# Study related to school capacity

## European School - EEB1

Final report

September 2021







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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

The objective of this mission was to study the maximum capacity of the European School in order to ensure safety, security and well-being as well as the smooth and efficient working of the school.

Specific objective - Pupils

Specific objective - Pupils

Identification of the maximum number of pupils in a school in terms of space available for teaching, learning, leisure and other day-to-day activities by considering the impact of the organisation of these activities.

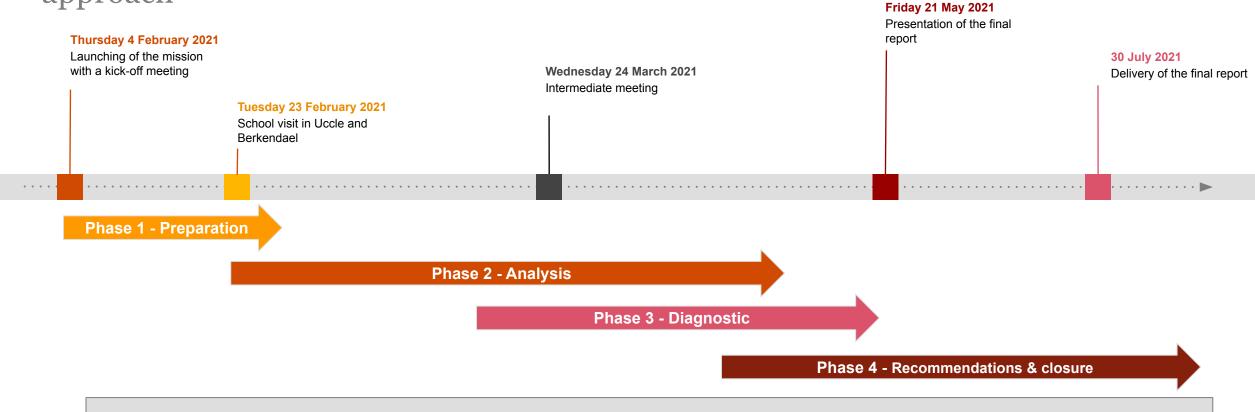
Specific objective - Staff

Identification of the maximum number of staff in the school.

**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.

#### 1. Introduction

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



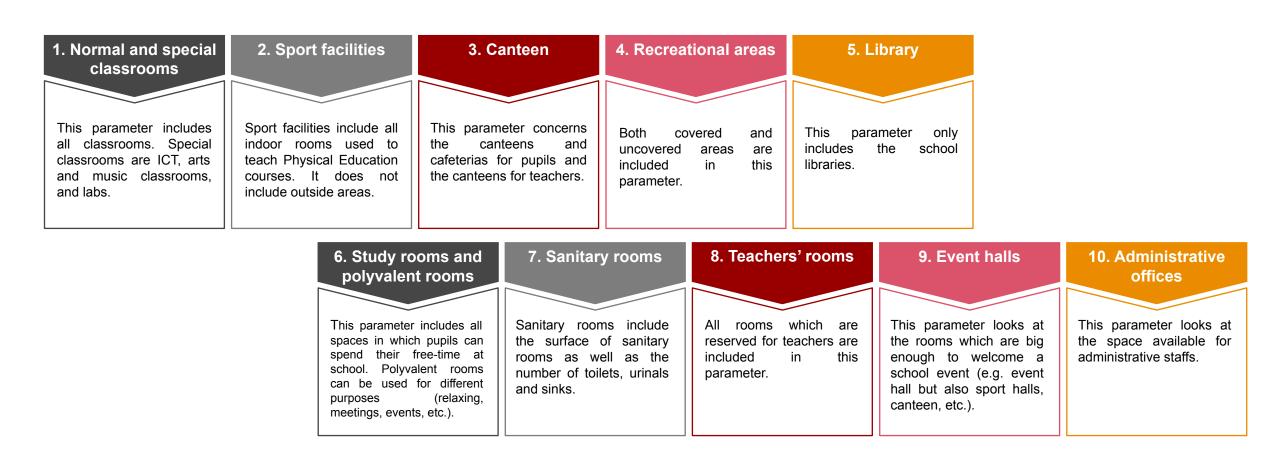
The mission was launched on **Thursday 4 February 2021** with a kick-off meeting. A school visit was organised on **Tuesday 23 February 2021**. The end of the mission was marked by the delivery of a first version of the final report on **30 July 2021**.

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



## Methodology

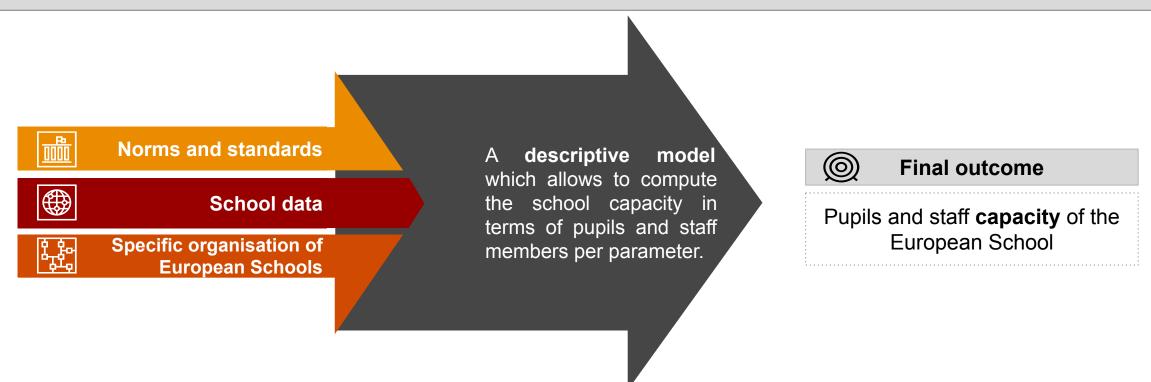
The capacity of the school was studied for 10 well-chosen parameters



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.

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).



#### 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:

- Norms implemented by European Schools which relate specifically to the organisation and structure of education:
- Norms implemented by the Federal government which provide a framework to ensure workers' well-being;
- 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 Infrastructuur in het Onderwijs (AGION)

Fédération Wallonie-Bruxelles -Direction Générale des Infrastructures (FWB)

European Schools -Board of Governors

**Administrative offices** 

Ad-hoc standards

Firefighters' audit

<sup>1</sup> In the model, the combination of most demanding norms is called the *upper boundary*.

<sup>2</sup> In the model, the combination of least demanding norms is called the *lower boundary*.

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<sup>1</sup> and the largest maximum is defined by a combination of the least demanding norms<sup>2</sup>.

Normal classrooms	<b>~</b>	<u> </u>	<b>*</b>	<b>*</b>		<b>~</b>
Special classrooms	<b>✓</b>	<b>~</b>	<b>✓</b>	<b>~</b>		<b>~</b>
Sport facilities	<b>✓</b>	<b>~</b>	<b>✓</b>	<b>✓</b>		<b>~</b>
Canteen				<b>\</b>	<b>~</b>	<b>~</b>
Recreation areas			<b>✓</b>	<b>~</b>	<b>~</b>	
Library			<b>✓</b>	<b>~</b>		<b>✓</b>
Study/polyvalent rooms		<b>~</b>	<b>~</b>	<b>~</b>		<b>~</b>
Sanitary		<b>✓</b>		<b>~</b>		
Teachers room		<b>✓</b>		<b>~</b>		<b>✓</b>
Event hall		✓		<b>~</b>		<b>✓</b>

**Federal** 

Government

**FWB** 

AGION

Ad-hoc

European

Schools

**Firefighters** 

audit

#### 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) <u>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).</u>

#### **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.

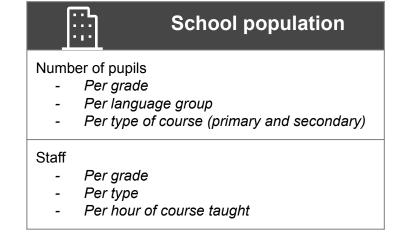
For example, the time needed to eat at lunch, or the respect of pupils' biological rhythm.

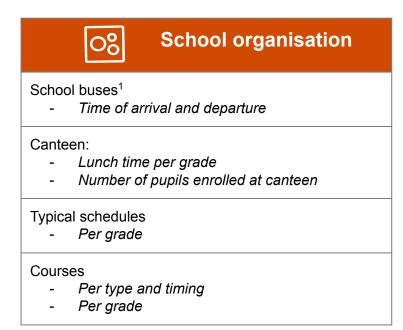
#### **Safety and security norms and standards**

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.

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





#### **School infrastructure**

Total surface of each building/room per pupil and staff

- Per type
- Per grade

#### Number of sanitaries

- Per type (changing room, shower, toilet, sinks)
- Per grade
- Per pupil or staff

#### Total surface of external spaces

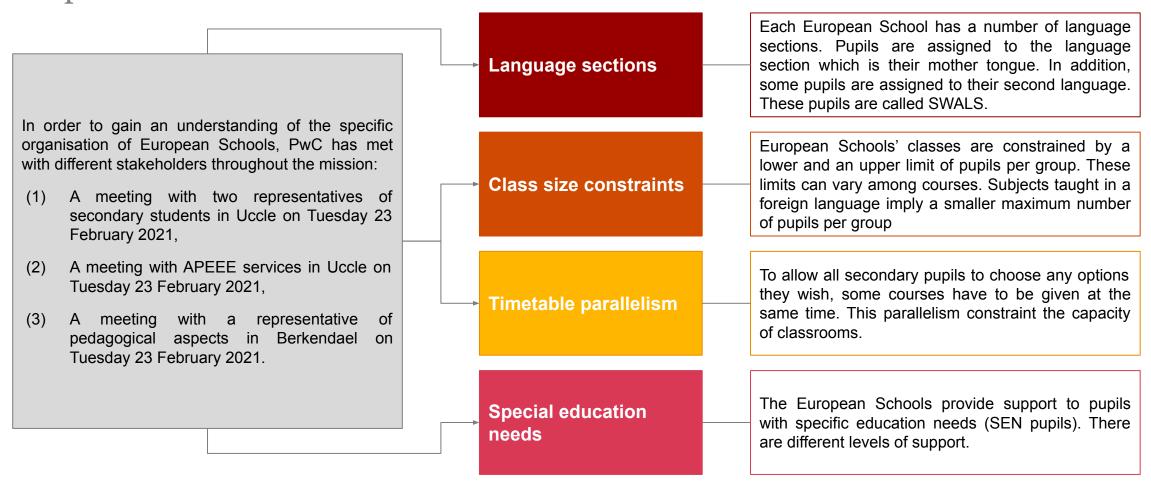
- Covered and uncovered
- Parking lots

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.

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

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



**Disclaimer**: The four specificities presented on the right-side of this slide were discussed during the different meetings with the schools' stakeholders and used to compute school capacity. There might exist additional specificities which were however not mentioned by the school.

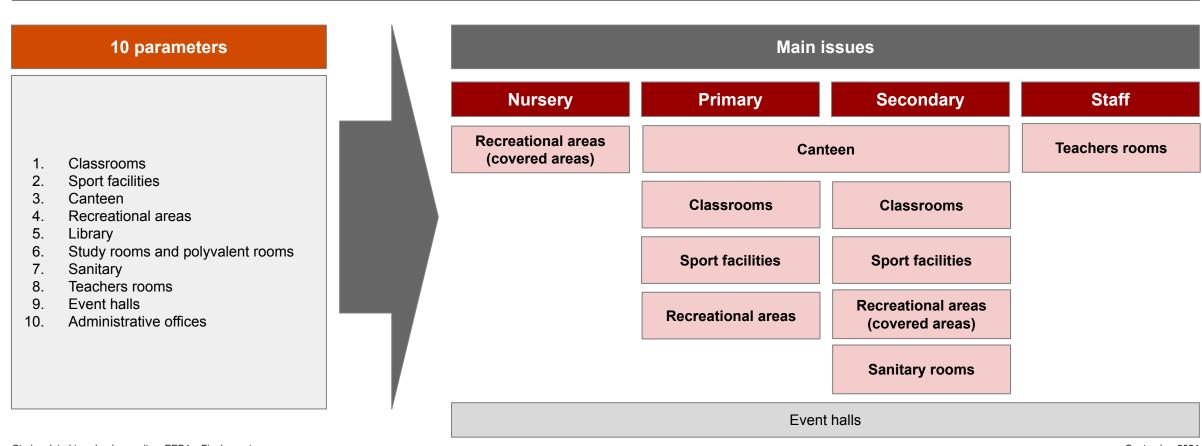


# Uccle - School capacity overview

#### 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 3.102 pupils and 325 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**, **743 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**.

	Classrooms
	2 222
3	oort facilities
	Canteen
Re	creation areas
Covere	d recreation areas
	Library
Study an	d polyvalent rooms
	Sanitary
Te	achers' rooms
	Event hall
Admi	nistrative offices

Nursery	Pupils Primary	Secondary
Nuisery	Filmary	Secondary

Secondary Other

### Classrooms

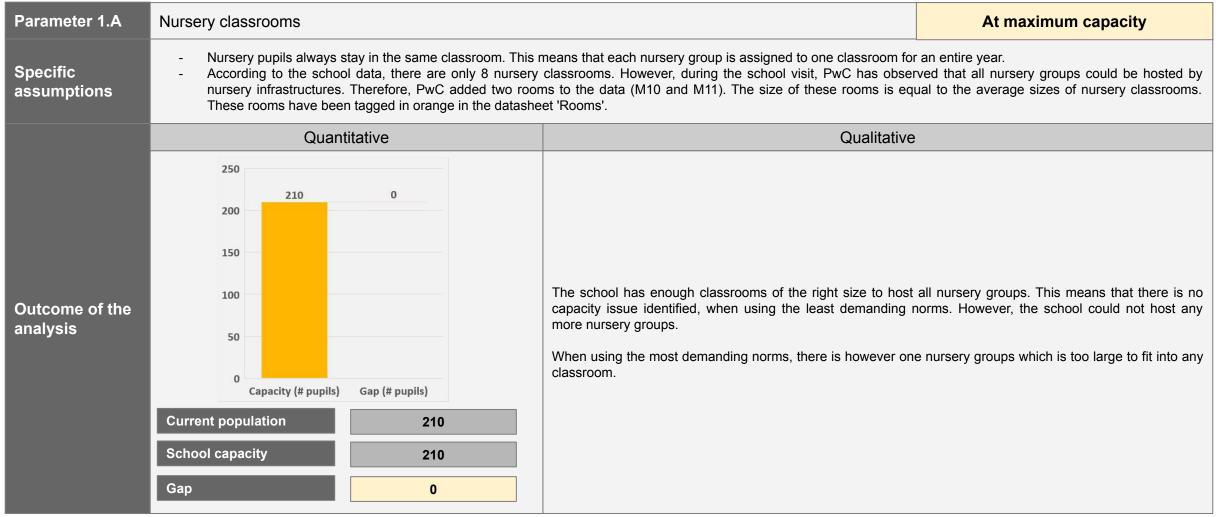
#### 4.1 Classrooms

Parameter 1	Classrooms								
	Classrooms include normal classrooms, special classrooms and labs:								
	<ul> <li>Normal classrooms are classrooms in which no s teacher and a black/white board.</li> </ul>	pecific material/equipment	is needed to te	each. These classro	ooms contai	n chairs and	desks for all	pupils and for the	
Definitions	- Special classrooms are classrooms in which specific material/equipment is needed to teach. Special classrooms, include ICT classrooms, arts classrooms and music classrooms.								
	<ul> <li>Labs are classrooms specifically designed to teac experiments.</li> </ul>	h science courses (biology	, chemistry and	physics). Labs co	ntain specia	l equipment w	hich allow to	o perform scientific	
	The capacity of classrooms is limited by two different	Minimum classroom surface per pupil/staff  Pedagogical norm							
	pedagogical norms :  (1) The minimum surface needed 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 regiona	Normal classrooms		<b>✓</b>	<b>~</b>	<b>✓</b>		FWB/AGION	
Norms and	entities: FWB & AGION. For staff, norms are defined by the Federal Government.	Special classrooms		<b>✓</b>	<b>~</b>	<b>✓</b>		AGION	
standards	(2) The maximum number of pupils per class							agogical 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 class varies among courses.	Normal classrooms	<b>✓</b>		<b>~</b>			European Schools	
		Special classrooms	<b>✓</b>		<b>~</b>			European Schools	

#### 4.1 Classrooms

Parameter 1	Classrooms							
		Oo School population	○ School organisation	School infrastructure				
	The capacity of classrooms was computed	Number of pupils	School buses - Time of arrival and departure	Surface of each classroom				
Key data	based on data of the Academic year 2020 - 2021.	Number of teachers	Typical schedules					
			Courses					
General assumptions	<ul> <li>There is one teacher (and one assistate)</li> <li>The capacity of classrooms is computed account any potential evolutions in sc</li> </ul>	ted based on a static depiction of optimise hool population, organisation and/or infrast	ed occupancy given current school population	·				

