upper limit)
- ICT classroom : 0\% (lower limit), $0 \%$ (upper limit)
- Labs : 4,3\% (lower limit), 37,6\% (upper limit)
- Music classroom : 4,9\% (lower limit), 56,1\% (upper limit)
- Art classroom : 30\% (lower limit), 41,4\% (upper limit)

Currently, the school does not respect norms in terms of well-being and pedagogical aspects for pupils as some groups of secondary pupils are too large regarding the norms and the infrastructure capacity. This is mainly the case for art classrooms which have capacity issues whether the most or least demanding norms is taken into account. Using the least demanding norms, courses given in art classrooms present an exceeding population of $\mathbf{5 7}$ secondary pupils. As a conclusion, there is a capacity issue in secondary classrooms due to a lack of large art classrooms (i.e. art classrooms which are able to host large groups).
Moreover, the utilization rate of each type of classrooms shows that the remaining capacity of normal classrooms and labs is very limited. The parallelism effect might lead to a saturation of secondary classrooms.

## 4. School capacity through each parameter

### 4.1 Classrooms



## 4. School capacity through each parameter

### 4.1 Classrooms

| Parameter 1 | Classrooms |  |  |
| :---: | :---: | :---: | :---: |
|  | 1.1 Classrooms | The objective of this sheet is to summarize all aggregated data, standards and norms and assumptions used to compute school capacity of the parameter. | Semi - automated |
|  | 1.2.1 Nursery <br> Classrooms | The objective of this sheet is to represent all individual data used to compute school capacity of the parameter, as well as assumptions which are directly linked to individual data. On the left-hand side, school infrastructure data (supply) is presented. On the right-hand side, school population data (demand) is presented. | Fully - automated |
|  | 1.2.2 Nursery Classrooms | The objective of this sheet is to compute school capacity of the parameter. Firstly, by ensuring people's safety and security and checking the difference between firefighters limitations and current school population. Secondly, by computing the number of classrooms needed to host the school population while ensuring people's well-being. The smallest limitation results to be the maximum capacity of the school. | Semi - automated |
|  | 1.3.1 Primary Classrooms | The objective of this sheet is to check whether the number of pupils per group of each type of courses complies with the maximum number of pupils per group allowed under European School norms. | Fully - automated |
| Guidelines - <br> Excel model | 1.3.2 Primary Classrooms | The objective of this sheet is to represent all individual data used to compute school capacity of the parameter, as well as assumptions which are directly linked to individual data. On the left-hand side, school infrastructure data (supply) is presented. On the right-hand side, school population data (demand) is presented. | Fully - automated |
|  | 1.3.3 Primary Classrooms | The objective of this sheet is to compute school capacity of the parameter. Firstly, by ensuring people's safety and security and checking the difference between firefighters limitations and current school population. Secondly, by computing the number of classrooms needed to host the school population while ensuring people's well-being. The smallest limitation results to be the maximum capacity of the school. | Not automated |
|  | 1.4.1 Secondary Classrooms | The objective of this sheet is to represent all individual data used to compute school capacity of the parameter, as well as assumptions which are directly linked to individual data. On the left-hand side, school infrastructure data (supply) is presented. On the right-hand side, school population data (demand) is presented. | Fully - automated |
|  | 1.4.2 Secondary Classrooms | The objective of this sheet is to compute school capacity of the parameter. Firstly, by ensuring people's safety and security and checking the difference between firefighters limitations and current school population. Secondly, by computing the number of classrooms needed to host the school population while ensuring people's well-being. The smallest limitation results to be the maximum capacity of the school. | Fully - automated |
|  | 1.4.2 Secondary Classrooms | The objective of this sheet is to compute school capacity of the parameter. The idea behind the computation is to check whether the school has enough classrooms of each size and each type to host all secondary groups. | Fully - automated |
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## Indoor sport facilities

## 4. School capacity through each parameter

### 4.2 Indoor sport facilities



## 4. School capacity through each parameter

### 4.2 Indoor sport facilities



## 4. School capacity through each parameter

### 4.2 Indoor sport facilities - Nursery



## 4. School capacity through each parameter

### 4.2 Indoor sport facilities - Primary



## 4. School capacity through each parameter

### 4.2 Indoor sport facilities - Secondary



## 4. School capacity through each parameter

### 4.2 Indoor sport facilities

| Parameter 2 | Indoor sport facilities |
| :--- | :--- |
| Conclusion | As a conclusion, the school experiences a cap facilities <br> availability of sport facilities. There is no issu <br> It is important to emphasize that this param <br> Education courses. Outdoor facilities are howe <br> courses. |
|  | I Nursery |
| Recommendations <br> and possible <br> solutions* |  |

## 4. School capacity through each parameter

### 4.2 Indoor sport facilities

| Parameter 2 | Indoor sport facilities |  |
| :---: | :---: | :---: |
|  | 2.1 Sport facilities | The objective of this sheet is to summarize all aggregated data, standards and norms and assumptions used to compute school capacity of the parameter. |
| Guidelines Excel model | 2.2.1 Nursery Sport facilities | The objective of this sheet is to represent all individual data used to compute school capacity of the parameter, as well as assumptions which are directly linked to individual data. On the left-hand side, school infrastructure data (supply) is presented. On the right-hand side, school population data (demand) is presented. |
|  | 2.2.2 Nursery Sport facilities | The objective of this sheet is to compute school capacity of the parameter. Firstly, by ensuring people's safety and security and checking the difference between firefighters limitations and current school population. Secondly, by checking whether the school infrastructure respects the minimum surface needed to ensure pupils' well-being. Thirdly, by computing the number of facilities needed to host all groups of pupils. |
|  | 2.3.1 Primary Sport facilities | The objective of this sheet is to represent all individual data used to compute school capacity of the parameter, as well as assumptions which are directly linked to individual data. On the left-hand side, school infrastructure data (supply) is presented. On the right-hand side, school population data (demand) is presented. |
|  | 2.3.2 Primary Sport facilities | The objective of this sheet is to compute school capacity of the parameter. Firstly, by ensuring people's safety and security and checking the difference between firefighters limitations and current school population. Secondly, by checking whether the school infrastructure respects the minimum surface needed to ensure pupils' well-being. Thirdly, by computing the number of facilities needed to host all groups of pupils. |
|  | 2.4.1 Secondary Sport facilities | The objective of this sheet is to represent all individual data used to compute school capacity of the parameter, as well as assumptions which are directly linked to individual data. On the left-hand side, school infrastructure data (supply) is presented. On the right-hand side, school population data (demand) is presented. |
|  | 2.4.2 Secondary Sport facilities | The objective of this sheet is to compute school capacity of the parameter. Firstly, by ensuring people's safety and security and checking the difference between firefighters limitations and current school population. Secondly, by checking whether the school infrastructure respects the minimum surface needed to ensure pupils' well-being. Thirdly, by computing the number of facilities needed to host all groups of pupils. |

Semi - automated

Fully - automated

Semi - automated

Fully - automated

Semi - automated

Fully - automated

Semi - automated


## Canteen

## 4. School capacity through each parameter

### 4.3 Canteen



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${ }^{1}$ COCOF (2016). Enquête sur le temps de midi dans les établissements de l'enseignement fondamental ordinaire de la région bruxelloise. https://sites.uclouvain.be/reso/opac css/doc num.php?explnum id=7083

## 4. School capacity through each parameter

### 4.3 Canteen



[^1]
## 4. School capacity through each parameter

### 4.3 Canteen

| Parameter 3.A | Pupils' canteen |  | Exceeding population |
| :---: | :---: | :---: | :---: |
| Specific assumptions <br> Outcome of the | - The share of the canteen dedicated to self-service is $15 \%$. Therefore, the surface available for pupils to eat is decreased by this amount. <br> - Nursery and P1 pupils eat in a canteen located in the Fabiola building. <br> - P2 to P5 pupils eat either in the canteen located in the Van Houtte building, or in the cafeteria located in the Erasme building. <br> - Secondary pupils eat either in the canteen located in the Van Houtte building, or in one of the two cafeterias (Platon and Van Houtte). |  |  |
|  | Quantitative |  | Qualitative |
|  |  | 521 <br> Gap (\# pupils) | Currently, the school does not respect pupils' well-being in terms of lunch time: <br> - P1, P2 and P4 pupils eat too early (before 11:30am) which goes against their biological rhythm. Moreover, they do not have enough time to eat. <br> - Nursery, P3 and P5 pupils do not have enough time to eat. <br> - Secondary pupils eat to late (after 14:00pm) which goes against their biological rhythm. Moreover, they do not have enough time to eat. <br> In addition, the current organisation of lunch in secondary does not allow the school to organise the necessary number of shifts to provide lunch for all secondary pupils while ensuring well-being. There are only two course periods of 50 minutes included between 11:30 and 14:00 (period 6 and period 7). However, to ensure pupils' well-being a total of 135 minutes of lunch would be needed (i.e. 3 shifts of 45 minutes). <br> The most optimal combination of groups (pupils and staff) and shifts allows to provide lunch in the canteen/cafeteria for $\mathbf{2 . 9 0 2}$ people. If at least $\mathbf{8 3} \%$ of pupils from S6 and S7 eat outside the school, the canteen could accommodate all pupils. <br> It is important to indicate the capacity issue of the canteen is due to a lack of space in the canteen and cafeterias reserved for primary (P2 - P5) and secondary pupils (exceeding population of 580 pupils). Indeed, the canteen located in the Fabiola building can accommodate all nursery and P1 pupils, with a remaining capacity of 59 pupils. The total gap is therefore equal to $\mathbf{5 2 1}$ pupils (i.e. exceeding population of primary and secondary canteens/cafeterias increased by the remaining space in the Fabiola canteen). |
|  | Current population <br> School capacity <br> Gap | 3.423 <br> 2.902 <br> 521 |  |

## 4. School capacity through each parameter

### 4.3 Canteen



## 4. School capacity through each parameter

### 4.3 Canteen



## 4. School capacity through each parameter

### 4.3 Canteen




## Recreation areas

## 4. School capacity through each parameter

### 4.4 Recreation areas

| Parameter 4 |
| :--- |
| Definitions |
|  |
| Norms and |
| standards |

## Recreation areas

Recreation areas include total recreation areas and covered recreation areas:

- Total recreation areas are all external areas which are accessible to pupils during breaks (covered and uncovered). Recreation areas should allow the organisation of diverse activities for short time periods.
- Covered recreation areas are all external spaces which are accessible to pupils and are covered by a roof. Covered recreation areas allow pupils to cover themselves from unfavourable weather conditions. Covered recreation areas can also be replaced by polyvalent rooms located inside the building and which are accessible to pupils during breaks (excl. study rooms, libraries, relaxation rooms and canteens/cafeterias). ${ }^{1}$

| The capacity of recreation areas is limited by two different types of norms : |  | Total recreation areas |  |  |  | Pedagogical norm |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | European Schools | Federal Government | FWB | AGION | Ad-hoc | Lower boundary |
| school's recreation areas (pedagogical norm on infrastructure). These norms are defined by the two regional entities: FWB \& AGION. <br> (2) The minimum variable surface needed for a school's recreation areas (well-being norm on infrastructure). These norms are defined by the two regional entities: FWB \& AGION | Min fixed surface |  |  | $\checkmark$ | $\checkmark$ |  | AGION |
|  | Min variable surface |  |  | $\checkmark$ | $\checkmark$ |  | FWB |
|  |  | Covered recreation areas |  |  |  | Well-being norm |  |
|  |  | European Schools | Federal Government | FWB | AGION | Ad-hoc | Lower boundary |
| Whereas norms on total recreation areas relate to a pedagogical necessity, norms on covered recreation areas concern pupils well-being, | Min fixed surface |  |  | $\checkmark$ | $\checkmark$ |  | AGION |
|  | Min variable surface |  |  | $\checkmark$ | $\checkmark$ |  | AGION |

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## 4. School capacity through each parameter

### 4.4 Recreation areas

| Parameter 4 | Recreation areas |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Key data | The capacity of recreation areas was computed based on data of the Academic year 2020-2021. | Oo School population | O\% School organisation | P: School infrastructure |
|  |  | Number of pupils | School buses - Time of arrival and departure <br> Typical schedules | Aggregate surface per grade of recreation area <br> Aggregate surface per grade of covered recreation area |
| General assumptions | - In order to ensure pupils' well-being, | school must be able to host all pupi | vered recreation areas in case of unfav | weather conditions ${ }^{1}$ |

## 4. School capacity through each parameter

### 4.4 Recreation areas - Nursery



## 4. School capacity through each parameter

### 4.4 Recreation areas - Primary



## 4. School capacity through each parameter

### 4.4 Recreation areas - Secondary



## 4. School capacity through each parameter

### 4.4 Recreation areas

| Parameter 4 | Recreation areas |
| :---: | :---: |
| Conclusion | Recreation areas Covered recreation areas |
|  | As a conclusion, the school experiences pupils does not comply with pedagogical n <br> Nursery and secondary total recreation are |
|  | Nursery |
| Recommendations and possible solutions | Covered recreation areas <br> Two possible solutions to ensure pupils' well-being in when weather conditions are unfavourable would be to: <br> - Extend covered recreation areas <br> - Extend/use indoor spaces (hallways and other similar spaces...) |

## 4. School capacity through each parameter

### 4.4 Recreation areas

| Parameter 4 | Recreation areas |  |  |
| :---: | :---: | :---: | :---: |
|  | 4.1 Recreation areas | The objective of this sheet is to summarize all aggregated data, standards and norms and assumptions used to compute school capacity of the parameter. | Semi - automated |
| Guidelines <br> Excel mode | 4.2 Recreation areas | The objective of this sheet is to represent all individual data used to compute school capacity of the parameter, as well as assumptions which are directly linked to individual data. | Fully - automated |
|  | 4.3 Recreation areas | The objective of this sheet is to compute school capacity of the parameter. Firstly, by ensuring people's safety and security and checking the difference between firefighters limitations and current school population. Secondly, by computing the number of people the school could host with current infrastructure while maintaining well-being. | Fully - automated |



## Library

## 4. School capacity through each parameter

### 4.5 Library

| Parameter 5 | Library |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Libraries are rooms in which all school books are placed. It should provide the following infrastructures: places to sit and work quietly, spaces to meet with a group, book shelves and a front desk. |  |  |  |  |  |  |  |
| Norms and standards | The capacity of library is limited by two different pedagogical norms : |  | Minimum library surface |  |  |  | Pedagogical norm |  |
|  |  |  | European Schools | Federal Government | FWB | AGION | Ad-hoc | Lower boundary |
|  | (1) The minimum surface required in a library for facilities and for pupil (pedagogical norm). In | Surface per pupil |  |  |  | $\checkmark$ |  | AGION |
|  | Belgium, these norms are defined by regional entities (AGION). <br> (2) The minimum surface needed per pupil/staff (infrastructural norm). For pupils, these norms are defined by the two regional entities: Fédération Wallonie - Bruxelles (FWB) \& Agentschap Voor Infrastructuur in het Onderwijs (AGION). | Surface for facilities |  |  |  | $\checkmark$ |  | AGION |
|  |  |  | Minimum surface per pupil (at the same time) |  |  |  | Pedagogical norm |  |
|  |  |  | European Schools | Federal Government | FWB | AGION | Ad-hoc | Lower boundary |
|  |  | Classrooms |  |  | $\checkmark$ | $\checkmark$ |  | FWB/AGION |