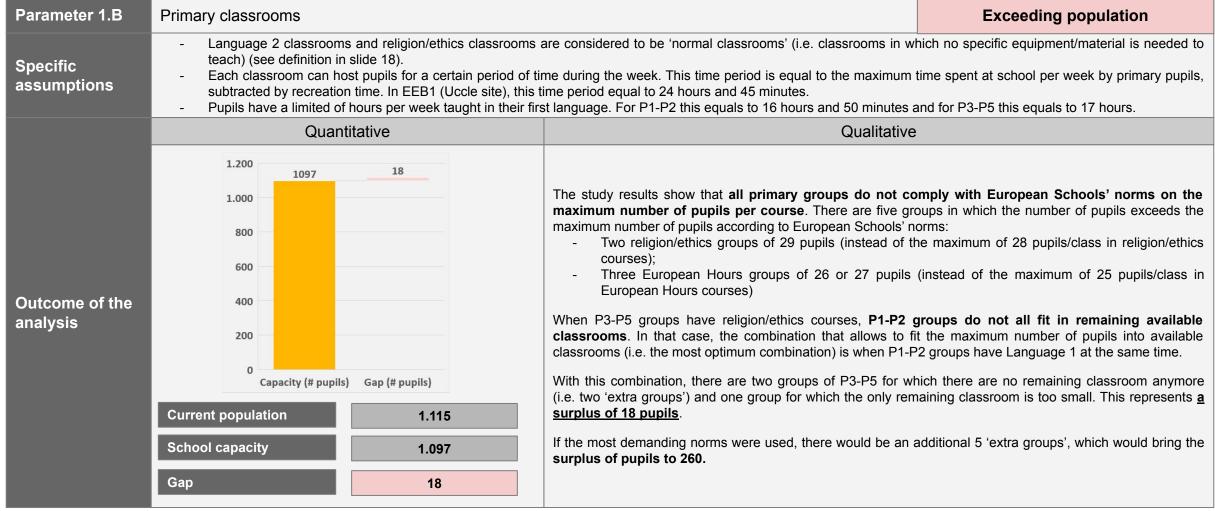
#### 4.1 Classrooms - Nursery



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PwC

#### 4.1 Classrooms - Primary

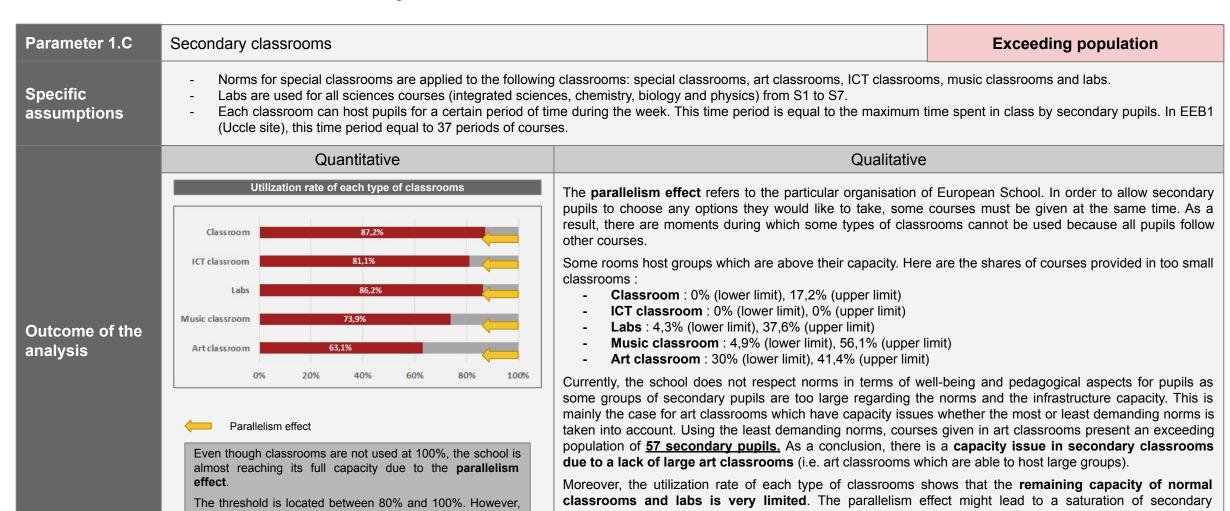


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PwC

#### 4.1 Classrooms - Secondary

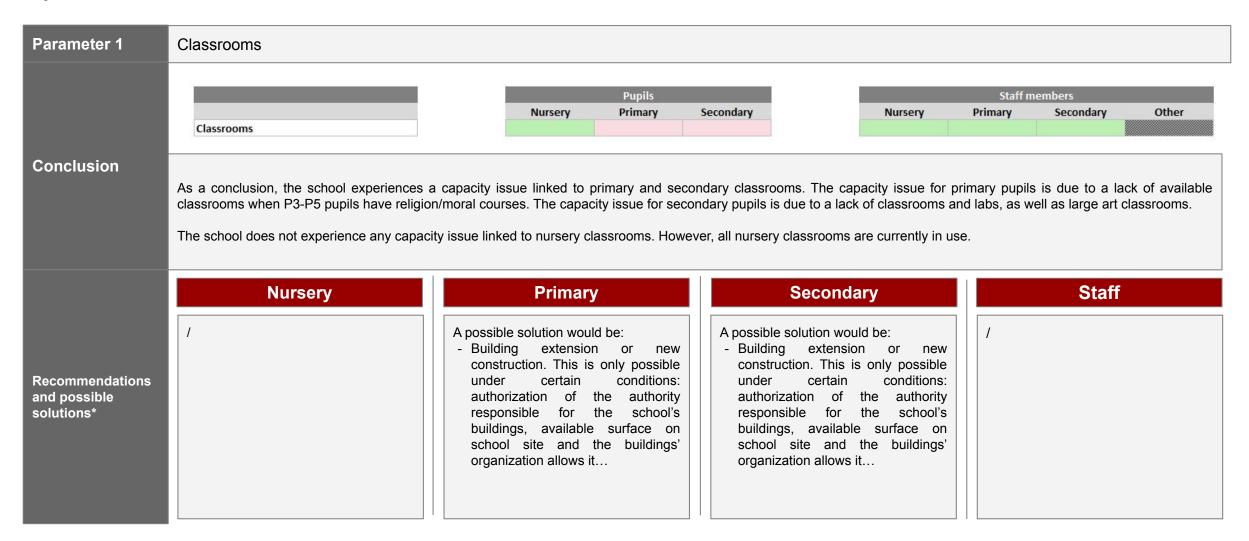
the exact value cannot be determined.



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classrooms.

#### 4.1 Classrooms



#### 4.1 Classrooms

Parameter 1	Classrooms	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, which are directly linked to individual data. On the left-hand side, school infrastructure data (supply) is presented school population data (demand) is presented.		Fully - automated					
	the difference between firefighters limitations and current sci	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.						
Guidelines - 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					

# Indoor sport facilities

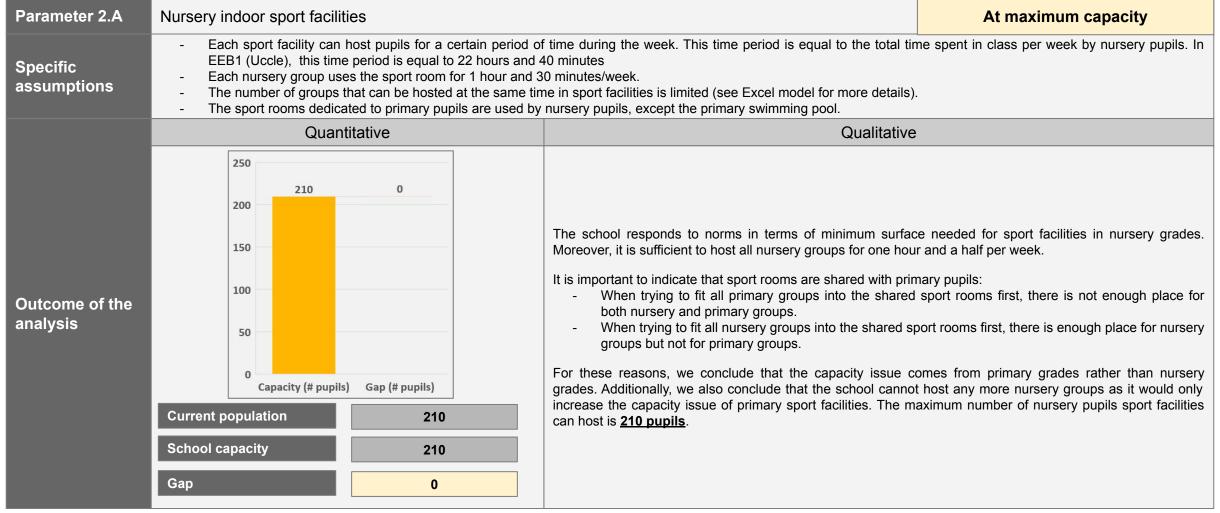
#### 4.2 Indoor sport facilities

Parameter 2	Indoor sport facilities								
Definitions	Sport facilities include all indoor rooms and/or spaces in which Physical Education can be taught.  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.								
			Minim	um surface of	total spor	t facilities	Ped	agogical norm	
	The capacity of sport facilities is limited by two different pedagogical norms:  (1) The minimum surface needed for a school's sport facilities (pedagogical norm on infrastructure). These norms are defined by the two regional entities: FWB & AGION.  (2) The maximum number of pupils per class (pedagogical norm on education). In Belgium,		European Schools	Federal Government	FWB	AGION	Ad-hoc	Lower boundary	
		Sport facilities			<b>~</b>	<b>~</b>		FWB/AGION	
Norms and standards									
	these norms are defined by regional entities (FWB). However, European Schools have their	Maximum number of punils per class Pedagogical n						agogical norm	
	own norms on the <b>maximum number of pupils per class</b> . The maximum number pupils per class varies among courses.		European Schools	Federal Government	FWB	AGION	Ad-hoc	Lower boundary	
	stabb various arriority socirous.	Sport facilities	<b>✓</b>		<b>✓</b>			European Schools	

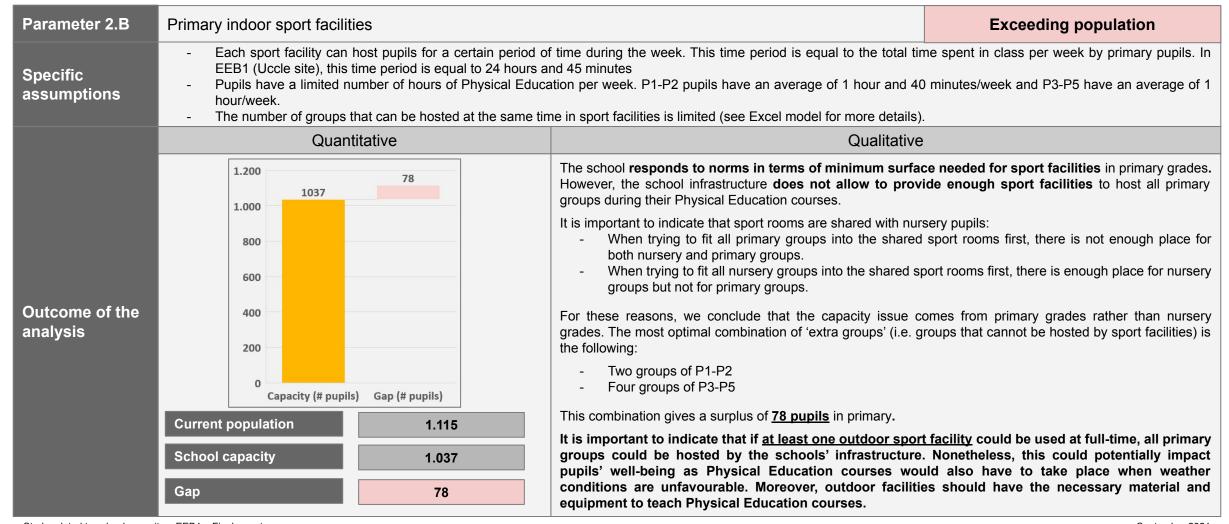
#### 4.2 Indoor sport facilities

Parameter 2	Indoor sport facilities						
			School population	School organisation			School infrastructure
	The capacity of sport facilities was computed based on data of the Academic year 2020 - 2021.	Number of pupils  Number of teachers		School buses <i>- Time of arrival and departure</i> Typical schedules		Surfa	ce of each sport facility
Key data							
				Courses			
General assumptions	<ul> <li>In order to ensure pupils' well-being, the second of the se</li></ul>					condition	S

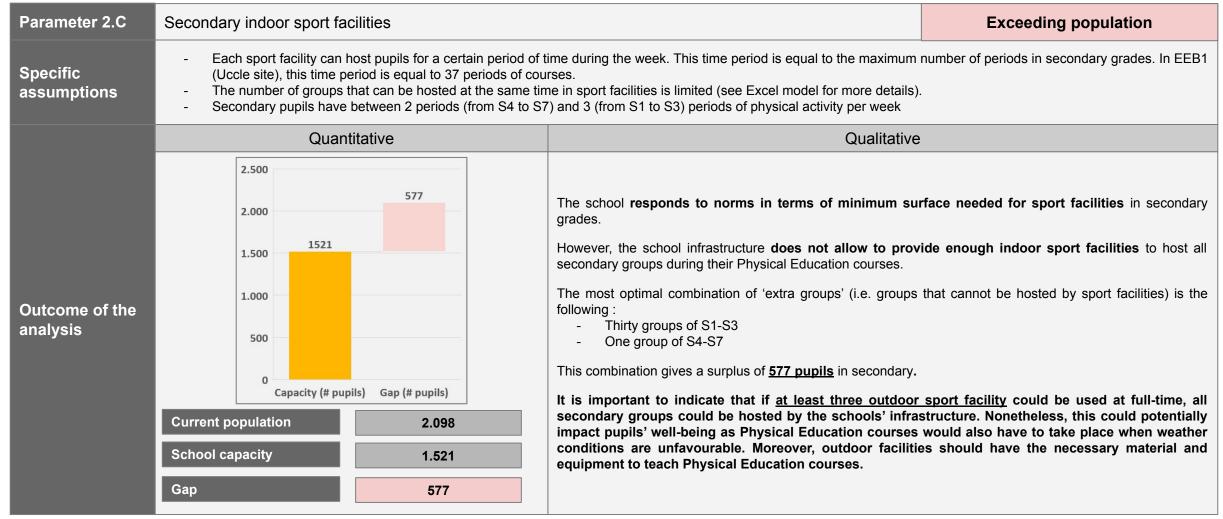
#### 4.2 Indoor sport facilities - Nursery



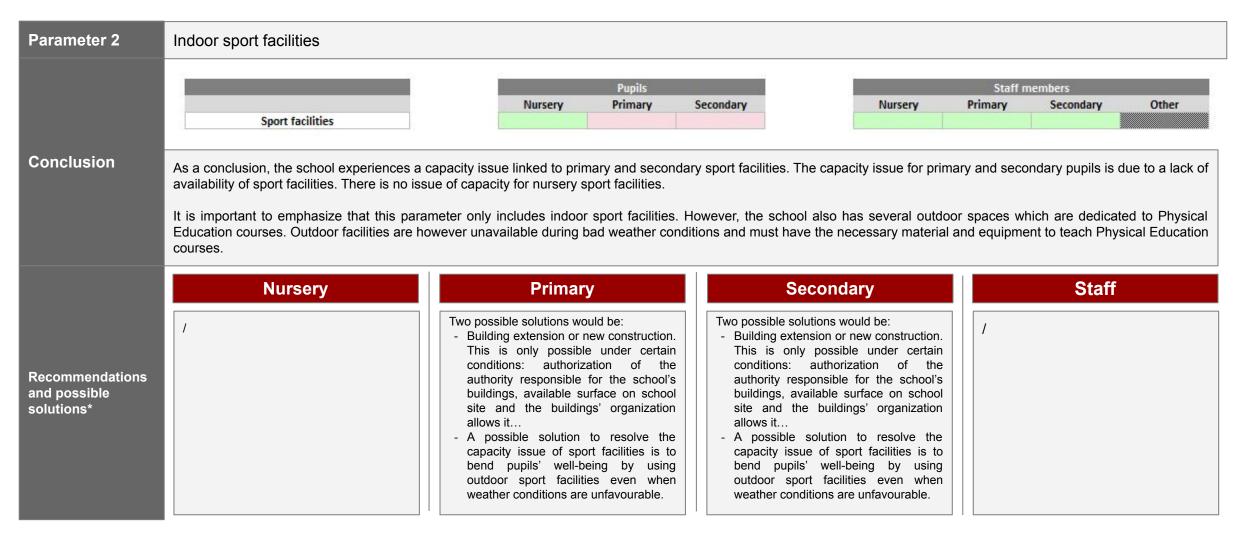
#### 4.2 Indoor sport facilities - Primary



#### 4.2 Indoor sport facilities - Secondary



#### 4.2 Indoor sport facilities



#### 4.2 Indoor sport facilities

Parameter 2	Indoor sport facilitie	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.	Semi - automated					
	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.	Fully - automated					
	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.	Semi - automated					
Guidelines - Excel model	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.	Fully - automated					
	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					
	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.	Fully - automated					
	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					

# 3 Canteen

#### 4.3 Canteen

Parameter 3	Canteen								
	Canteen include all rooms which are designed to host pupils and staff during lunch: canteens, cafeterias								
	The time spent at the canteen should be divided into effective lunch time and preparation time:								
Definitions	- 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. <sup>1</sup>								
	- Preparation time represents the time needed for a and after (cleaning seat, cleaning dishes, walking of			alking to the cantee	n, washing l	hands, distribu	ite food, find	a place to sit, etc.)	
		Minimum surface of canteen Pedagogical no							
	The capacity of canteen is limited by both pedagogical and well-being norms:  (1) The minimum surface needed for a school's canteen/cafeteria (pedagogical norm on infrastructure). For pupils, norms are defined by the two regional entities (FWB & AGION). For staff, norms are defined by the Federal government.		European Schools	Federal Government	FWB	AGION	Ad-hoc	Lower boundary	
		Canteen		<b>✓</b>	<b>~</b>	~		FWB/AGION	
Norms and standards									
	(2) Norms which ensure pupils' well-being during								
	<b>lunch</b> (well-being norms on education) including: biological rhythm of pupils and minimum lunch time needed per grade.		European Schools	Federal Government	FWB	AGION	Ad-hoc	Lower boundary	
		Canteen					~	1	

#### 4.3 Canteen

Parameter 3	Canteen			
Key data	The capacity of canteens was computed based on data of the Academic year 2020 - 2021.	Oo School population	School organisation	School infrastructure
		Number of pupils	School buses - Time of arrival and departure	Surface of each canteen
		Number of staff	Typical schedules	Surface of each cafeteria
General assumptions	<ul> <li>To respect the biological rhythm of pupils (from nursery to secondary grades), lunch should take place between 11:30am and 2:00pm.<sup>1</sup></li> <li>A minimum amount of effective lunch time is needed in order to ensure pupils' and staffs' well-being. This time varies in primary and nursery grades. PwC assumes that secondary pupils need 45 minutes<sup>2</sup> <ul> <li>Nursery pupils need 30 minutes<sup>2</sup></li> <li>Secondary pupils need 30 minutes<sup>2</sup></li> <li>Staff need 35 minutes<sup>3</sup></li> </ul> </li> <li>The amount needed to prepare for eating time is around 15 minutes. This time includes preparation 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.<sup>4</sup></li> <li>In order to take into account the specific organisation of European Schools and the schedule constraints it implies, all pupils of the same level must eat at the same time. Since nursery levels are mixed in nursery groups, both levels must eat at the same time.</li> <li>A share of secondary pupils of S4 to S7 have the authorization to leave the school during lunch.</li> </ul>			

<sup>&</sup>lt;sup>1</sup> 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

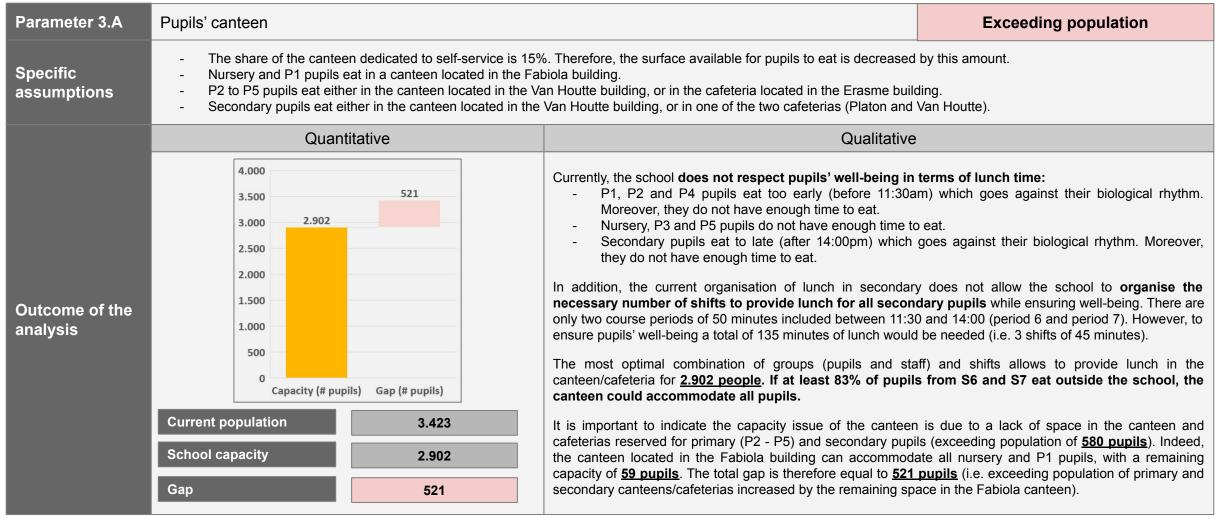
September 2021

<sup>&</sup>lt;sup>2</sup> AFNOR (2011), Norme de service - Service de la restauration scolaire. NF X50-220 Octobre 2011.

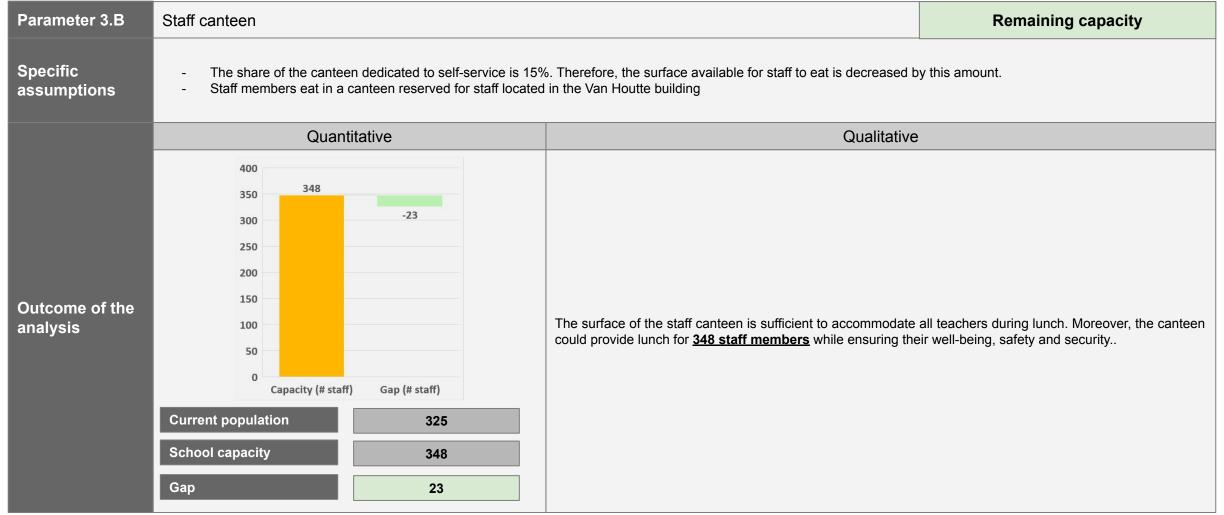
<sup>&</sup>lt;sup>3</sup> Enseignement be (2020). Circulaire 7512 - Règlement de travail cadres, enseignements fondamental et secondaire, ordinaires et spécialisées.

<sup>&</sup>lt;sup>4</sup> 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

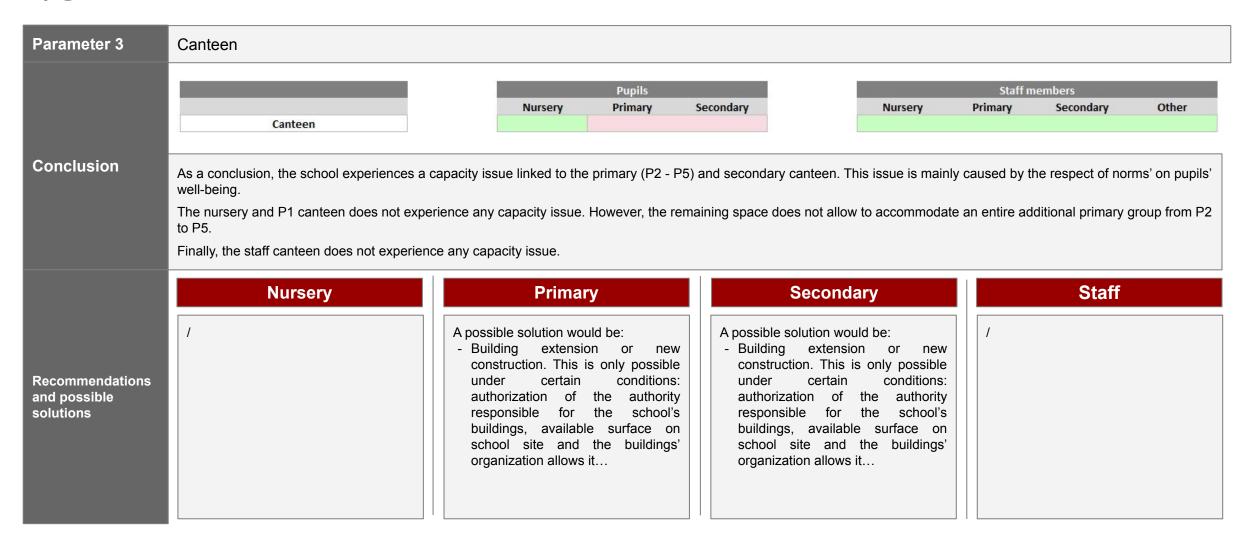
#### 4.3 Canteen



#### 4.3 Canteen



#### 4.3 Canteen



#### 4.3 Canteen

Parameter 3	Canteen		
	3.1 Canteen	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
	3.2 Canteen	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
Guidelines -	3.3 Canteen	The objective of this sheet is to perform a series of checks on safety, security and well-being compliance before computing school capacity of the parameter. Firstly, firefighters limitations are presented. Secondly, compliance with well-being norms and standards is checked. Finally, the number of shifts needed to host all pupils while respecting their well-being are computed.	Fully - automated
Excel model	3.4 Canteen	The objective of this sheet is to compute the optimal usage of the canteen while respecting safety, security and well-being of nursery and P1 pupils.	Fully - automated
	3.5 Canteen	The objective of this sheet is to compute the optimal usage of the canteen while respecting safety, security and well-being of primary (P2-P5) and secondary pupils.	Fully - automated
	3.6 Canteen	The objective of this sheet is to compute the optimal usage of the canteen while respecting safety, security and well-being of staff members.	Fully - automated

## Recreation areas

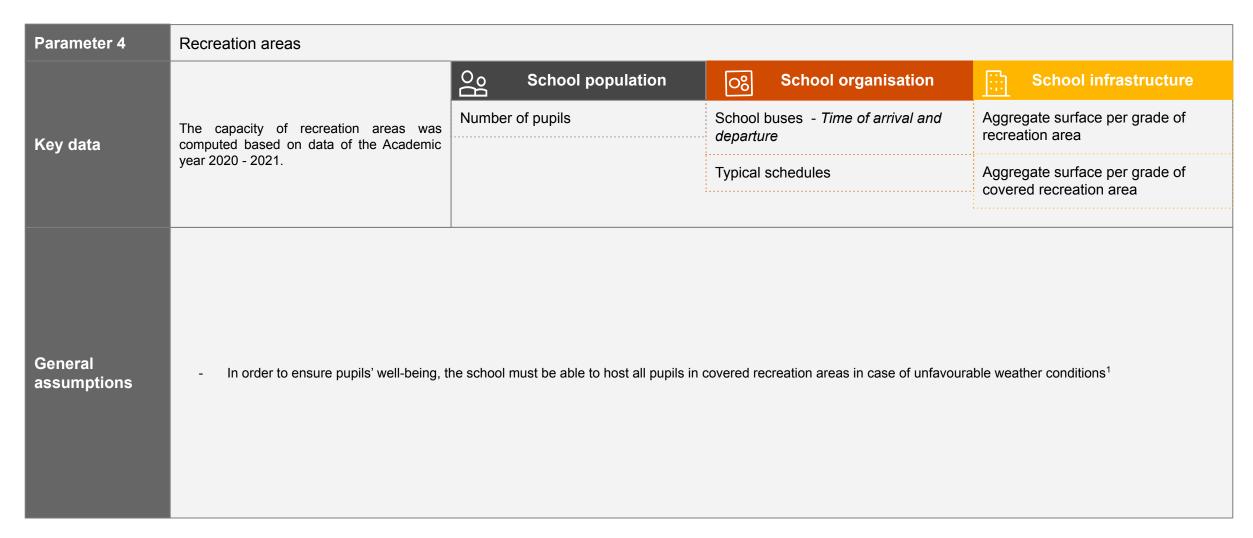
#### 4.4 Recreation areas

Parameter 4	Recreation areas									
Definitions	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:  (1) The minimum fixed surface needed for a school's recreation areas (pedagogical norm on infrastructure). These norms are defined by the two regional entities: FWB & AGION.		Total recreation areas Pedagogical nor							
			European Schools	Federal Government	FWB	AGION	Ad-hoc	Lower boundary		
		Min fixed surface			<b>~</b>	<b>✓</b>		AGION		
Norms and		Min variable surface			<b>~</b>	~		FWB		
standards	(2) The minimum variable surface needed for a school's recreation areas (well-being norm on	^ · · · · · · · · · · · · · · · · · · ·					Wel	l-being norm		
	infrastructure). These norms are defined by the two regional entities: FWB & AGION		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	Min fixed surface			<b>~</b>	~		AGION		
	areas concern <b>pupils well-being</b> ,	Min variable surface			<b>✓</b>	~		AGION		

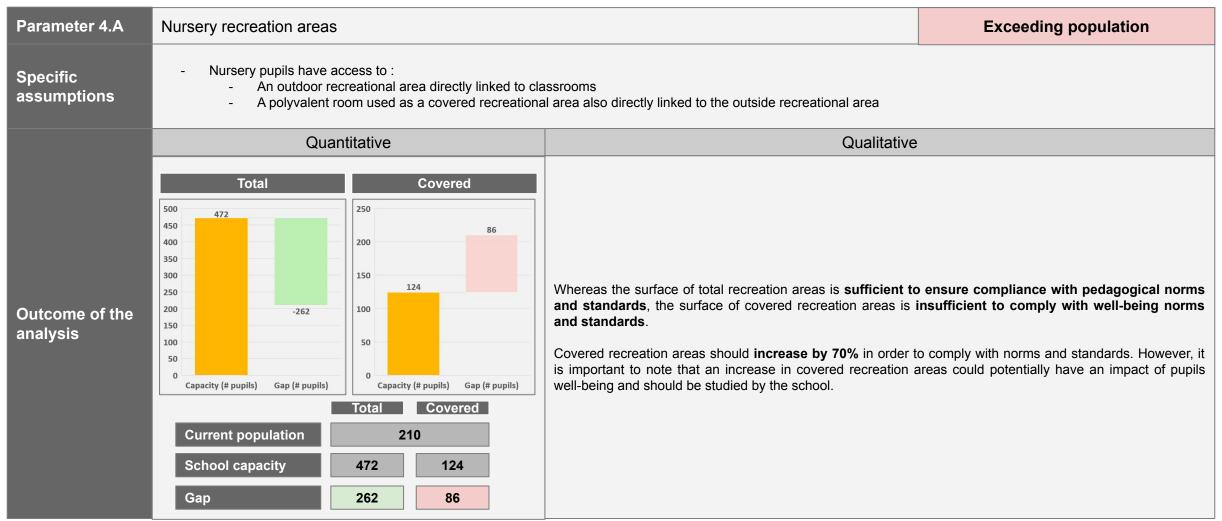
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<sup>1</sup> perspective.brussels (2018). Mon école, un espace de qualité - Guide pour l'enseignement fondamental. https://perspective.brussels/sites/default/files/documents/mon ecole un espace qualite 0.pdf