## 4. School capacity through each parameter

### 4.5 Library



## 4. School capacity through each parameter

### 4.5 Library - Primary

| Parameter 5.A | Library - Primary |  |
| :---: | :---: | :---: |
| Specific assumptions | - Pupils might use the library during lunch or courses but peak-times are during breaks. Therefore use of library during breaks is analysed to assess capacity. |  |
|  | Quantitative | Qualitative |
| Outcome of the analysis |  <br> Pupils allowed to be at the same time in the library | The school infrastructure is sufficient to provide space in the library for pupils wishing to spend their free-time in the library while maintaining safety, security and well-being. This conclusion is based on the following statements: <br> - Going to library is an alternative to recreational times. Primary pupils tend to spend more time in the recreational areas during breaks. <br> - It is not common that pupils spend one hour of their weekly recreation time in the library. <br> If the demand for using the library is linear amongst primary pupils, $\mathbf{9 2 , 5 \%}$ of primary pupils could spend one hour of their weekly recreation time in the library. |

## 4. School capacity through each parameter

### 4.5 Library - Secondary



## 4. School capacity through each parameter

### 4.5 Library



## 4. School capacity through each parameter

### 4.5 Library




Study rooms and polyvalent rooms

## 4. School capacity through each parameter

### 4.6 Study rooms and polyvalent rooms

| Parameter 6 | Study rooms and polyvalent rooms |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Definitions | Study rooms are spaces which can be used by pupils in order to study. In the case of secondary pupils, study rooms are spaces in which pupils can spend their free-time. <br> Polyvalent rooms welcome different type of activities such as extra-curricular activities, inside games, occasional events. In the case of secondary pupils, polyvalent rooms are spaces in which pupils can spend their free-time. |  |  |  |  |  |  |  |
| Norms and standards | The capacity of study rooms and polyvalent rooms is limited by different norms : |  | Minimum surface for polyvalent rooms |  |  |  | Pedagogical norm |  |
|  |  |  | European Schools | Federal Government | FWB | AGION | Ad-hoc | Lower boundary |
|  | (1) The minimum surface required in polyvalent rooms for pupils (pedagogical norm). In | Surface per pupil |  |  |  | $\checkmark$ |  | AGION |
|  | Belgium, these norms are defined by regional entities (AGION). | Minimum surface per pupil (at the same time) |  |  |  |  | Pedagogical norm |  |
|  | entities (AGION). <br> (2) The minimum surface needed per pupil/staff (infrastructural norm). For pupils, these norms are defined by the two regional entities: Fédération Wallonie - Bruxelles (FWB) \& Agentschap Voor Infrastructuur in het Onderwijs (AGION). For the staff, the norm is defined at the |  | European Schools | Federal Government | FWB | AGION | Ad-hoc | Lower boundary |
|  |  | Classrooms norms |  |  | $\checkmark$ | $\checkmark$ |  | FWB/AGION |
|  |  |  | Minimum surface per worker |  |  |  | Well-being norm |  |
|  |  |  | European Schools | Federal Government | FWB | AGION | Ad-hoc | Lower boundary |
| Study related to school capacity - EEB1 - Final reportPwC |  | Surface per staff |  | $\checkmark$ |  |  |  | Codex |
|  |  |  |  |  |  |  | 56 |  |

## 4. School capacity through each parameter

### 4.6 Study rooms and polyvalent rooms

| Parameter 6 | Study rooms and polyvalent rooms |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | The capacity of study and polyvalent rooms was computed based on data of the Academic year 2020-2021. | Oo School population | O\% School organisation | 1: School infrastructure |
| Key data |  | Number of pupils <br> Number of teachers | Typical schedules | Surface of study rooms and polyvalent rooms |
| General assumptions | - The norms and standards concerning polyvalent rooms (in $\mathrm{m}^{2} /$ pupil) takes into account that all pupils are never at the same time in the library. The minimum surface needed is computed on the total number of pupils ( $0.5 \mathrm{~m}^{2} /$ pupil). <br> - The number of pupils that can be hosted at the same time in each polyvalent room is computed by using norms and standards of classrooms. <br> - The surface of study and polyvalent rooms is decreased to take into account the space needed for surveillance staff. We assume there is one surveillance staff per room. <br> - Nursery and primary pupils do not use the study rooms and polyvalent rooms as they do not study. <br> - Secondary pupils have between 0 and 6 hours of free-time per week. Three different scenarios of the percentage of pupils per hours of free-time will be evaluated. <br> $>$ Scenario 1 : Normal distribution <br> $>$ Scenario 2 : Pedagogical optimisation of the number of free-time periods per week <br> > Scenario 3 : Worst-case distribution (all pupils have the maximum amount of free-time) |  |  |  |

## 4. School capacity through each parameter

### 4.6 Study rooms and polyvalent rooms - Secondary



## 4. School capacity through each parameter

### 4.6 Study rooms and polyvalent rooms



## 4. School capacity through each parameter

### 4.6 Study rooms and polyvalent rooms




## Sanitary rooms

## 4. School capacity through each parameter

### 4.7 Sanitary rooms

| Parameter 7 | Sanitary rooms |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Definitions | Sanitary facilities refer to the infrastructure dedicated to toilets. |  |  |  |  |  |  |  |
| Norms and standards | The capacity of sanitary is limited by two different norms |  | Minimum surface for sanitary facilities |  |  |  | Well-being norm |  |
|  |  |  | European Schools | Federal Government | FWB | AGION | Ad-hoc | Lower boundary |
|  | The minimum surface required in sanitary for pupils (well-being norm). In Belgium, these | Surface per pupil |  |  |  | $\checkmark$ |  | AGION |
|  | (2) The minimum supply of facilities (toilets, urinals, sinks) per pupil/staff (well-being norm). For pupils, these norms are defined by the regional entities: Agentschap Voor Infrastructuur in het Onderwijs (AGION). For the staff, the norm is defined at the federal level (Codex). | Minimum supply of facilities |  |  |  |  | Well-being norm |  |
|  |  |  | European Schools | Federal Government | FWB | AGION | Ad-hoc | Lower boundary |
|  |  | Number of toilets/sinks per pupil/staff |  | $\checkmark$ |  | $\checkmark$ |  | AGION/Codex |

## 4. School capacity through each parameter

### 4.7 Sanitary rooms



## 4. School capacity through each parameter

### 4.7 Sanitary rooms



## 4. School capacity through each parameter

### 4.7 Sanitary rooms

| Sanitary analysis - Nursery |  | Sanitary analysis - Primary |  | Sanitary analysis - Secondary |  | Sanitary analysis - Staff |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \# toilets provided | 24 | \# toilets provided | 107 | \# toilets provided | 103 | \# toilets provided | 49 |
| \# toilets required | 14 | \# toilets required | 65 | \# toilets required | 132 | \# toilets required | 27 |
| Gap | 10 | Gap | 32 | Gap | 29 | Gap | 22 |

This analysis is based on the time sanitary are available during breaks. To be understood, as : "Toilets can provide X minutes per pupil per day during breaks"