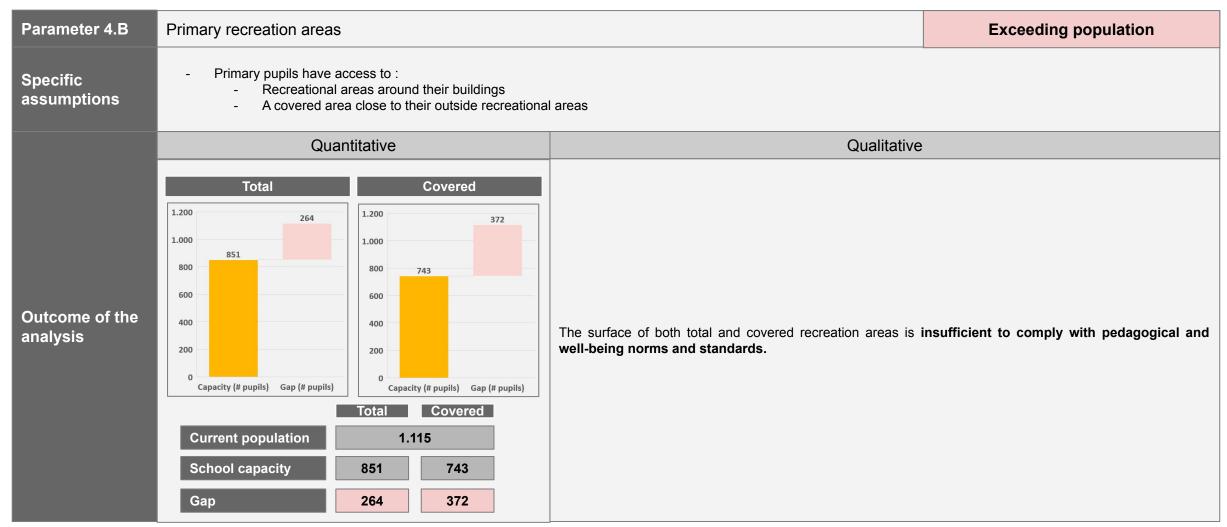
#### 4.4 Recreation areas



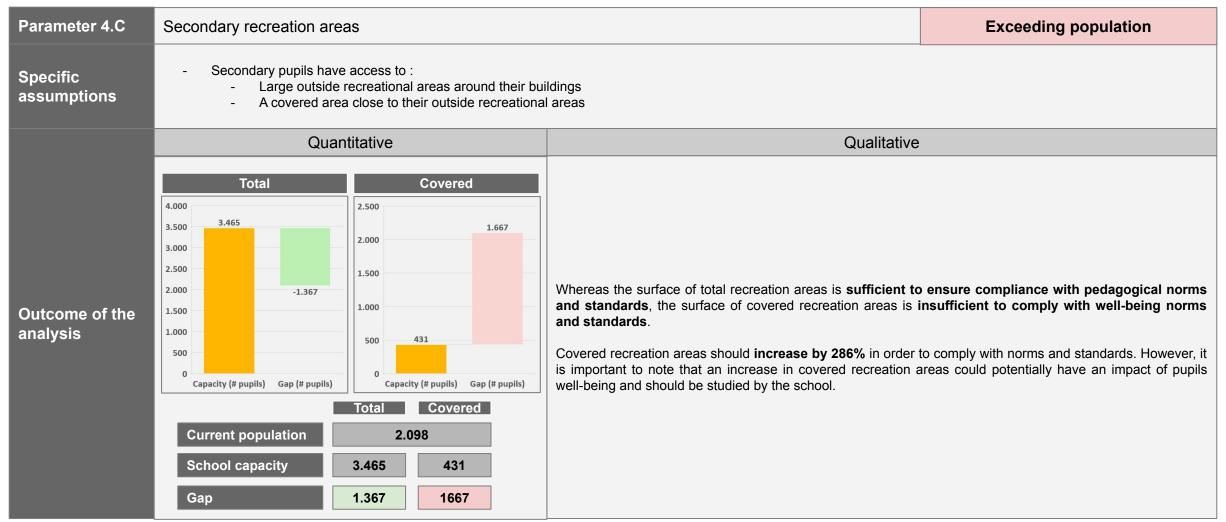
#### 4.4 Recreation areas - Nursery



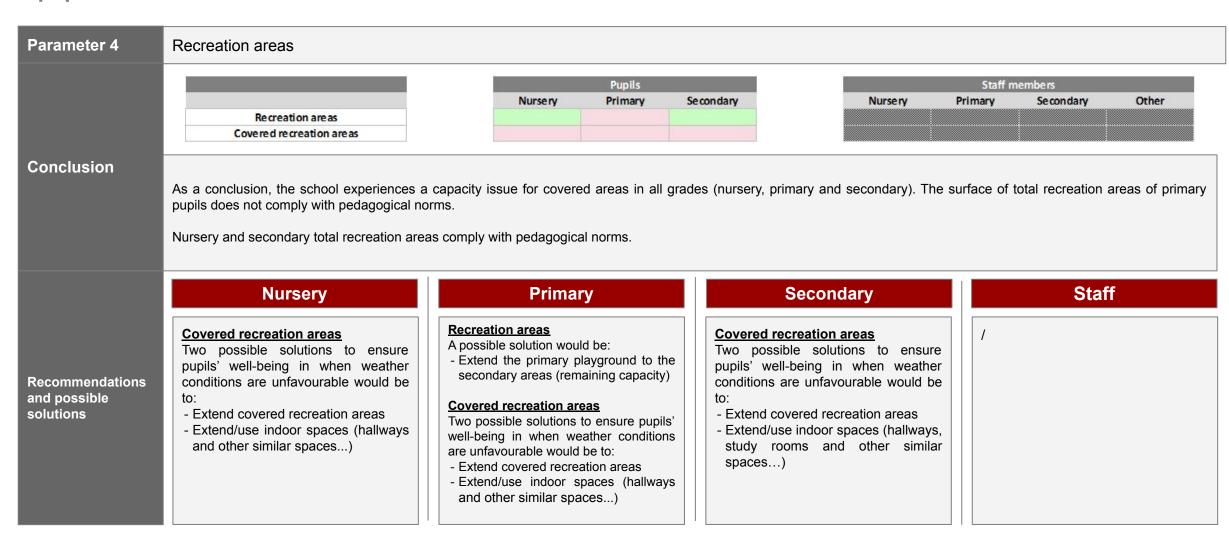
#### 4.4 Recreation areas - Primary



#### 4.4 Recreation areas - Secondary



#### 4.4 Recreation areas



#### 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 - Excel model	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

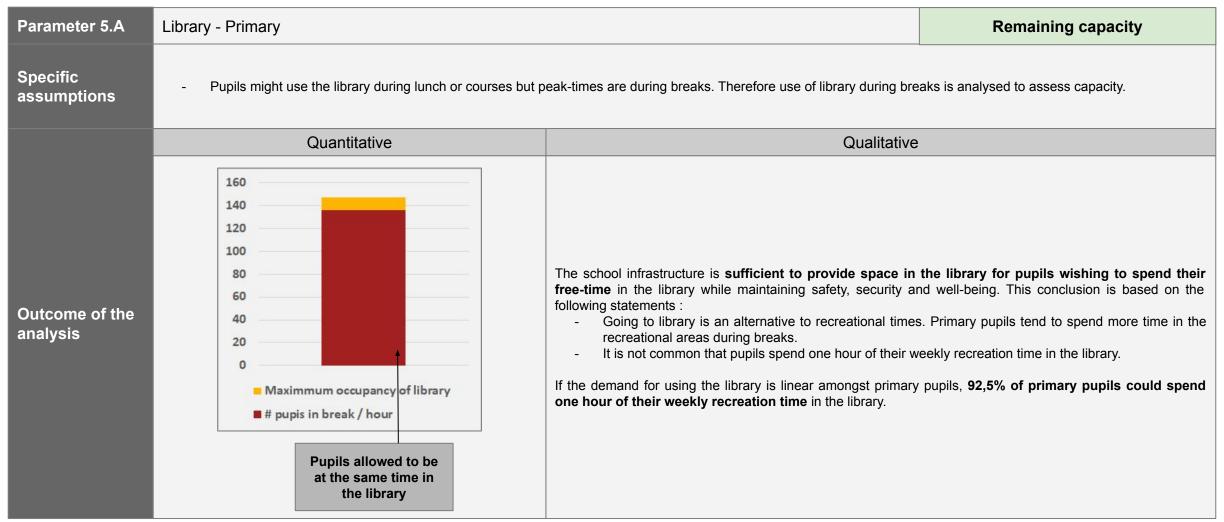
#### 4.5 Library

Parameter 5	Library									
Definitions	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.									
				Minimum libr	ary surfac	ce	Peda	agogical norm		
	The capacity of library is limited by two different pedagogical norms :		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				<b>✓</b>		AGION		
Norms and	Belgium, these norms are defined by regional entities (AGION).	Surface for facilities				<b>~</b>		AGION		
standards	(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).		Minimum	n surface per pu	upil (at the	e same tim	e) Peda	agogical norm		
			European Schools	Federal Government	FWB	AGION	Ad-hoc	Lower boundary		
		Classrooms			<b>~</b>	<b>✓</b>		FWB/AGION		

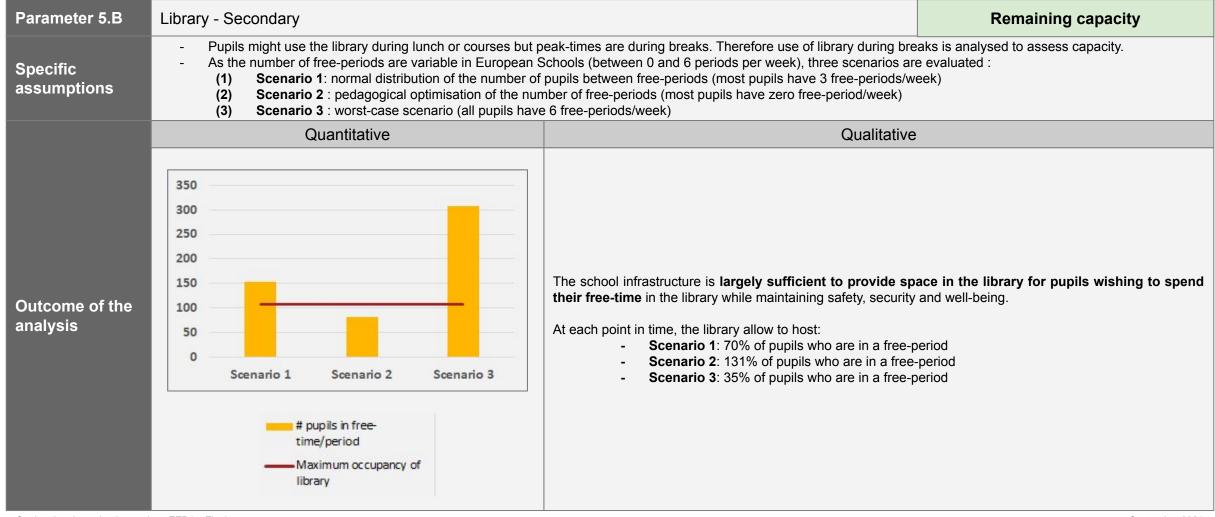
#### 4.5 Library

Parameter 5	Library								
Key data		e Bo	School population	0%	School organisation	<u> </u>	School infrastructure		
	The congests of library was computed based	Number	Number of pupils		Typical schedules		ace of each library		
	The capacity of library was computed based on data of the Academic year 2020 - 2021.	Number	of teachers			,			
General assumptions	<ul> <li>Nursery pupils do not use the library a</li> <li>Groups of pupils also use libraries dur</li> <li>Secondary pupils have between 0 and</li> <li>➤ Scenario 1 : Normal distributio</li> <li>➤ Scenario 2 : Pedagogical opti</li> <li>➤ Scenario 3 : Worst-case distri</li> </ul>	ing course of 6 hours of on misation of	s with their teacher.  If free-time per week. Three dif  If the number of free-time period	ds per week		er hours o	of free-time will be evaluated.		

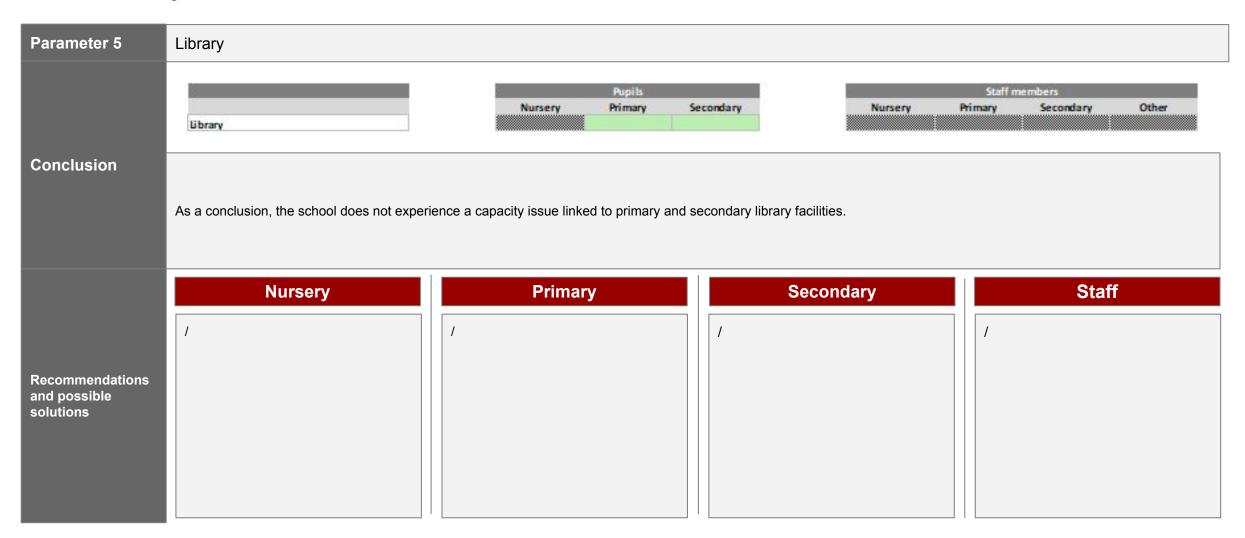
#### 4.5 Library - Primary



#### 4.5 Library - Secondary



#### 4.5 Library



#### 4.5 Library

Parameter 5	Library		
	5.1 Library	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 model	5.2 Library	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
	5.3 Library	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

# Study rooms and polyvalent rooms

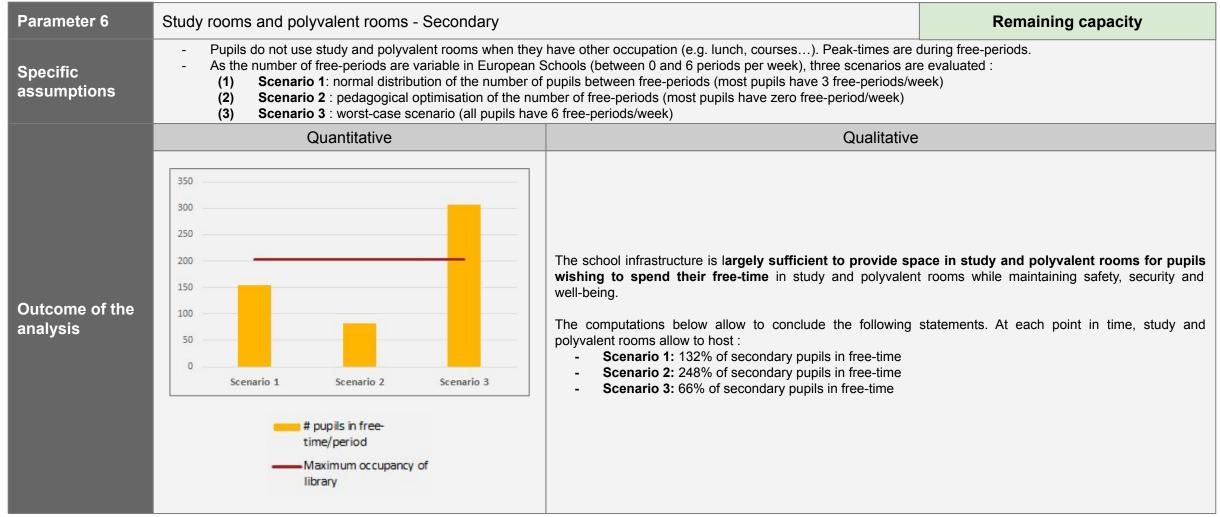
#### 4.6 Study rooms and polyvalent rooms

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.  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.									
			Minim	num surface fo	r polyvale	nt rooms	Peda	igogical norm		
	The capacity of study rooms and polyvalent rooms is limited by different norms:  (1) The minimum surface required in polyvalent rooms for pupils (pedagogical norm). In		European Schools	Federal Government	FWB	AGION	Ad-hoc	Lower boundary		
		Surface per pupil				~		AGION		
Normo and	Belgium, these norms are defined by regional entities (AGION).	Minimum surface per pupil (at the same time) Pedagogical norm						ngogical norm		
Norms and standards	(2) The minimum surface needed per pupil/staff (infrastructural norm). For pupils, these norms		European Schools	Federal Government	FWB	AGION	Ad-hoc	Lower boundary		
	are defined by the two regional entities: Fédération Wallonie - Bruxelles (FWB) &	Classrooms norms			~	<b>~</b>		FWB/AGION		
	Agentschap Voor Infrastructuur in het Onderwijs (AGION). For the staff, the norm is defined at the	Minimum surface per worker Well-being no						I-being norm		
	federal level (Codex).		European Schools	Federal Government	FWB	AGION	Ad-hoc	Lower boundary		
Study related to school cana	city – EEB1 – Final report	Surface per staff		<b>✓</b>				Codex		

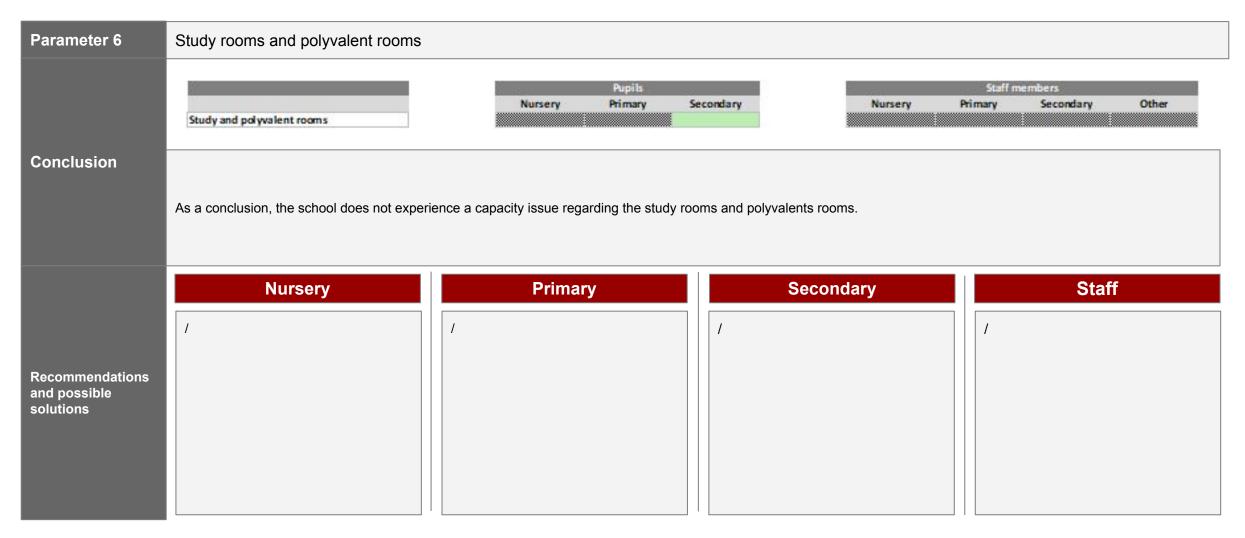
#### 4.6 Study rooms and polyvalent rooms

Parameter 6	Study rooms and polyvalent rooms								
		Oo School population	School organisation	School infrastructure					
Key data	The capacity of study and polyvalent rooms	Number of pupils	Typical schedules	Surface of study rooms and polyvalent rooms					
	was computed based on data of the Academic year 2020 - 2021.	Number of teachers		polyvalent rooms					
General assumptions	needed is computed on the total number.  The number of pupils that can be host.  The surface of study and polyvalent row.  Nursery and primary pupils do not use.  Secondary pupils have between 0 and.  Scenario 1 : Normal distribution.  Scenario 2 : Pedagogical opti	oper of pupils (0.5m²/pupil).  Ited at the same time in each polyvalent rocoms is decreased to take into account the each study rooms and polyvalent rooms as defined free-time per week. Three differences	erent scenarios of the percentage of pupils per s per week	s of classrooms. me there is one surveillance staff per room.					

#### 4.6 Study rooms and polyvalent rooms - Secondary



#### 4.6 Study rooms and polyvalent rooms



PwC

#### 4.6 Study rooms and polyvalent rooms

Parameter 6	Study rooms and p	Study rooms and polyvalent rooms							
	6.1 Study and polyvalent 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 - Excel model	6.2 Study and polyvalent 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						
	6.3 Study and polyvalent 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						

# S

## Sanitary rooms

#### 4.7 Sanitary rooms

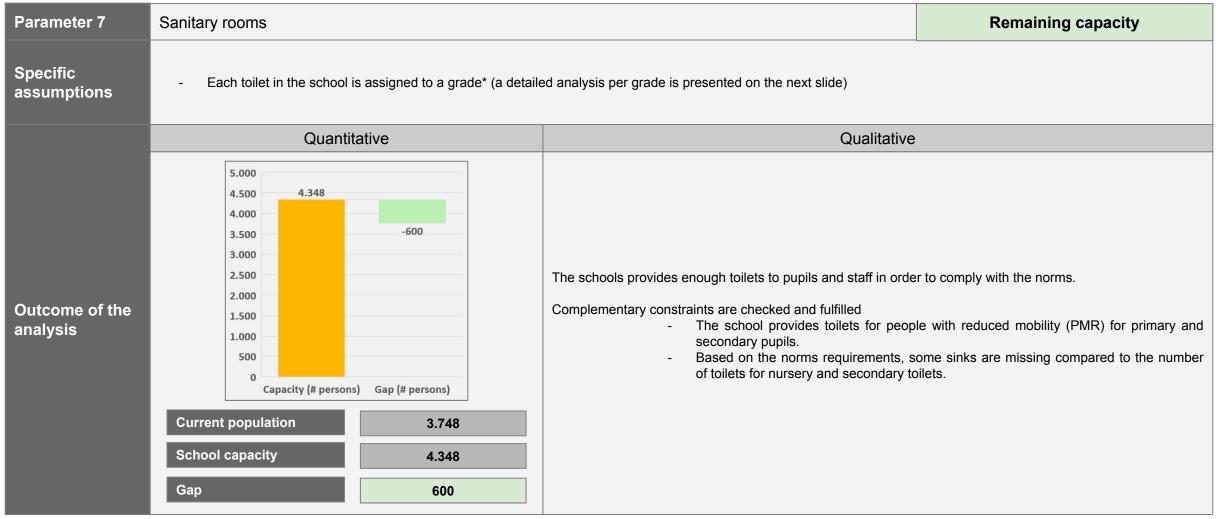
Parameter 7	Sanitary rooms							
Definitions	Sanitary facilities refer to the infrastructure dedicated to toil	ets.						
			Minin	num surface fo	r sanitary	facilities	Wel	l-being norm
	<ul> <li>The minimum surface required in sanitary for pupils (well-being norm). In Belgium, these norms are defined by regional entities (AGION).</li> <li>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).</li> </ul>		European Schools	Federal Government	FWB	AGION	Ad-hoc	Lower boundary
		Surface per pupil				<b>✓</b>		AGION
Norma and		Minimum supply of facilities				Well-being norm		
Norms and standards			European Schools	Federal Government	FWB	AGION	Ad-hoc	Lower boundary
		Number of toilets/sinks per pupil/staff		~		<b>~</b>		AGION/Codex

#### 4.7 Sanitary rooms

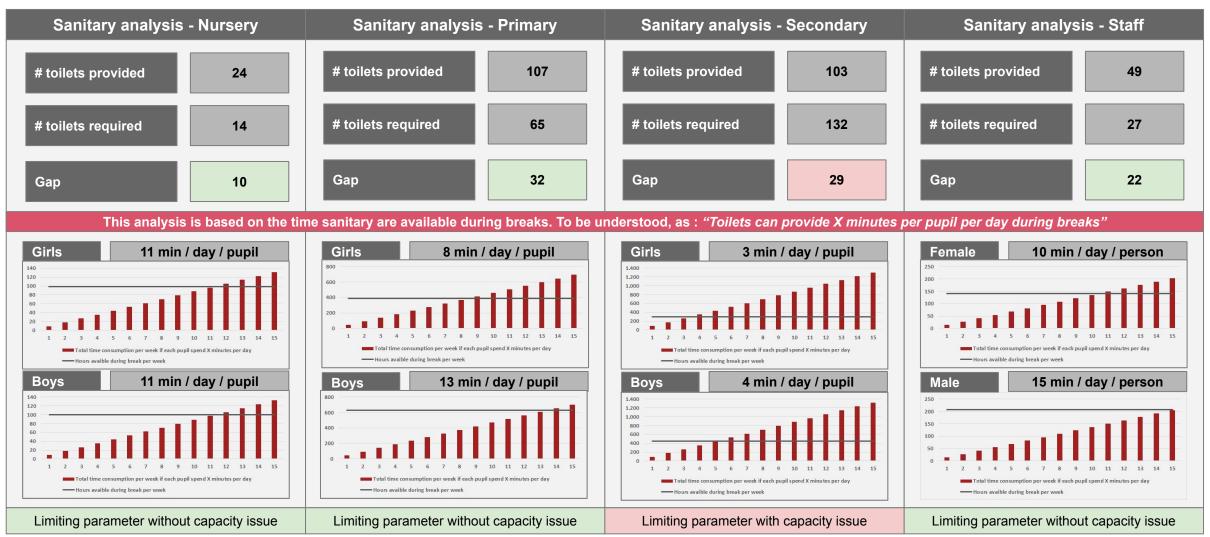
Parameter 7	Sanitary rooms			
		Oo School population	School organisation	School infrastructure
Key data	The capacity of sanitary rooms was	Number of pupils	Typical schedules	Surface of sanitary facilities
	computed based on data of the Academic year 2020 - 2021.	Number of staff	Number of toilets (and sinks) per grade	
General assumptions	<ul> <li>The school must provide toilets for pe</li> </ul>		vide ratio. heir respective population. Common urinals a	are only assigned to primary boys.

September 2021 PwC

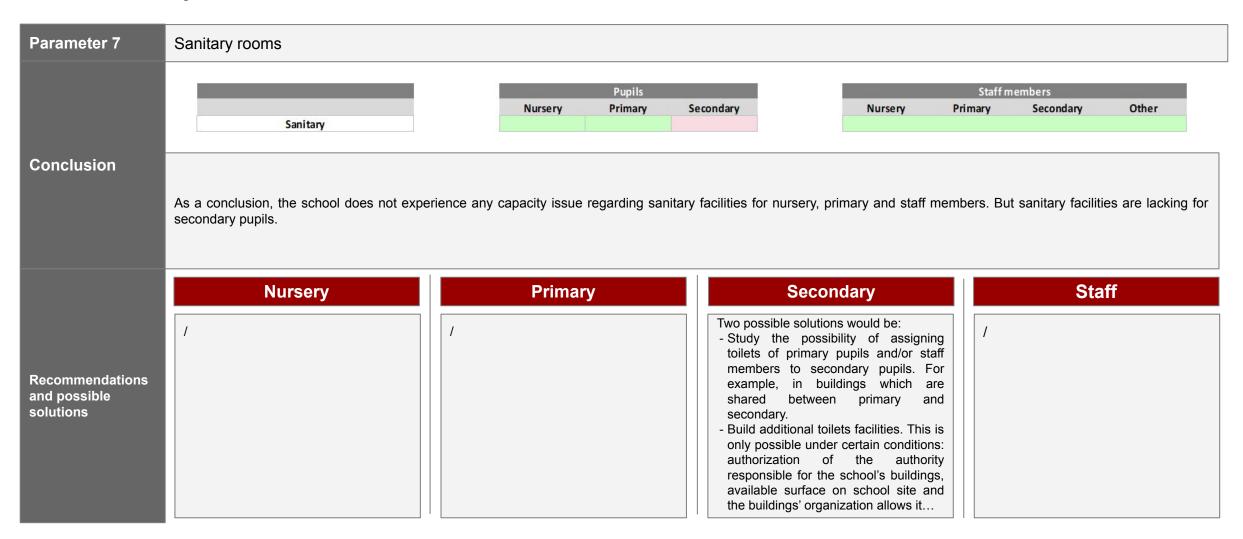
#### 4.7 Sanitary rooms



#### 4.7 Sanitary rooms



#### 4.7 Sanitary rooms



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#### 4.7 Sanitary rooms

Parameter 7	Sanitary rooms		
	7.1 Sanitary	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 -	7.2 Sanitary	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
Excel model	7.3 Sanitary	The objective of this sheet is to compute school capacity of the parameter by computing the number of people the school could host with current infrastructure while maintaining well-being.	Fully - automated
	7.4 Sanitary	The objective of this sheet is to compute school capacity of the parameter by assessing the amount of time each pupil / staff can use sanitary facilities during breaks.	Fully - automated

## Teachers' rooms

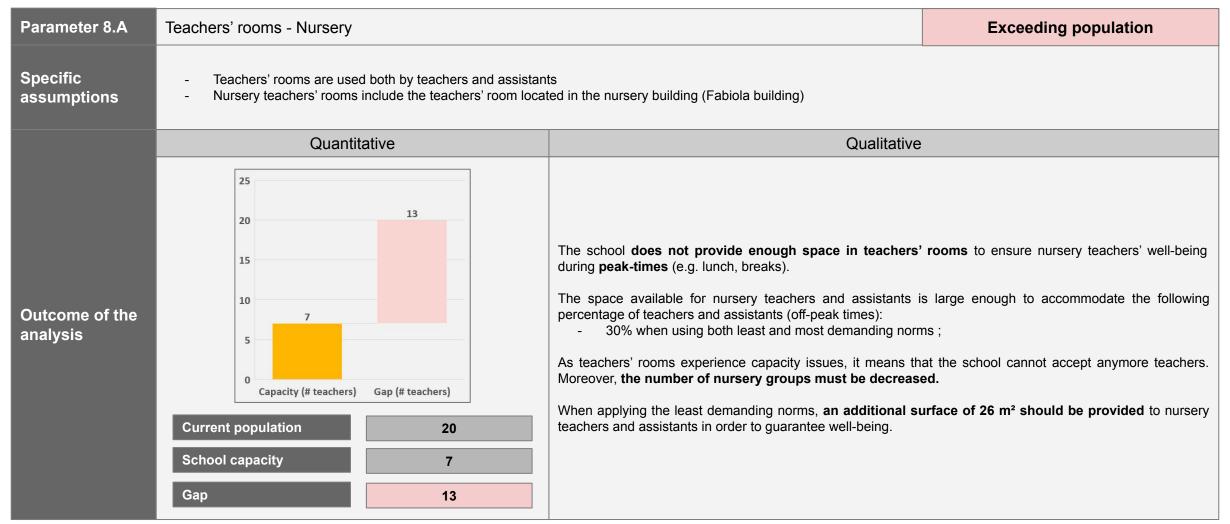
#### 4.8 Teachers' rooms

Parameter 8	Teachers' rooms									
Definitions	Teachers rooms are rooms exclusively reserved for the teaching body of the school (teachers and assistants). These rooms should allow different usages: eating, working, preparing courses and stimulating exchanges between teachers.									
Norms and standards	The capacity of teachers' rooms is limited by different norms:  (1) The minimum surface required in teachers' rooms for staff (well-being norm). In Belgium, these norms are defined by regional (AGION) and federal (Codex) entities.	Minimum surface for teachers' rooms Well-being r					ll-being norm			
			European Schools	Federal Government	FWB	AGION	Ad-hoc	Lower boundary		
		Surface per teacher		<b>✓</b>		<b>✓</b>		Codex		

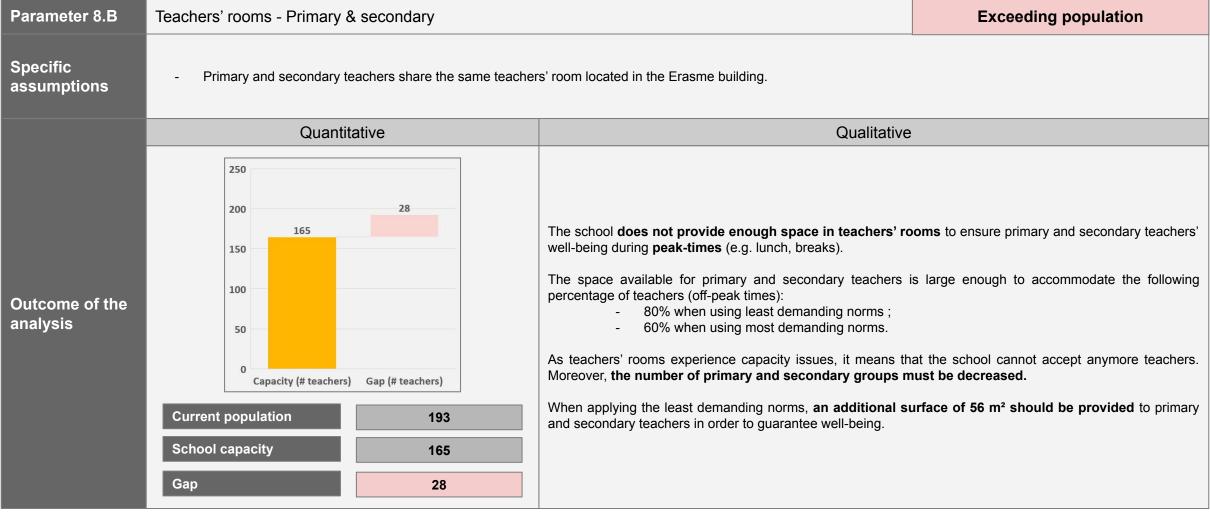
#### 4.8 Teachers' rooms

Parameter 8	Teachers' rooms								
Key data	The capacity of teachers' rooms was computed based on data of the Academic year 2020 - 2021.	Number of teachers and assistants	School organisation  Typical schedules	School infrastructure  Surface of teachers' rooms					
General assumptions	<ul> <li>Nursery assistants also use the teachers' room (in Fabiola building)</li> <li>Some teachers do not work on a full time basis, but we consider the whole population of teachers. All teachers have at least a partial usage of the teachers' room.</li> </ul>								

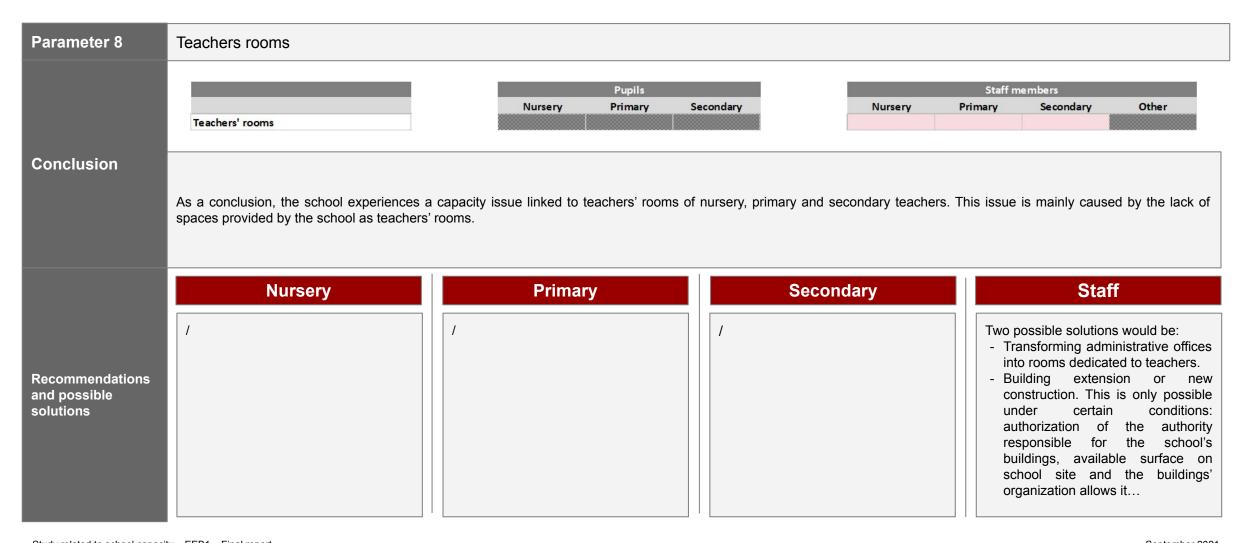
#### 4.8 Teachers' rooms - Nursery



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



# 4.8 Teachers rooms



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# 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 - 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

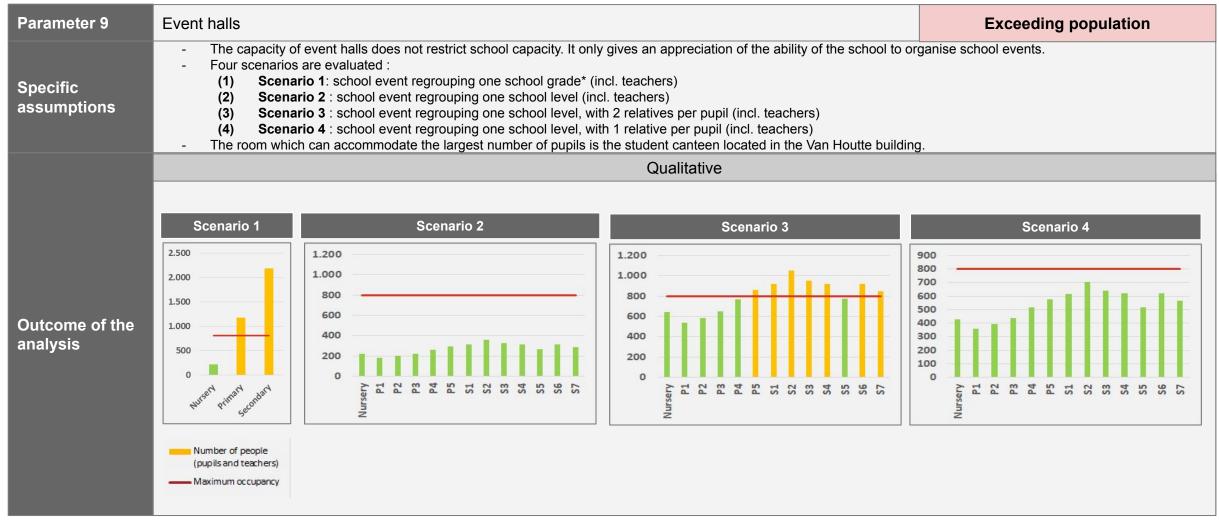
# 4.9 Event halls

Parameter 9	Event halls							
Definitions	Event halls welcome different type of activities such as extr families, etc.).	a-curricular activities, occas	sional events ar	nd exams. It should	l also allow t	he invitation o	of external pe	ople (parents,
			Minim	num surface for	r polyvale	nt rooms	Wel	ll-being norm
			European Schools	Federal Government	FWB	AGION	Ad-hoc	Lower boundary
	The capacity of event halls is limited by one norm :	Surface per pupil		<b>✓</b>		<b>✓</b>		AGION
Norms and standards	(1) The minimum surface required in polyvalent rooms for pupils (well-being norm). In Belgium, these norm is defined by regional entities (AGION).							