## 4. School capacity through each parameter

### 4.7 Sanitary rooms



## 4. School capacity through each parameter

### 4.7 Sanitary rooms




## Teachers' rooms

## 4. School capacity through each parameter

### 4.8 Teachers' rooms

| Parameter 8 | Teachers' rooms |
| :---: | :---: |
| Definitions | Teachers rooms are rooms exclusively reserved for the teach preparing courses and stimulating exchanges between teach |

## 4. School capacity through each parameter

### 4.8 Teachers' rooms



## 4. School capacity through each parameter

### 4.8 Teachers' rooms - Nursery



## 4. School capacity through each parameter

### 4.8 Teachers' rooms - Primary \& Secondary



## 4. School capacity through each parameter

### 4.8 Teachers rooms



## 4. School capacity through each parameter

### 4.8 Teachers' rooms

| Parameter 8 | Teachers' rooms |  |  |
| :---: | :---: | :---: | :---: |
|  | 8.1 Teachers rooms | The objective of this sheet is to summarize all aggregated data, standards and norms and assumptions used to compute school capacity of the parameter. | Semi - automated |
| Guidelines - <br> Excel model | 8.2 Teachers rooms | The objective of this sheet is to represent all individual data used to compute school capacity of the parameter, as well as assumptions which are directly linked to individual data. | Fully - automated |
|  | 8.3 Teachers rooms | The objective of this sheet is to compute school capacity of the parameter. Firstly, by ensuring people's safety and security and checking the difference between firefighters limitations and current school population. Secondly, by computing the number of people the school could host with current infrastructure while maintaining well-being. | Fully - automated |



## Event halls

## 4. School capacity through each parameter

### 4.9 Event halls



## 4. School capacity through each parameter

### 4.9 Event halls

| Parameter 9 | Event halls |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Key data | The capacity of event halls was computed based on data of the Academic year 2020 2021. | Oo School population | O\% School organisation | : School infrastructure |
|  |  | Number of pupils <br> Number of teachers and assistants | Typical use of event halls | Surface of rooms which can be used as an event hall |
| General assumptions | - Event halls should provide enough secondary). <br> - Each pupil should be allowed to bring <br> - A particular event cannot be split into | pace to give the opportunity to the sch <br> wo relatives/parents with him. wo different sites/rooms. Therefore, we | to organize at least one event for eat <br> only consider the room which can host | evel of each grade (nursery, primary and gest number of people. |

## 4. School capacity through each parameter

### 4.9 Event halls

| Parameter 9 | Event halls |  |  | Exceeding population |
| :---: | :---: | :---: | :---: | :---: |
| Specific assumptions | The capacity of event halls does not restrict school capacity. It only gives an appreciation of the ability of the school to organise school events. Four scenarios are evaluated : <br> (1) Scenario 1: school event regrouping one school grade* (incl. teachers) <br> (2) Scenario 2 : school event regrouping one school level (incl. teachers) <br> (3) Scenario 3 : school event regrouping one school level, with 2 relatives per pupil (incl. teachers) <br> (4) Scenario 4 : school event regrouping one school level, with 1 relative per pupil (incl. teachers) <br> The room which can accommodate the largest number of pupils is the student canteen located in the Van Houtte building. |  |  |  |
| Outcome of the analysis | Qualitative |  |  |  |
|  | Scenario 1 | Scenario 2 | Scenario 3 | Scenario 4 |
|  |  |  |  |  |
|  |  |  |  |  |

## 4. School capacity through each parameter

### 4.9 Event halls



## 4. School capacity through each parameter

### 4.9 Event halls

| Parameter 9 | Event halls |  |  |
| :---: | :---: | :---: | :---: |
|  | 9.1 Event halls | The objective of this sheet is to summarize all aggregated data, standards and norms and assumptions used to compute school capacity of the parameter. | Semi - automated |
| Guidelines - <br> Excel model | 9.2 Event halls | The objective of this sheet is to represent all individual data used to compute school capacity of the parameter, as well as assumptions which are directly linked to individual data. | Fully - automated |
|  | 9.3 Event halls | The objective of this sheet is to compute school capacity of the parameter. The capacity of event halls however does not restrict school capacity. It only gives an appreciation of the ability of the school to organise school events. | Fully - automated |



## Administrative offices

## 4. School capacity through each parameter

### 4.10 Administrative offices



## 4. School capacity through each parameter

### 4.10 Administrative offices



## 4. School capacity through each parameter

### 4.10 Administrative offices



## 4. School capacity through each parameter

### 4.10 Administrative offices

| Parameter 10 | Administrative offices |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Pupils |  |  |  | bers |  |
|  | Administrative offices | Nursery | Primary | Secondary | Nursery | Primary | Secondary | Other |
| ConclusionAs a conclusion, the school globally does not experience a capacity issue regarding administrative of |  |  |  |  |  |  |  |  |
|  | Nursery | Prima |  |  |  |  | Sta |  |
| Recommendations and possible solutions |  |  |  |  |  |  |  |  |
| Study related to school capacity - EEB1 - Final report September 2021 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |

## 4. School capacity through each parameter

### 4.10 Administrative offices

| Parameter 10 | Administrative offices |  |  |
| :---: | :---: | :---: | :---: |
|  | 10.1 <br> Administrative offices | The objective of this sheet is to summarize all aggregated data, standards and norms and assumptions used to compute school capacity of the parameter. | Semi - automated |
| Guidelines - <br> Excel model | 10.2 <br> Administrative offices | The objective of this sheet is to represent all individual data used to compute school capacity of the parameter, as well as assumptions which are directly linked to individual data. | Semi - automated |
|  | 10.3 <br> Administrative offices | The objective of this sheet is to compute school capacity of the parameter. Firstly, by ensuring people's safety and security and checking the difference between firefighters limitations and current school population. Secondly, by computing the number of people the school could host with current infrastructure while maintaining well-being. | Fully - automated |



## 5. Conclusion and recommendations

Pedagogical school capacity is limited by nursery classrooms, primary recreation areas and secondary classrooms whereas well-being school capacity is limited by covered recreation areas and teachers' rooms
Maximum school capacity to ensure the school's
primary objective

| Pupils | \begin{tabular}{l\|l|}
\hline
\end{tabular} | Pupils | 1.298 people |
| :---: | :---: | :---: | :---: |
| Staff | 325 people | Staff | 284 people |

## 5. Conclusion and recommendations

Several recommendations allow to partially solve pedagogical and well-being school capacity issues

Recommendations


Event hall: Renting an event hall outside the school infrastructure for large events requiring to invite relatives or to gather several grades.

## Berkendael School capacity overview

## 6. School capacity overview

## 6 out of 10 parameters present capacity issues

In order to assess the capacity of the school ten parameters are analysed catching different aspects of a school functioning. These analysis show that 6 out of 10 ten parameters experience a capacity issue.


## 6. School capacity overview

## The school currently respects safety and security aspects but not pedagogical and well-being needs of pupils and staff

## Pedagogical school capacity

To ensure the achievement of the school's primary objective (i.e. pupils' education), the most limiting parameter are:

Nursery classrooms which can only host 209 pupils, which represents a gap of 21 pupils

- Primary classrooms which can host 768 pupils, which represents a gap of 118 pupils

In total, the school can host 977 pupils and 119 staff members.

## Well-being school capacity

To ensure pupils' well-being, the most limiting parameter are :

- Nursery covered recreation areas, which can only host 116 nursery pupils.This gap is mainly caused by the respect of pupils' well-being when weather conditions are unfavourable.
- Primary indoor sport facilities, which can only host 490 primary pupils. This gap is mainly caused by the lack of space in indoor sport facilities.