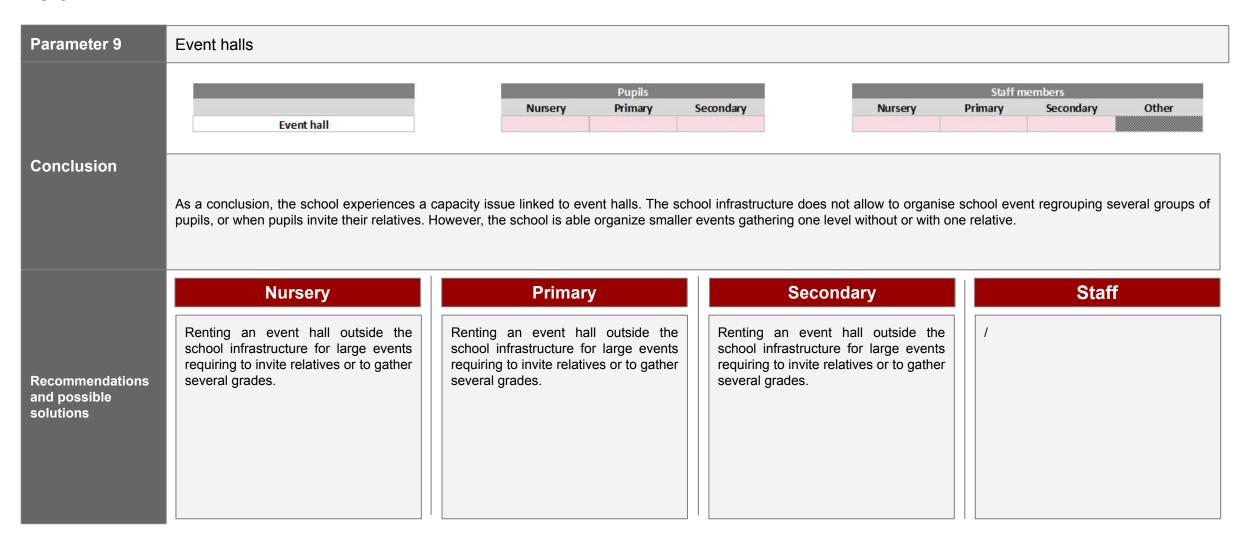
# 4.9 Event halls

Parameter 9	Event halls			
		School population	School organisation	School infrastructure
Kan data	The capacity of event halls was computed	Number of pupils	Typical use of event halls	Surface of rooms which can be used as an event hall
Key data	based on data of the Academic year 2020 - 2021.	Number of teachers and assistan	ts	
General assumptions	secondary) Each pupil should be allowed to bring	two relatives/parents with him.	school to organize at least one event for each	

# 4.9 Event halls



# 4.9 Event halls



# 4.9 Event halls

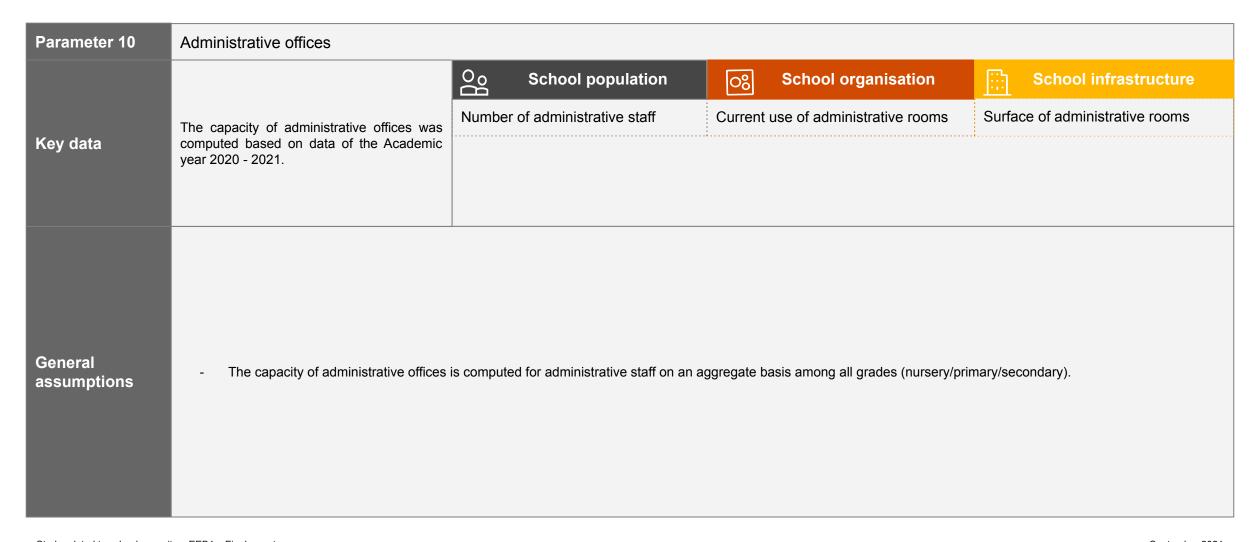
Parameter 9	Event halls					
	9.1 Event halls	The objective of this sheet is to summarize all aggregated data, standards and norms and assumptions used to compute school capacity of the parameter.	Semi - automated			
Guidelines - Excel model	9.2 Event halls	The objective of this sheet is to represent 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

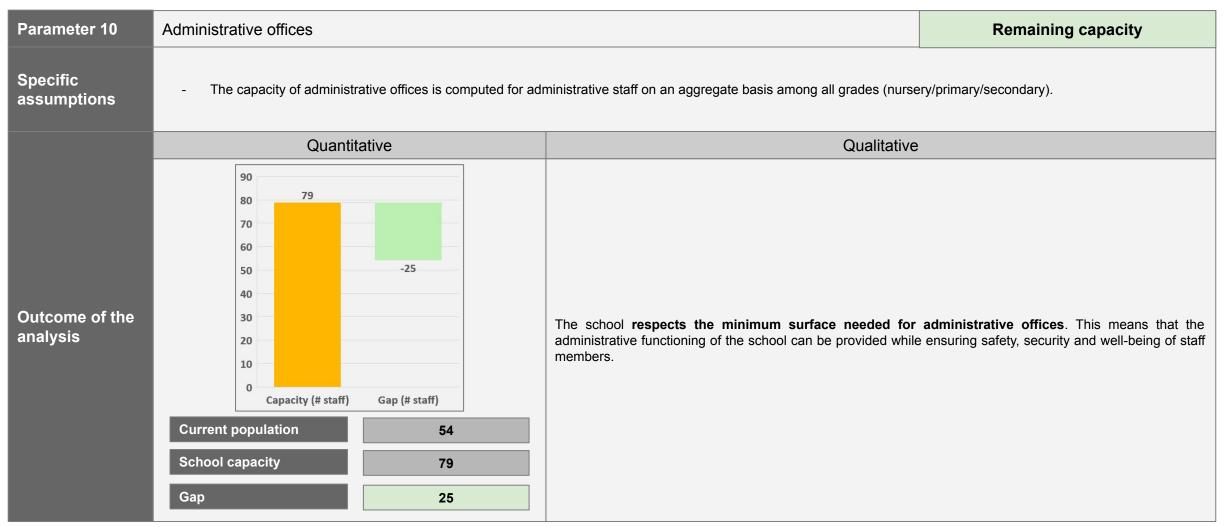
# 4.10 Administrative offices

Parameter 10	Administrative offices							
Definitions	Administrative offices include all rooms used for the manage	ement of school activities:	direction offices	, secretariat, psych	ologists offic	ces and other	educational s	staff offices.
			l	Minimum surfa	ce for off	ices	Wel	I-being norm
			European Schools	Federal Government	FWB	AGION	Ad-hoc	Lower boundary
	The conscituted administrative offices is limited by one	Surface per staff				<b>✓</b>		AGION
Norms and standards	The capacity of administrative offices is limited by one norm:  (1) The minimum surface required in offices for staff (well-being norm). In Belgium, these norm is defined by regional entities (AGION).							

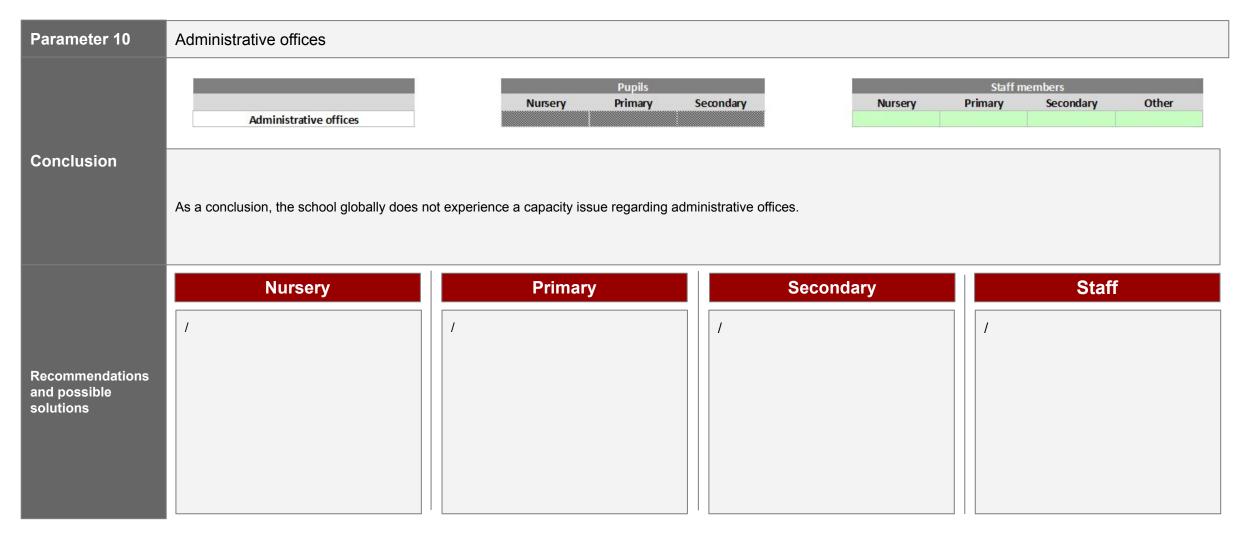
# 4.10 Administrative offices



# 4.10 Administrative offices



# 4.10 Administrative offices



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# 4.10 Administrative offices

Parameter 10	Administrative offices					
	10.1 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 - Excel model	10.2 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 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			



# Uccle -Conclusion and recommendations

# 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

	apacity to ensure the school's mary objective		capacity to ensure pupils' and aff well-being
Pupils	3.102 people	Pupils	1.298 people
Staff	325 people	Staff	284 people

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# 5. Conclusion and recommendations

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

### Recommendations

### Nursery

### **Sport facilities**

- Use outdoor sport facilities even when weather conditions are unfavourable.

### **Covered recreation areas**

- Extend covered recreation areas
- Extend/use indoor spaces (hallways, study rooms, and other similar spaces...)

### **Primary**

### Classrooms

- Building extension or new construction (under certain conditions)

### Sport facilities

- Building extension or new construction (under certain conditions)
- Use outdoor sport facilities even when weather conditions are unfavourable

### Canteen

- Building extension or new construction (under certain conditions)

### Recreation areas

- Use a share of the secondary recreation areas

### **Covered recreation areas**

- Extend covered recreation areas
- Extend/use indoor spaces (hallways, study rooms, and other similar spaces...)

### **Secondary**

### Classrooms

- Building extension or new construction (under certain conditions)

### **Sport facilities**

- Building extension or new construction (under certain conditions)
- Use outdoor sport facilities even when weather conditions are unfavourable

### Canteen

- Building extension or new construction (under certain conditions)

### Covered recreation areas

- Extend covered recreation areas
- Extend/use indoor spaces (hallways, study rooms, and other similar spaces...)

### Sanitary facilities

- Assign primary or staff toilets to secondary
- Build additional sanitary facilities

### Staff

### Teachers' rooms

- Transform administrative offices into rooms dedicated to teachers
- Building extension or new construction (under certain conditions)

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

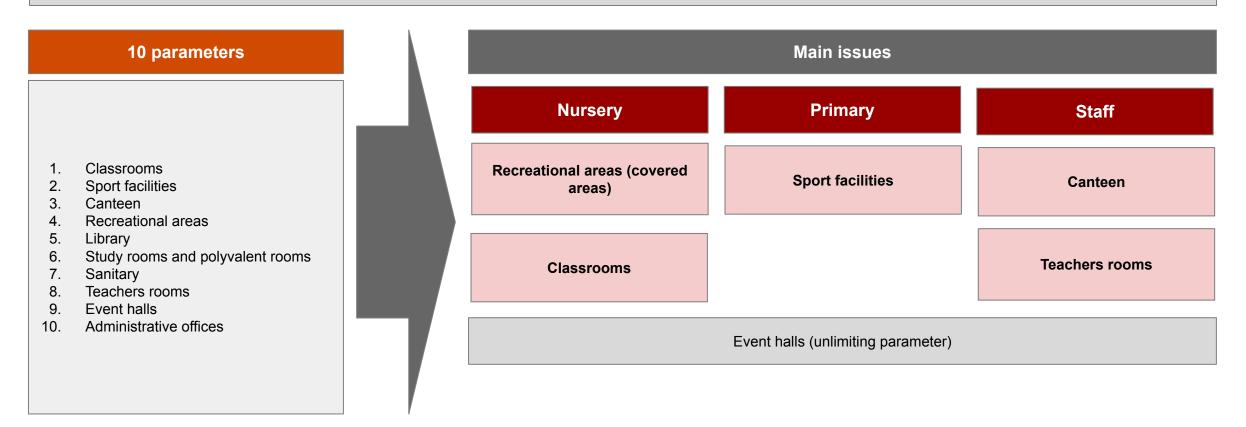


# Berkendael -School capacity overview

# 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	

P	upils
Nursery	Primary

Nursery Prim	nary		Othe	er
	************			
		20000000		

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# Berkendael -School capacity through each parameter

# Classrooms

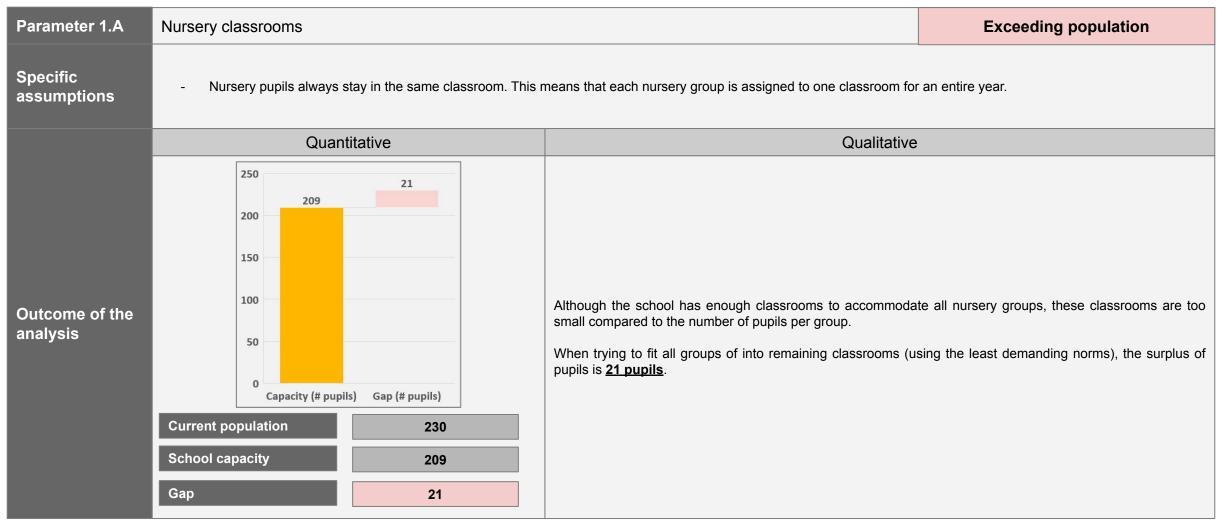
# 7.1 Classrooms

Parameter 1	Classrooms								
	Classrooms include normal classrooms, special classrooms and labs:								
Definitions	- Normal classrooms are classrooms in which no specific material/equipment is needed to teach. These classrooms contain chairs and desks for all pupils and for the teacher and a black/white board.								
	- Special classrooms are classrooms in which specific material/equipment is needed to teach. Special classrooms, include ICT classrooms, arts classrooms and music classrooms.								
	- Labs are classrooms specifically designed to teach science courses (biology, chemistry and physics). Labs contain special equipment which allow to perform scientific experiments.								
p	The capacity of classrooms is limited by two different	Minimum classroom surface per pupil/staff Pedagogical norm							
	pedagogical norms:  (1) The minimum surface needed per pupil/staff (pedagogical norm on infrastructure). For pupils, these norms are defined by the two regional		European Schools	Federal Government	FWB	AGION	Ad-hoc	Lower boundary	
		Normal classrooms		<b>✓</b>	<b>~</b>	~		FWB/AGION	
		Special classrooms		<b>✓</b>	<b>~</b>	<b>✓</b>		AGION	
standards		Maximum number of pupils per class Pedagogical n					agogical norm		
			European Schools	Federal Government	FWB	AGION	Ad-hoc	Lower boundary	
	own norms on the <b>maximum number of pupils per class</b> . The maximum number pupils per	Normal classrooms	<b>✓</b>		<b>~</b>			European Schools	
	class varies among courses.	Special classrooms	<b>✓</b>		<b>~</b>			European Schools	