The most limiting parameter for staff is the canteen which is nonexistent and can therefore not host any staff member.

|  |
| :--- |
| Classrooms |
| Sport facilities |
| Canteen |
| Recreation areas |
| Covered recreation areas |
| Library |
| Study and polyvalent rooms |
| Sanitary |
| Teachers' rooms |
| Event hall |
| Administrative offices |




Study related to school capacity - EEB1 - Final report

## Berkendael School capacity through each parameter

## 7 <br> 1 <br> Classrooms

## 7. School capacity through each parameter

### 7.1 Classrooms

Parameter 1<br>Definitions<br>Norms and<br>standards

| Classrooms |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Classrooms include normal classrooms, special classro <br> - Normal classrooms are classrooms in which no teacher and a black/white board. <br> - Special classrooms are classrooms in which spe classrooms. <br> - Labs are classrooms specifically designed to teac experiments. | ns and labs: <br> cific material/equipme <br> c material/equipment <br> science courses (biolo | needed to eded to tea <br> chemistry and | ch. These clas <br> Special classro <br> physics). Labs | ns con <br> incluc <br> in spec | chairs and <br> T classro <br> quipment | esks for <br> s, arts cla <br> ich allow | pupils and for the rooms and music perform scientific |
| The capacity of classrooms is limited by two different pedagogical norms : | Minimum classroom surface per pupil/staff |  |  |  |  |  |  |
|  |  | European Schools | Federal Government | FWB | AGION | Ad-hoc | Lower boundary |
| (pedagogical norm on infrastructure). For pupils, these norms are defined by the two regional | Normal classrooms |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | FWB/AGION |
| entities: FWB \& AGION. For staff, norms are defined by the Federal Government. | Special classrooms |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | AGION |
| (2) The maximum number of pupils per class | Maximum number of pupils per class Pedagogical norm |  |  |  |  |  |  |
| (pedagogical norm on education). In Belgium, these norms are defined by regional entities (FWB). However, European Schools have their |  | European Schools | Federal Government | FWB | AGION | Ad-hoc | Lower boundary |
| own norms on the maximum number of pupils per class. The maximum number pupils per | Normal classrooms | $\checkmark$ |  | $\checkmark$ |  |  | European Schools |
| class varies among courses. | Special classrooms | $\checkmark$ |  | $\checkmark$ |  |  | European Schools |

## 7. School capacity through each parameter

### 7.1 Classrooms



## 7. School capacity through each parameter

### 7.1 Classrooms - Nursery



## 7. School capacity through each parameter

### 7.1 Classrooms - Primary

| Parameter 1.B | Primary classrooms |  | Remaining capacity |
| :---: | :---: | :---: | :---: |
| Specific assumptions | Language 2 classrooms and religion/ethics classrooms are considered to be 'normal classrooms' (i.e. classrooms in which no specific equipment/material is needed to teach) (see definition in slide 18). <br> Each classroom can host pupils for a certain period of time during the week. This time period is equal to the maximum time spent at school per week by primary pupils, subtracted by recreation time. In EEB1 (Berkendael site), this time period equal to 24 hours and 45 minutes. <br> Pupils have a limited of hours per week taught in their first language. For P1-P2 this equals to 16 hours and 50 minutes and for P3-P5 this equals to 17 hours. |  |  |
| Outcome of the analysis | Quantitative |  | Qualitative |
|  |  | $-118$ <br> Gap (\# pupils) | The study results show that all primary groups do not comply with European Schools' norms on the maximum number of pupils per course. There is one group in which the number of pupils exceeds the maximum number of pupils according to European Schools' norms: <br> - One religion/ethics group of 29 pupils (instead of the maximum of 28 pupils/class in language 2 courses); <br> There is no issue of capacity when using the least demanding norms. All groups of pupils fit in the school's infrastructure. <br> Since religion/moral courses are the most classroom-consuming courses for both P1-P2 and P3-P5, we take the combination of courses that provides the lowest number remaining capacity. This allows for all course |
|  | Current population | 650 | combinations to be implemented. The remaining capacity is 118 pupils. |
|  | School capacity | 768 | It is important to note that the school has an important amount of small classrooms. In fact, around $40 \%$ of the school classrooms can host less than 26 pupils. |
|  | Gap | 118 |  |

## 7. School capacity through each parameter

### 7.1 Classrooms


As a conclusion, the school experiences a capacity issue linked to nursery classrooms. The capacity issue for nursery pupils is due to a lack of large classrooms.
The school does not experience any capacity issue linked to primary classrooms.

| Nursery | Primary | Staff |
| :---: | :---: | :---: |
| Two possible solutions would be: <br> - Building extension or new construction. This is only possible under certain conditions: authorization of the authority responsible for the school's buildings, available surface on school site and the buildings' organization allows it... <br> - Use primary classrooms which can host large groups of students. However, this is only a partial solution as the number of remaining large primary classrooms is limited. |  | 1 |

## 7. School capacity through each parameter

### 7.1 Classrooms

| Parameter 1 | Classrooms |  |  |
| :---: | :---: | :---: | :---: |
|  | 1.1 Classrooms | The objective of this sheet is to summarize all aggregated data, standards and norms and assumptions used to compute school capacity of the parameter. | Semi - automated |
|  | 1.2.1 Nursery Classrooms | The objective of this sheet is to represent all individual data used to compute school capacity of the parameter, as well as assumptions which are directly linked to individual data. On the left-hand side, school infrastructure data (supply) is presented. On the right-hand side, school population data (demand) is presented. | Fully - automated |
| Guidelines - <br> Excel model | 1.2.2 Nursery Classrooms | The objective of this sheet is to compute school capacity of the parameter. Firstly, by ensuring people's safety and security and checking the difference between firefighters limitations and current school population. Secondly, by computing the number of classrooms needed to host the school population while ensuring people's well-being. The smallest limitation results to be the maximum capacity of the school. | Semi - automated |
|  | 1.3.1 Primary Classrooms | The objective of this sheet is to check whether the number of pupils per group of each type of courses complies with the maximum number of pupils per group allowed under European School norms. | Fully - automated |
|  | 1.3.2 Primary Classrooms | The objective of this sheet is to represent all individual data used to compute school capacity of the parameter, as well as assumptions which are directly linked to individual data. On the left-hand side, school infrastructure data (supply) is presented. On the right-hand side, school population data (demand) is presented. | Fully - automated |
|  | 1.3.3 Primary Classrooms | The objective of this sheet is to compute school capacity of the parameter. Firstly, by ensuring people's safety and security and checking the difference between firefighters limitations and current school population. Secondly, by computing the number of classrooms needed to host the school population while ensuring people's well-being. The smallest limitation results to be the maximum capacity of the school. | Not automated |
| Study related to school capacity - EEB1 - Final report PwC |  |  | September 2021 100 |

## Indoor sport facilities

## 7. School capacity through each parameter

### 7.2 Indoor sport facilities

| Parameter 2 | Indoor sport facilities |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Definitions | Sport facilities include all indoor rooms and/or spaces in which Physical Education can be taught. <br> Outdoor sport facilities are not included in the analysis. To ensure well-being, pupils' should be able to have class indoors when weather conditions are unfavourable. |  |  |  |  |  |  |  |  |
| Norms and standards | The capacity of sport facilities is limited by two different pedagogical norms : |  | Minimum surface of total sport facilities |  |  |  |  | Pedagogical norm |  |
|  |  |  |  | European Schools | Federal Government | FWB | AGION | Ad-hoc | Lower boundary |
|  |  | The minimum surface needed for a school's sport facilities (pedagogical norm on | Sport facilities |  |  | $\checkmark$ | $\checkmark$ |  | FWB/AGION |
|  | (2) | The maximum number of pupils per class (pedagogical norm on education). In Belgium, these norms are defined by regional entities (FWB). However, European Schools have their |  | Max | um number | pupils | class | Ped | agogical norm |
|  |  | own norms on the maximum number of pupils per class. The maximum number pupils per class varies among courses. |  | European Schools | Federal Government | FWB | AGION | Ad-hoc | Lower boundary |
|  |  |  | Sport facilities | $\checkmark$ |  | $\checkmark$ |  |  | European Schools |

## 7. School capacity through each parameter

### 7.2 Indoor sport facilities



## 7. School capacity through each parameter

### 7.2 Indoor sport facilities - Nursery

| Parameter 2.A | Nursery indoor sport facilities |  |  |
| :---: | :---: | :---: | :---: |
| Specific assumptions | - Each sport facility can host pupils for a certain period of time during the week. This time period is equal to the total time spent in class per week by nursery pupils. In EEB1 (Berkendael site), this time period is equal to 20 hours and 15 minutes <br> - Each nursery group uses the sport room for 1 hour/week. <br> - The number of groups that can be hosted at the same time in sport facilities is limited (see Excel model for more details). |  |  |
| Outcome of the analysis | Quantitative |  | Qualitative |
|  |  |  | The school responds to norms in terms of minimum surface needed for sport facilities in nursery grades. <br> It is important to indicate that sport rooms are shared with primary pupils. There are enough sport facilities to provide all nursery and primary groups for the necessary amount of hours per week (i.e. 1 hour for nursery, one hour and 40 minutes for P1-P2 and 1 hour for P3-P4). <br> However, the school does not respond to norms in terms of minimum surface needed for sport facilities in primary grades. Therefore, a capacity issue has been identified for primary pupils and the total remaining availability of sport facilities have been allocated to nursery pupils. <br> The school sport rooms could host an additional number of $\mathbf{1 5 0}$ nursery pupils. |
|  | Current population | 230 |  |
|  | School capacity Gap | 380 150 |  |

## 7. School capacity through each parameter

### 7.2 Indoor sport facilities - Primary



## 7. School capacity through each parameter

### 7.2 Indoor sport facilities

| Parameter 2 | Indoor sport facilities |
| :--- | :--- |
| Conclusion | Sport facilities |
|  | As a conclusion, the school experiences a capacity issue |
| It is important to emphasize that this parameter only in |  |
| Education courses. Outdoor facilities are however unava |  |
| courses. |  |$\quad$

## 7. School capacity through each parameter

### 7.2 Indoor sport facilities

| Parameter 2 | Indoor sport facilities |  |
| :---: | :---: | :---: |
|  | 2.1 Sport facilities | The objective of this sheet is to summarize all aggregated data, standards and norms and assumptions used to compute school capacity of the parameter. |
|  | 2.2.1 Nursery Sport facilities | The objective of this sheet is to represent all individual data used to compute school capacity of the parameter, as well as assumptions which are directly linked to individual data. On the left-hand side, school infrastructure data (supply) is presented. On the right-hand side, school population data (demand) is presented. |
| Guidelines Excel model | 2.2.2 Nursery Sport facilities | The objective of this sheet is to compute school capacity of the parameter. Firstly, by ensuring people's safety and security and checking the difference between firefighters limitations and current school population. Secondly, by checking whether the school infrastructure respects the minimum surface needed to ensure pupils' well-being. Thirdly, by computing the number of facilities needed to host all groups of pupils. |
|  | 2.3.1 Primary Sport facilities | The objective of this sheet is to represent all individual data used to compute school capacity of the parameter, as well as assumptions which are directly linked to individual data. On the left-hand side, school infrastructure data (supply) is presented. On the right-hand side, school population data (demand) is presented. |
|  | 2.3.2 Primary Sport facilities | The objective of this sheet is to compute school capacity of the parameter. Firstly, by ensuring people's safety and security and checking the difference between firefighters limitations and current school population. Secondly, by checking whether the school infrastructure respects the minimum surface needed to ensure pupils' well-being. Thirdly, by computing the number of facilities needed to host all groups of pupils. |

Semi - automated

Fully - automated

Semi - automated

Fully - automated

Semi - automated

## 7



## Canteen

## 7. School capacity through each parameter

### 7.3 Canteen

| Parameter 3 | Canteen |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Definitions | Canteen include all rooms which are designed to host pupils and staff during lunch: canteens, cafeterias... <br> The time spent at the canteen should be divided into effective lunch time and preparation time: <br> - Effective lunch time represents the time needed to eat per pupil. This time does not include preparation time before (walking to the canteen, washing hands, distribute food, find a place to sit, etc.) and after (cleaning seat, cleaning dishes, walking out of the canteen, etc.) eating. ${ }^{1}$ <br> - Preparation time represents the time needed for all activities which prepare pupils before (walking to the canteen, washing hands, distribute food, find a place to sit, etc.) and after (cleaning seat, cleaning dishes, walking out of the canteen, etc.) eating. ${ }^{1}$ |  |  |  |  |  |  |  |  |
| Norms and standards | The capacity of canteen is limited by both pedagogical and well-being norms: |  |  | Minimum surface of canteen |  |  |  | Pedagogical norm |  |
|  |  |  |  | European Schools | Federal Government | FWB | AGION | Ad-hoc | Lower boundary |
|  |  | The minimum surface needed for a school's canteen/cafeteria (pedagogical norm on | Canteen |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | FWB/AGION |
|  | (2) | Norms which ensure pupils' well-being during |  |  | ms on well-b | duri | unch |  | eeing norm |
|  |  | biological rhythm of pupils and minimum lunch time needed per grade. |  | European Schools | Federal Government | FWB | AGION | Ad-hoc | Lower boundary |
|  |  |  | Canteen |  |  |  |  | $\checkmark$ | 1 |

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${ }^{1}$ COCOF (2016). Enquête sur le temps de midi dans les établissements de l'enseignement fondamental ordinaire de la région bruxelloise. https://sites.uclouvain.be/reso/opac css/doc num.php?explnum id=7083

## 7. School capacity through each parameter

### 7.3 Canteen



[^2]Fédération des Associations de Parents de l'Enseignement Officiel (2008). Le sens du rythme - Rythmes scolaires, biologiques et psychologiques de l'enfant et de l'adolescent. https://www.yumpu.com/fr/document/view/17082745/le-sens-du-rythme-rythmes-scolaires-biologiques-et-fapeo
${ }^{2}$ AFNOR (2011). Norme de service - Service de la restauration scolaire. NF X50-220 Octobre 2011.
${ }^{3}$ Enseignement.be (2020). Circulaire 7512 - Règlement de travail cadres, enseignements fondamental et secondaire, ordinaires et spécialisées.