# 7.1 Classrooms

Parameter 1	Classrooms				
		School population	School organisation	School infrastructure	
	The capacity of classrooms was computed	Number of pupils	School buses - Time of arrival and departure	Surface of each classroom	
Key data	based on data of the Academic year 2020 - 2021.	Number of teachers	Typical schedules		
			Courses		
General assumptions	<ul> <li>There is one teacher (and one assistate)</li> <li>The capacity of classrooms is computed account any potential evolutions in sc</li> </ul>	ited based on a static depiction of optimis shool population, organisation and/or infras	ed occupancy given current school population	•	

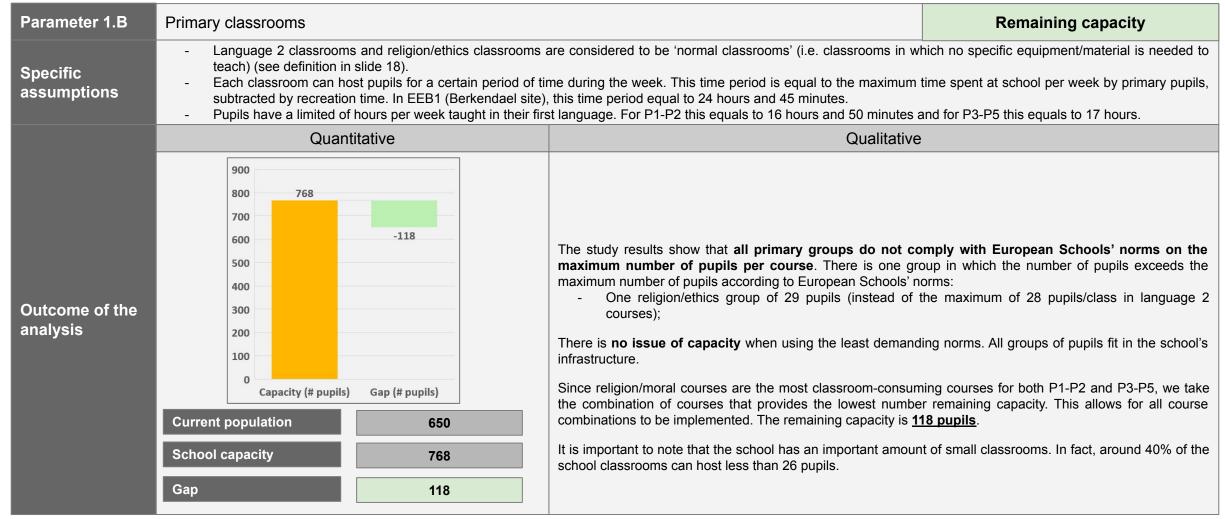
# 7.1 Classrooms - Nursery



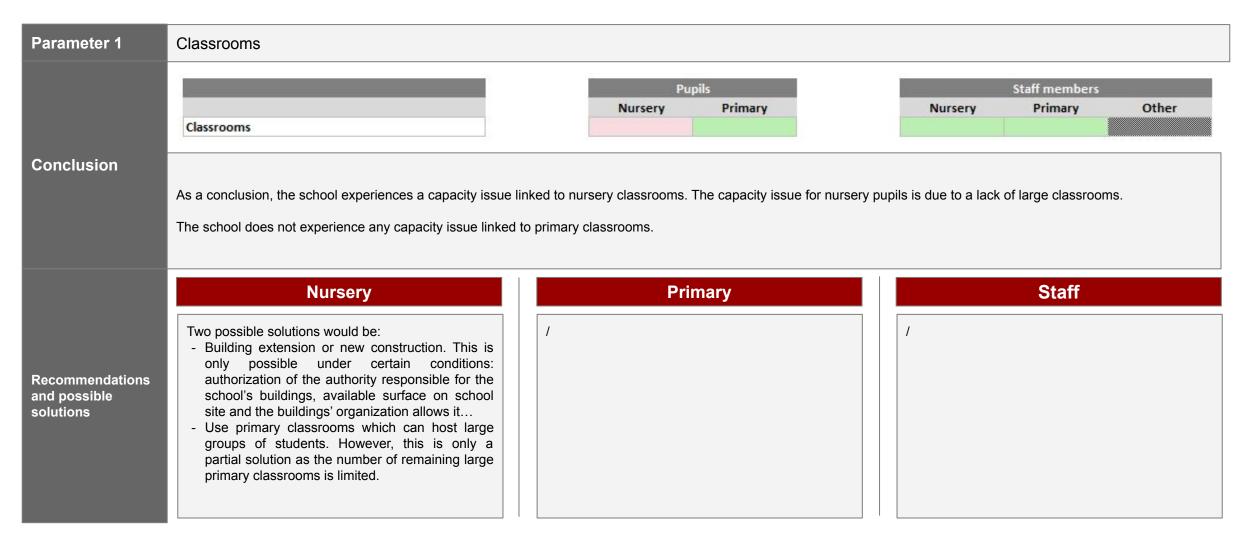
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PwC

# 7.1 Classrooms - Primary



# 7.1 Classrooms



# 7.1 Classrooms

Parameter 1	Classrooms						
Guidelines - Excel model	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				
	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.					
	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	accumptions which are directly linked to individual data. On the left-hand side, school intrastructure data (suppliy) is					
	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				

# Indoor sport facilities

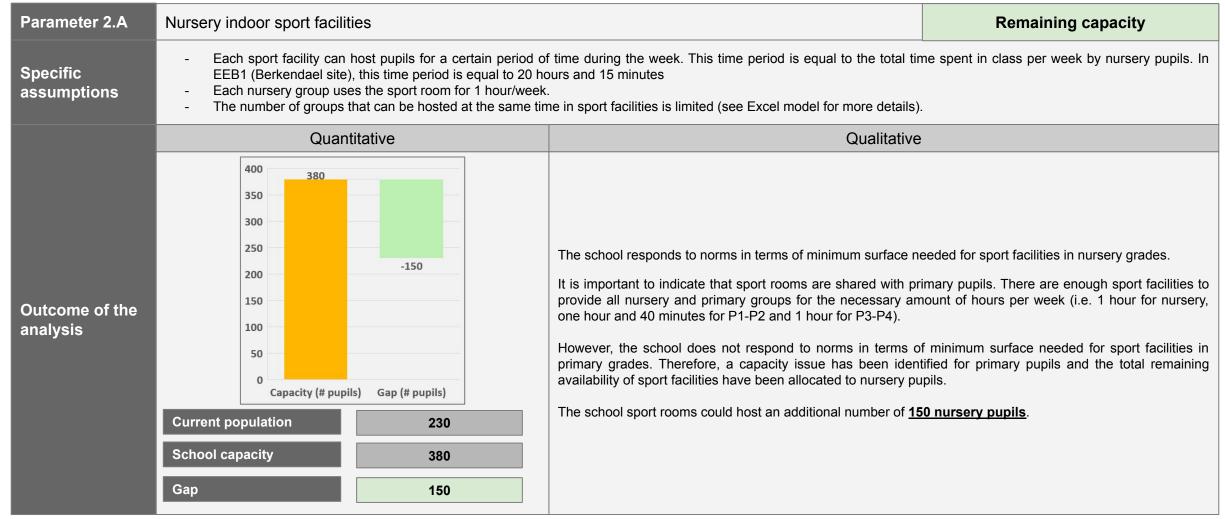
# 7.2 Indoor sport facilities

Parameter 2	Indoor sport facilities							
Definitions	Sport facilities include all indoor rooms and/or spaces in which Physical Education can be taught.  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		Minimum surface of total sport facilities Pedagogical norm						
	The capacity of sport facilities is limited by two different pedagogical norms:  (1) The minimum surface needed for a school's sport facilities (pedagogical norm on sport facilities)		European Schools	Federal Government	FWB	AGION	Ad-hoc	Lower boundary
		Sport facilities			<b>~</b>	<b>~</b>		FWB/AGION
	infrastructure). These norms are defined by the two regional entities: 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 own norms on the maximum number of pupils per class. The maximum number pupils per class varies among courses.	Maximum number of pupils per class Pedagogical norm						agogical norm
			European Schools	Federal Government	FWB	AGION	Ad-hoc	Lower boundary
	stabb various arriority socirous.	Sport facilities	<b>✓</b>		<b>✓</b>			European Schools

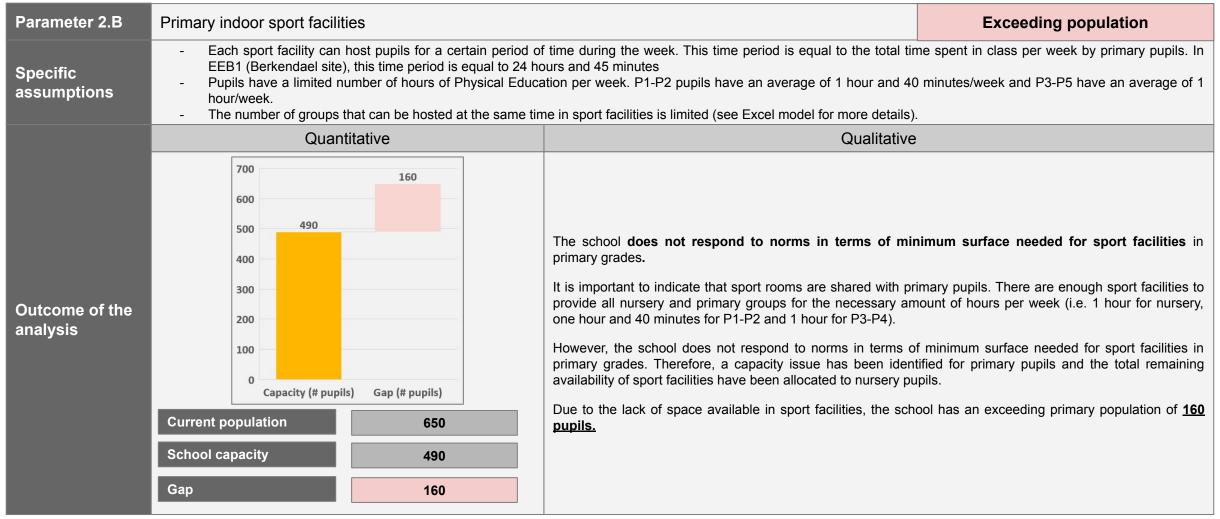
# 7.2 Indoor sport facilities

Parameter 2	Indoor sport facilities								
Key data		ဝရိ	School population	School organisation			School infrastructure		
	The capacity of sport facilities was computed based on data of the Academic year 2020 - 2021.	Number of pupils  Number of teachers		School buses <i>- Time of arrival and departure</i> Typical schedules		Surface of each sport facility			
				Courses					
General assumptions	- In order to ensure pupils' well-being, the school must be able to host all sport courses inside in case of unfavourable weather conditions								

# 7.2 Indoor sport facilities - Nursery



# 7.2 Indoor sport facilities - Primary



# 7.2 Indoor sport facilities

Parameter 2	Indoor sport facilities								
		Pupils	Staff men	Staff members					
Conclusion	Sport facilities	Nursery Primary	Nursery Primar	y Other					
	As a conclusion, the school experiences a capacity issue linked to primary sport facilities. The capacity issue for primary pupils is due to a lack of space in sport facilities.								
	It is important to emphasize that this parameter only include Education courses. Outdoor facilities are however unavailable courses.								
Recommendations and possible solutions	Nursery	Primary	Staff						
		A possible solution would be:     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     A possible solution to resolve the capacity issue of sport facilities is to bend pupils' well-being by using outdoor sport facilities even when weather conditions are unfavourable.							

# 7.2 Indoor sport facilities

Parameter 2	Indoor sport facilities							
Guidelines - Excel model	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.	Semi - automated					
	2.2.1 Nursery Sport facilities	assumptions which are directly linked to individual data. On the left-hand side school intrastructure data (supply) is						
	2.2.2 Nursery Sport facilities	· · · · · · · · · · · · · · · · · · ·						
	2.3.1 Primary Sport facilities	assumptions which are directly linked to individual data. On the left-hand side, school intrastructure data (supply) is						
	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					

# S Canteen

## 7.3 Canteen

Parameter 3	Canteen								
Canteen include all rooms which are designed to host pupils and staff during lunch: canteens, cafeterias									
	The time spent at the canteen should be divided into effect	tive lunch time and prepa	ration time:						
Definitions  - Effective lunch time represents the time needed to eat per pupil. This time does not include preparation time before (walking a food, find a place to sit, etc.) and after (cleaning seat, cleaning dishes, walking out of the canteen, etc.) eating. <sup>1</sup>							teen, washing	g hands, distribute	
	- 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, and after (cleaning seat, cleaning dishes, walking out of the canteen, etc.) eating. <sup>1</sup>								
		Minimum surface of canteen						Pedagogical norm	
	The capacity of canteen is limited by both pedagogical and well-being norms:  (1) The minimum surface needed for a school's canteen/cafeteria (pedagogical norm on		European Schools	Federal Government	FWB	AGION	Ad-hoc	Lower boundary	
		Canteen		<b>✓</b>	<b>~</b>	~		FWB/AGION	
Norms and standards	infrastructure). For pupils, norms are defined by the two regional entities (FWB & AGION). For staff, norms are defined by the Federal government.								
	(2) Norms which ensure pupils' well-being during						l-being norm		
	lunch (well-being norms on education) including: biological rhythm of pupils and minimum lunch time needed per grade.		European Schools	Federal Government	FWB	AGION	Ad-hoc	Lower boundary	
		Canteen					~	1	

## 7.3 Canteen

Parameter 3	Canteen			
	School population School organisation		ଠ <b>ୃ</b> School organisation	School infrastructure
Key data	The capacity of canteens was computed based on data of the Academic year 2020 -	Number of pupils	School buses - Time of arrival and departure	Surface of each canteen
noy auta	2021.	Number of staff	Typical schedules	Surface of each cafeteria
General assumptions	<ul> <li>A minimum amount of effective lunch secondary pupils need the same amo         <ul> <li>Nursery pupils need 45 minut</li> <li>Primary pupils need 30 minut</li> <li>Staff need 35 minutes³</li> </ul> </li> <li>The amount needed to prepare for ea place to sit, etc.) and after (cleaning some supplemental processing of the second se</li></ul>	time is needed in order to ensure pupils' a unt of time as primary pupils: es² es² ting time is around 15 minutes. This time in eat, cleaning dishes, walking out of the car	the schedule constraints it implies, all pupils of	nary and nursery grades. PwC assumes that

<sup>&</sup>lt;sup>1</sup> 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. <a href="https://www.yumpu.com/fr/document/view/17082745/le-sens-du-rythme-rythme-rythmes-scolaires-biologiques-et-fapeo">https://www.yumpu.com/fr/document/view/17082745/le-sens-du-rythme-rythmes-scolaires-biologiques-et-fapeo</a>

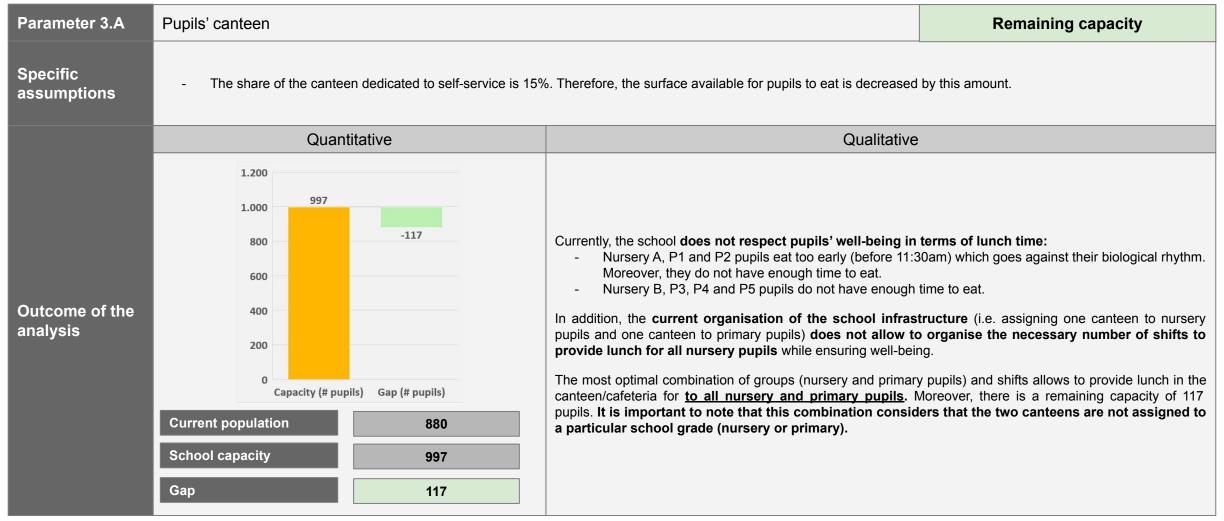
September 2021

<sup>&</sup>lt;sup>2</sup> AFNOR (2011). Norme de service - Service de la restauration scolaire. NF X50-220 Octobre 2011.