## 7. School capacity through each parameter

### 7.3 Canteen - Pupils



## 7. School capacity through each parameter

### 7.3 Canteen - Staff

| Parameter 3.B |
| :--- |
| Specific <br> assumptions |

## 7. School capacity through each parameter

### 7.3 Canteen



## 7. School capacity through each parameter

### 7.3 Canteen



## 7 <br> 4 <br> Recreation areas

## 7. School capacity through each parameter

### 7.4 Recreation areas

| Parameter 4 |
| :--- |
| Definitions |
|  |
| Norms and |
| standards |

## Recreation areas

Recreation areas include total recreation areas and covered recreation areas:

- Total recreation areas are all external areas which are accessible to pupils during breaks (covered and uncovered). Recreation areas should allow the organisation of diverse activities for short time periods.
- Covered recreation areas are all external spaces which are accessible to pupils and are covered by a roof. Covered recreation areas allow pupils to cover themselves from unfavourable weather conditions. Covered recreation areas can also be replaced by polyvalent rooms located inside the building and which are accessible to pupils during breaks (excl. study rooms, libraries, relaxation rooms and canteens/cafeterias). ${ }^{1}$

| The capacity of recreation areas is limited by two different types of norms : |  | Total recreation areas |  |  |  | Pedagogical norm |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | European Schools | Federal Government | FWB | AGION | Ad-hoc | Lower boundary |
| school's recreation areas (pedagogical norm on infrastructure). These norms are defined by the two regional entities: FWB \& AGION. <br> (2) The minimum variable surface needed for a school's recreation areas (well-being norm on infrastructure). These norms are defined by the two regional entities: FWB \& AGION | Min fixed surface |  |  | $\checkmark$ | $\checkmark$ |  | AGION |
|  | Min variable surface |  |  | $\checkmark$ | $\checkmark$ |  | FWB |
|  |  | Covered recreation areas |  |  |  | Well-being norm |  |
|  |  | European Schools | Federal Government | FWB | AGION | Ad-hoc | Lower boundary |
| Whereas norms on total recreation areas relate to a pedagogical necessity, norms on covered recreation areas concern pupils well-being, | Min fixed surface |  |  | $\checkmark$ | $\checkmark$ |  | AGION |
|  | Min variable surface |  |  | $\checkmark$ | $\checkmark$ |  | AGION |

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## 7. School capacity through each parameter

### 7.4 Recreation areas



## 7. School capacity through each parameter

### 7.4 Recreation areas - Nursery



## 7. School capacity through each parameter

### 7.4 Recreation areas - Primary



## 7. School capacity through each parameter

### 7.4 Recreation areas

| Parameter 4 |
| :--- | :--- |
| Conclusion |


| Recreation areas |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Pupils |  | Staff members |  |  |
|  | Nursery | Primary | Nursery | Primary | Other |
| Recreation areas |  |  |  |  |  |
| Covered recreation areas |  |  |  |  |  |

As a conclusion, the school experiences a capacity issue regarding covered areas for nursery pupils. The surface of total recreation areas of nursery pupils does comply with pedagogical norms.

Primary total recreation areas and covered areas comply with the norms.
Nursery

| To ensure pupils well-being when weather conditions |
| :--- |
| are unfavourable, three possible solutions would be: |
| - Build covered recreation areas |
| - Extend/use indoor spaces (hallways, classrooms, |
| and other similar spaces...) |
| - Since there is an overlap of 15 minutes (from 12:50 |
| to $13: 05$ ) in recreation areas between the two |
| nursery groups, the lunch breaks of group B could |
| be shifted by 15 minutes. Therefore, two groups of |
| pupils would never be at the same time in |
| recreation areas during breaks, and the capacity |
| could full allocated to each group (like primary |
| pupils). |



## 7. School capacity through each parameter

### 7.4 Recreation areas

| Parameter 4 | Recreation areas |  |  |
| :---: | :---: | :---: | :---: |
|  | 4.1 Recreation areas | The objective of this sheet is to summarize all aggregated data, standards and norms and assumptions used to compute school capacity of the parameter. | Semi - automated |
| Guidelines Excel mode | 4.2 Recreation areas | The objective of this sheet is to represent all individual data used to compute school capacity of the parameter, as well as assumptions which are directly linked to individual data. | Fully - automated |
|  | 4.3 Recreation areas | The objective of this sheet is to compute school capacity of the parameter. Firstly, by ensuring people's safety and security and checking the difference between firefighters limitations and current school population. Secondly, by computing the number of people the school could host with current infrastructure while maintaining well-being. | Fully - automated |

## 7 <br>  <br> Library

## 7. School capacity through each parameter

### 7.5 Library



## 7. School capacity through each parameter

### 7.5 Library



## 7. School capacity through each parameter

### 7.5 Library



## 7. School capacity through each parameter

### 7.5 Library



## 7. School capacity through each parameter

### 7.5 Library



## Study rooms and polyvalent rooms

## 7. School capacity through each parameter

### 7.6 Study rooms and polyvalent rooms

| Parameter 6 | Study rooms and polyvalent rooms |
| :--- | :--- |
| Definitions | Study rooms are spaces which can be used by pupils in order to study. In the case of secondary pupils, study rooms are spaces in which pupils can spend their free-time. <br> Polyvalent rooms welcome different type of activities such as extra-curricular activities, inside games, occasional events. In the case of secondary pupils, polyvalent rooms are <br> spaces in which pupils can spend their free-time. |
| Status | This parameter is not analysed for the Berkendael site since it is only relevant for secondary pupils. There are no secondary pupils in the Berkendael site. |

## Sanitary rooms

## 7. School capacity through each parameter

### 7.7 Sanitary rooms



## 7. School capacity through each parameter

### 7.7 Sanitary rooms

| Parameter 7 | Sanitary rooms |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Key data | The capacity of sanitary rooms was computed based on data of the Academic year 2020-2021. | Oo School population | O\% School organisation | P: School infrastructure |
|  |  | Number of pupils | Typical schedules | Surface of sanitary facilities |
|  |  | Number of staff |  | Number of toilets (and sinks) per grade |
|  |  |  |  |  |
| General assumptions | - Female population account for $49.6 \%$ of school population, based on the worldwide ratio. <br> - The school must provide toilets for people with reduced mobility (PMR). <br> - Common toilets are assigned to nursery and primary pupils, in proportion of their respective population. Common urinals |  |  | ly assigned to primary boys. |

## 7. School capacity through each parameter

### 7.7 Sanitary rooms



## 7. School capacity through each parameter

### 7.7 Sanitary rooms



[^3]
## 7. School capacity through each parameter

### 7.7 Sanitary rooms



## 7. School capacity through each parameter

### 7.7 Sanitary rooms



## Teachers' rooms

## 7. School capacity through each parameter

### 7.8 Teachers' rooms



## 7. School capacity through each parameter

### 7.8 Teachers' rooms



## 7. School capacity through each parameter

### 7.8 Teachers' rooms - Nursery \& Primary

| Parameter 8.A | Teachers' rooms - Nursery \& Primary |  |  |
| :---: | :---: | :---: | :---: |
| Specific assumptions | - Teachers' rooms are used both by nursery teachers and nursery assistants <br> - There is one teachers' room for both nursery and primary teachers |  |  |
| Outcome of the analysis | Quantitative |  | Qualitative |
|  |  | 32 <br> Gap (\# staff) | The school does not provide enough space in teachers' rooms to ensure nursery and primary teachers' well-being during peak-times (e.g. lunch, breaks). <br> The space available for nursery teachers and assistants is large enough to accommodate the following percentage of teachers and assistants (off-peak times): <br> - $60 \%$ when using least demanding norms ; <br> - $40 \%$ when using most demanding norms. <br> As teachers' rooms experience capacity issues, it means that the school cannot accept anymore teachers. Moreover, the number of groups must be decreased. |
|  | Current population <br> School capacity <br> Gap | 83 <br> 51 <br> 32 |  |

## 7. School capacity through each parameter

### 7.8 Teachers' rooms

Parameter 8
Conclusion
Recommendations
and possible
solutions

| Teachers rooms |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Pupils |  | Staff members |  |  |
|  | Nursery | Primary | Nursery | Primary | Other |
| Teachers' rooms |  |  |  |  |  |

As a conclusion, the school experiences a capacity issue linked to teachers' rooms of nursery and primary teachers. This issue is mainly caused by not enough spaces provided by the school as teachers' rooms.

| Nursery | Primary | Staff |
| :---: | :---: | :---: |
| 1 | 1 | Two possible solutions would be: <br> - Building extension or new construction. This is only possible under certain conditions: authorization of the authority responsible for the school's buildings, available surface on school site and the buildings' organization allows it.. <br> To ensure that staff have a comfortable space to relax and work when they are not teaching, a partial solution would be to transform available primary classroom into an additional teachers' room. |

## 7. School capacity through each parameter

### 7.8 Teachers' rooms

| Parameter 8 | Teachers' rooms |  |  |
| :---: | :---: | :---: | :---: |
|  | 8.1 Teachers rooms | The objective of this sheet is to summarize all aggregated data, standards and norms and assumptions used to compute school capacity of the parameter. | Semi - automated |
| Guidelines - <br> Excel model | 8.2 Teachers rooms | The objective of this sheet is to represent all individual data used to compute school capacity of the parameter, as well as assumptions which are directly linked to individual data. | Fully - automated |
|  | 8.3 Teachers rooms | The objective of this sheet is to compute school capacity of the parameter. Firstly, by ensuring people's safety and security and checking the difference between firefighters limitations and current school population. Secondly, by computing the number of people the school could host with current infrastructure while maintaining well-being. | Fully - automated |

## 7 <br>  <br> Event halls

## 7. School capacity through each parameter

### 7.9 Event halls



## 7. School capacity through each parameter

### 7.9 Event halls



## 7. School capacity through each parameter

### 7.9 Event halls

| Parameter 9 | Event halls |  |  | Exceeding population |
| :---: | :---: | :---: | :---: | :---: |
| Specific assumptions | The capacity of event halls does not restrict school capacity. It only gives an appreciation of the ability of the schas Four scenarios are evaluated : <br> (1) Scenario 1: school event regrouping one school grade (incl. teachers) <br> (2) Scenario 2 : school event regrouping one school level (incl. teachers) <br> (3) Scenario 3 : school event regrouping one school level, with 2 relatives per pupil (incl. teachers) <br> (4) Scenario 4 : school event regrouping one school level, with 1 relative per pupil (incl. teachers) <br> The room which can accommodate the largest number of pupils is the pupils' canteen. |  |  | rganise school events. |
| Outcome of the analysis | Qualitative |  |  |  |
|  | Scenario 1 | Scenario 2 | Scenario 3 | Scenario 4 |
|  |  |  |  |  |
|  | Number of people (pupis and teachers) Maximum occupancy |  |  |  |

## 7. School capacity through each parameter

### 7.9 Event halls

| Parameter 9 Event halls |
| :--- |
|  |
| Conclusion |
|  |
|  |

## 7. School capacity through each parameter

### 7.9 Event halls

| Parameter 9 | Event halls |  |  |
| :---: | :---: | :---: | :---: |
|  | 9.1 Event halls | The objective of this sheet is to summarize all aggregated data, standards and norms and assumptions used to compute school capacity of the parameter. | Semi - automated |
| Guidelines Excel mode | 9.2 Event halls | The objective of this sheet is to represent all individual data used to compute school capacity of the parameter, as well as assumptions which are directly linked to individual data. | Fully - automated |
|  | 9.3 Event halls | The objective of this sheet is to compute school capacity of the parameter. The capacity of event halls however does not restrict school capacity. It only gives an appreciation of the ability of the school to organise school events. | Fully - automated |

## 10 <br> Administrative offices

## 7. School capacity through each parameter

### 7.10 Administrative offices



## 7. School capacity through each parameter

### 7.10 Administrative offices



## 7. School capacity through each parameter

### 7.10 Administrative offices



## 7. School capacity through each parameter

### 7.10 Administrative offices



## 7. School capacity through each parameter

### 7.10 Administrative offices



## Berkendael Conclusion and recommendations

## 8. Conclusion and recommendations

Pedagogical school capacity is limited by nursery and primary classrooms whereas well-being school capacity is limited by nursery covered recreation areas, primary sport facilities and staff canteen

Maximum school capacity to ensure the school's
primary objective

| Pupils | 977 people |
| :---: | :---: |
| Staff | 119 people |

Maximum school capacity to ensure pupils' and staff well-being


## 8. Conclusion and recommendations

## Several recommendations allow to partially solve pedagogical and well-being school capacity issues

Recommendations


[^4]Appendix

## Appendix A

## Descriptive Excel sheet model - General guidelines

The Excel model is divided into three sections:

- Section 1 -Results : This section presents a general overview of the results for all parameters
- Section 2 - Computations : This section presents school capacity computations for each parameter
- Section 3 - Data : This section presents all data that were used to compute school capacity


## Colour coding

A colour coding is used in the model to make it easier to understand the computations.


All cells in yellow represent raw data. These cells are not automated and can be modified, if necessary.


All cells in grey represent data that are linked to another sheet. These cells are automated and cannot be modified
All cells in orange represent assumptions. These cells are not automated and can be modified, if necessary.

All cells in blue represent computations. These cells are automated and cannot be modified.

## Understanding the results

In each results sheet, results are explained qualitatively in yellow boxes. This makes it easier for the reader to understand the results deriving from computations of the Excel model.

## Changing data source

Data can be changed via yellow cells in section 2 and via data sheet in section 3 . If a change is made in data sheet, it is important to fill each column in the same way columns are filled when the Excel model is delivered. This allows to ensure changes are taken into account in computations.

## Appendix B

## List of people met during the mission

Four meetings with the Steering committee, composed of:

- Brian Goggins, Director of European School EEB1,
- Jan Belien, Director of Finance and Administration of European School EEB1,
- Jonathan Guyot, Security Officer of European School EEB1,
- Kathryn Mathe, member of the APEEE of European School EEB1,
- Nils Berhndt, member of the APEEE of European School EEB1.

The four Steering committees took place on: 04/02/2021, 08/02/2021, 24/03/2021, 21/05/2021.

## Additional meetings during the mission:

- Meeting with the manager of APEEE services of Uccle Site, Pascale de Smedt, on 23/02/2021,
- Meeting with two representatives of secondary students on 23/02/2021,
- Meeting with the pedagogical secretary of Berkendael Site, Lieke Skeet on 23/02/2021.


## Thank you for your attention

pwc.be

Axel COMHAIRE
Director - PwC Belgium
Mobile : +32 477618149
E-mail : axel.comhaire@pwc.com


Louis DEGUELLE
Senior Consultant - PwC Belgium
Mobile : +32 479754572
E-mail : louis.deguelle@pwc.com


[^0]:    The data used to compute the capacity of the European School covers the Academic School year 2020-2021.
    In addition to data received from the school, a school visit was organised on Tuesday 23 February 2021 from 7:30am to 5pm in Uccle and Berkendael. This visit was aimed at getting a general understanding of the school organisation and visualising school infrastructure.

[^1]:    ${ }^{1}$ Fédération des Associations de Parents de l'Enseignement Officiel (2008). Le sens du rythme - Rythmes scolaires, biologiques et psychologiques de l'enfant et de l'adolescent. https://www.yumpu.com/fr/document/view/17082745/le-sens-du-rythme-rythmes-scolaires-biologiques-et-fapeo
    ${ }^{2}$ AFNOR (2011). Norme de service - Service de la restauration scolaire. NF X50-220 Octobre 2011
    ${ }^{3}$ Enseignement.be (2020). Circulaire 7512 - Règlement de travail cadres, enseignements fondamental et secondaire, ordinaires et spécialisées

[^2]:    Study related to school capacity - EEB1 - Final report Pwc

[^3]:    Study related to school capacity - EEB1 - Final report

[^4]:    Event hall: Renting an event hall outside the school infrastructure for large events requiring to invite relatives or to gather several grades