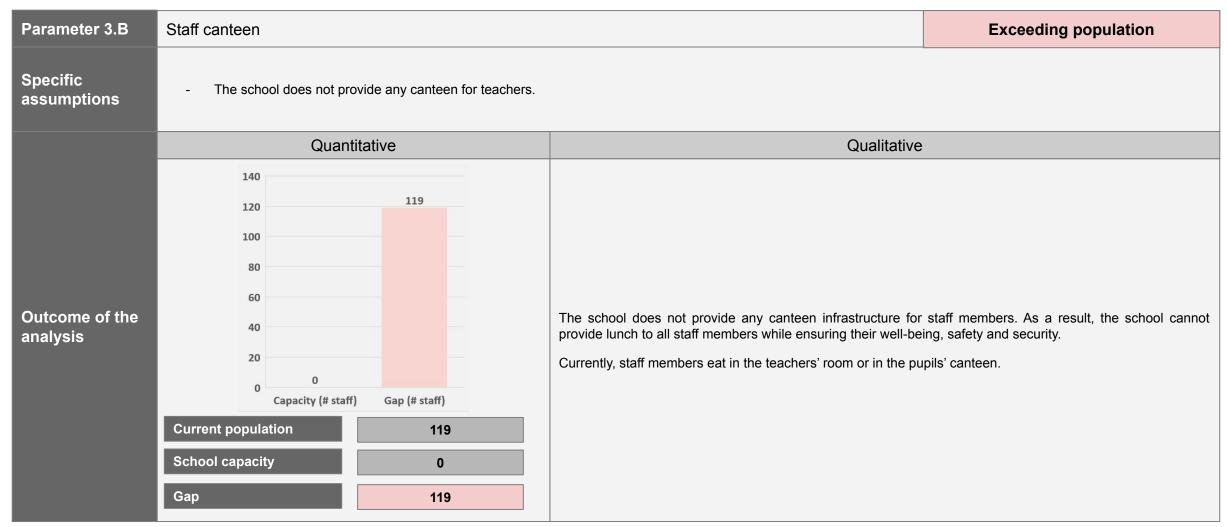
<sup>&</sup>lt;sup>3</sup> Enseignement be (2020). Circulaire 7512 - Règlement de travail cadres, enseignements fondamental et secondaire, ordinaires et spécialisées.

<sup>&</sup>lt;sup>4</sup> 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

## 7.3 Canteen - Pupils



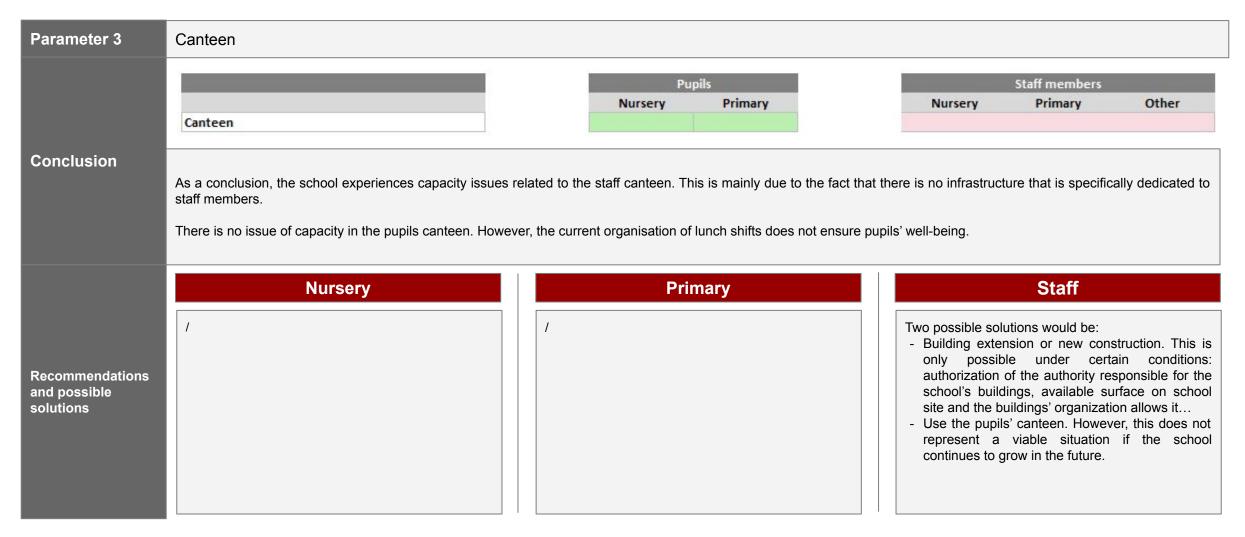
## 7.3 Canteen - Staff



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## 7.3 Canteen



## 7.3 Canteen

Parameter 3	Canteen	Canteen								
	3.1 Canteen	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 -	The objective of this sheet is to represent all individual data used to compute school ca parameter, as well as assumptions which are directly linked to individual data.		Fully - automated							
Excel model	3.3 Canteen	The objective of this sheet is to perform a series of checks on safety, security and well-being compliance before computing school capacity of the parameter. Firstly, firefighters limitations are presented. Secondly, compliance with well-being norms and standards is checked. Finally, the number of shifts needed to host all pupils while respecting their well-being are computed.	Fully - automated							
	The objective of this sheet is to compute the optimal usage of the canteen while respecting security and well-being of pupils and staff members.		Fully - automated							

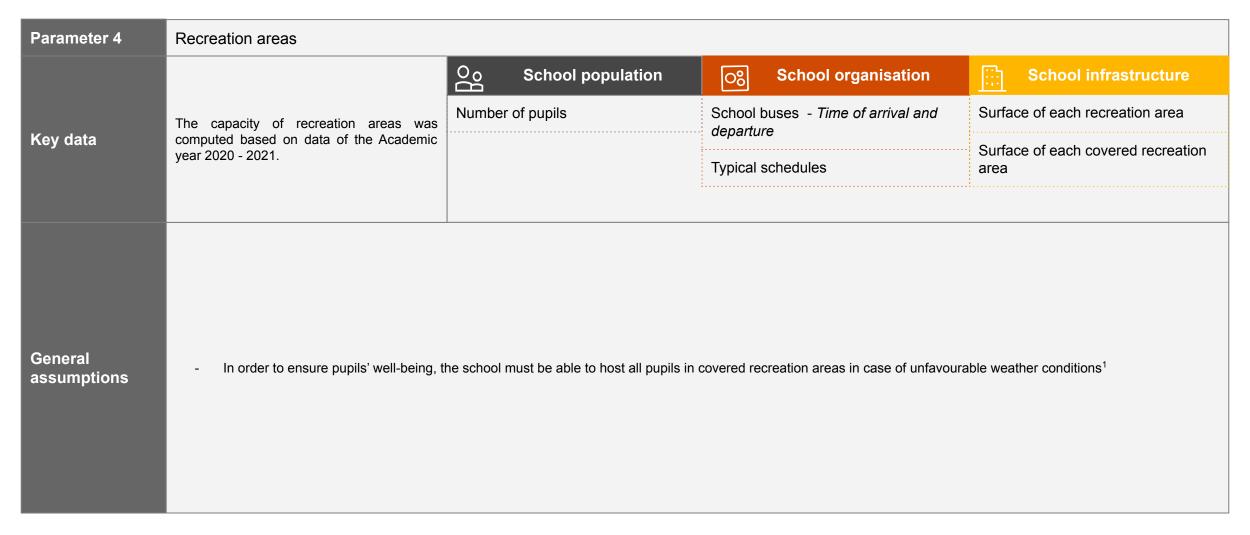
Recreation areas

## 7.4 Recreation areas

Parameter 4	Recreation areas							
Definitions	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:  (1) The minimum fixed surface needed for a school's recreation areas (pedagogical norm on infrastructure). These norms are defined by the two regional entities: FWB & AGION.			Total recrea	tion areas	s	Peda	agogical norm
			European Schools	Federal Government	FWB	AGION	Ad-hoc	Lower boundary
		Min fixed surface			<b>~</b>	~		AGION
Norms and		Min variable surface			<b>~</b>	<b>✓</b>		FWB
standards	(2) The minimum variable surface needed for a school's recreation areas (well-being norm on	Covered recreation areas Well-bei						I-being norm
	infrastructure). These norms are defined by the two regional entities: FWB & AGION		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	Min fixed surface			<b>*</b>	<b>✓</b>		AGION
	areas concern pupils well-being,	Min variable surface			<b>~</b>	~		AGION

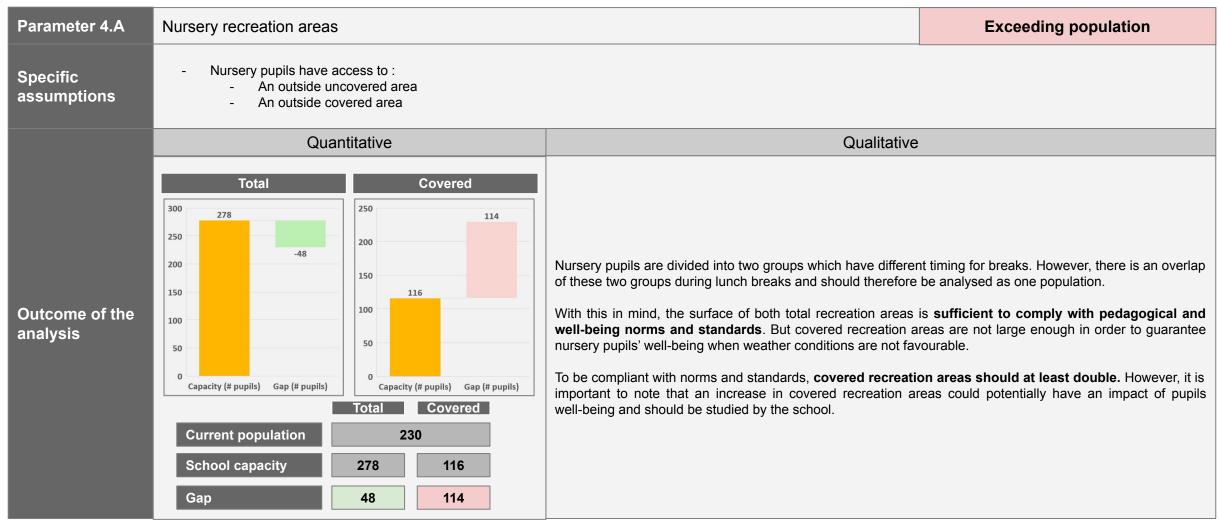
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## 7.4 Recreation areas

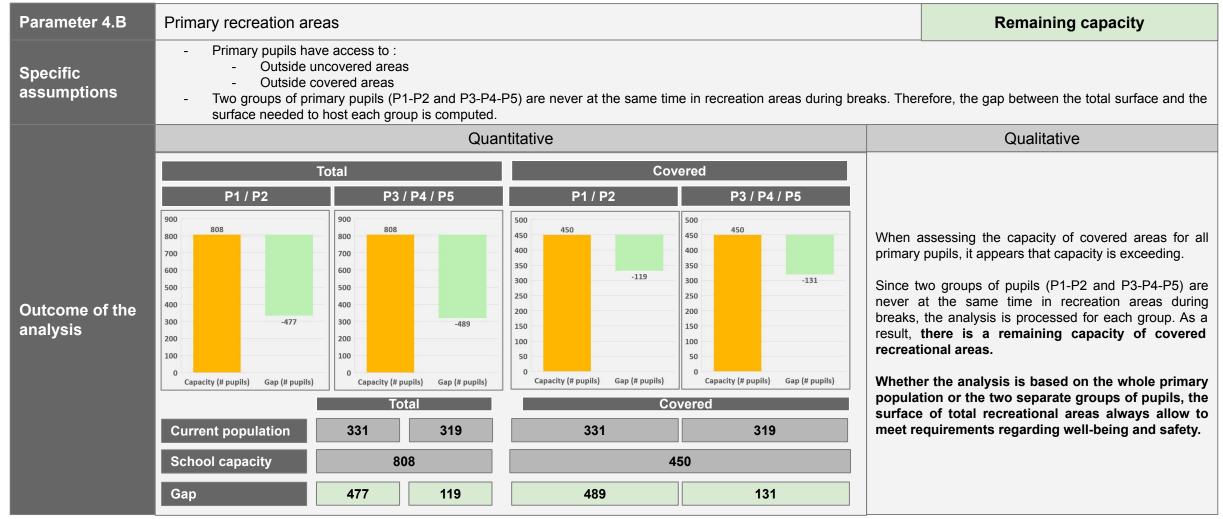


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## 7.4 Recreation areas - Nursery



## 7.4 Recreation areas - Primary



## 7.4 Recreation areas

Parameter 4	Recreation areas		
	Recreation areas Covered recreation areas	Pupils  Nursery Primary	Staff members Nursery Primary Other
Conclusion	As a conclusion, the school experiences a capacity issue pedagogical norms.  Primary total recreation areas and covered areas comply w	regarding covered areas for nursery pupils. The surface of to	otal recreation areas of nursery pupils does comply with
	Nursery	Primary	Staff
Recommendations and possible solutions	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).		

## 7.4 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 model	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

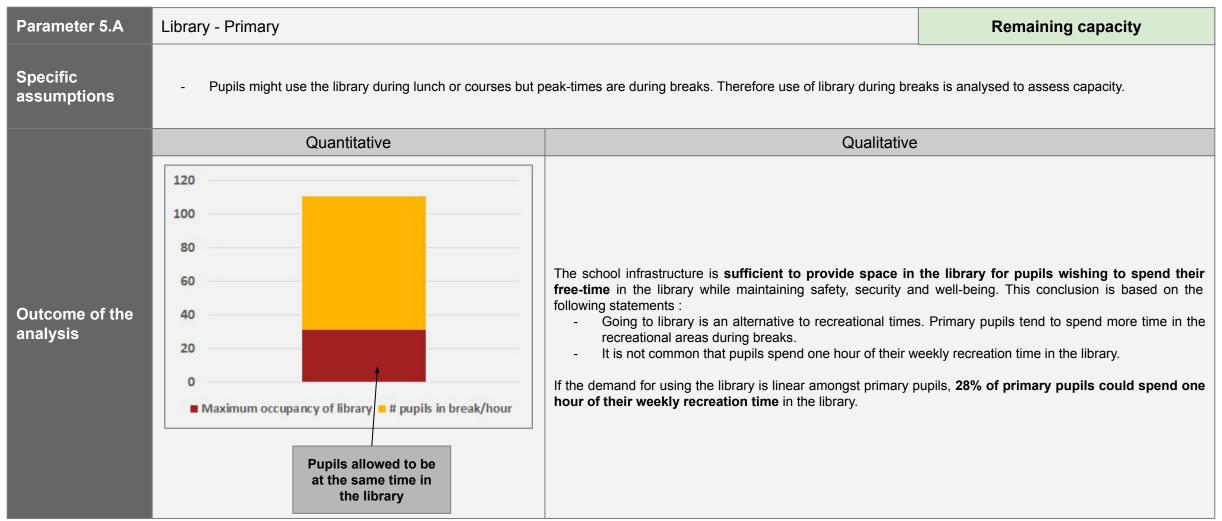
## 7.5 Library

Parameter 5	Library								
Definitions	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.								
				Minimum libr	ary surfac	ce	Peda	agogical norm	
	The capacity of library is limited by two different pedagogical norms :		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				~		AGION	
Norms and	Belgium, these norms are defined by regional entities (AGION).	Surface for facilities				~		AGION	
standards	(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).		Minimum	surface per p	upil (at the	e same tim	e) Peda	agogical norm	
			European Schools	Federal Government	FWB	AGION	Ad-hoc	Lower boundary	
		Classrooms			<b>~</b>	~		FWB/AGION	

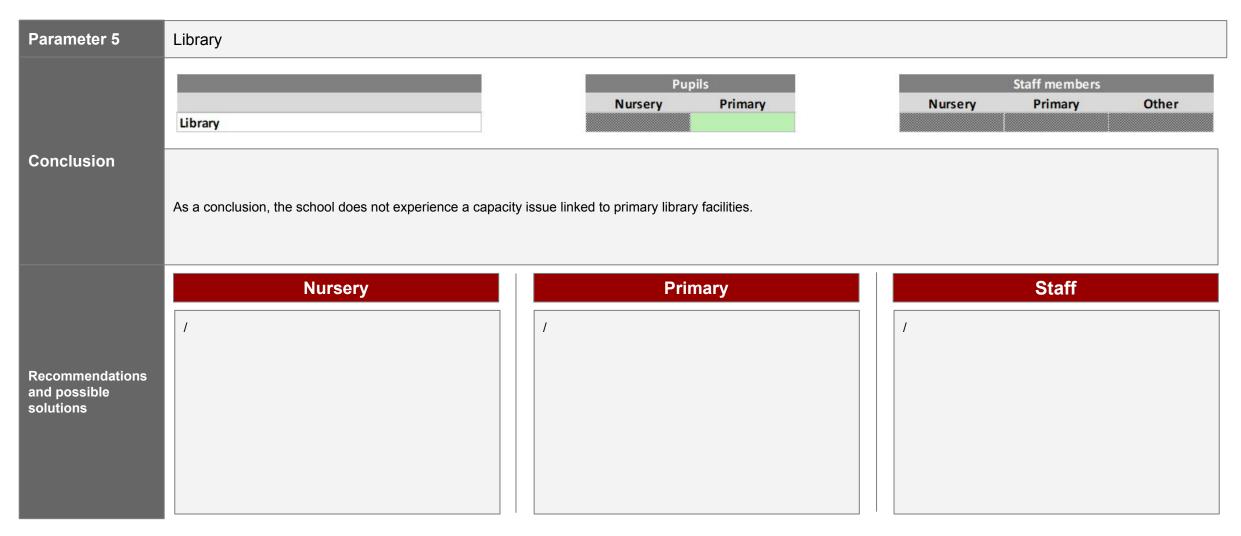
## 7.5 Library

Parameter 5	Library						
		O	School population	0%	School organisation	<u> </u>	School infrastructure
	The capacity of library was computed based	Number	of pupils	Typical	schedules	Surfa	ce of each library
Key data	The capacity of library was computed based on data of the Academic year 2020 - 2021.		of teachers				
General assumptions	Nursery pupils do not use the library a     Groups of pupils also use libraries dur	s they can ing course	not yet read books. s with their teacher.				

## 7.5 Library



## 7.5 Library



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## 7.5 Library

Parameter 5	Library	Library									
	5.1 Library	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 model	5.2 Library	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								
	5.3 Library	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								

## Study rooms and polyvalent rooms

## 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.  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.
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

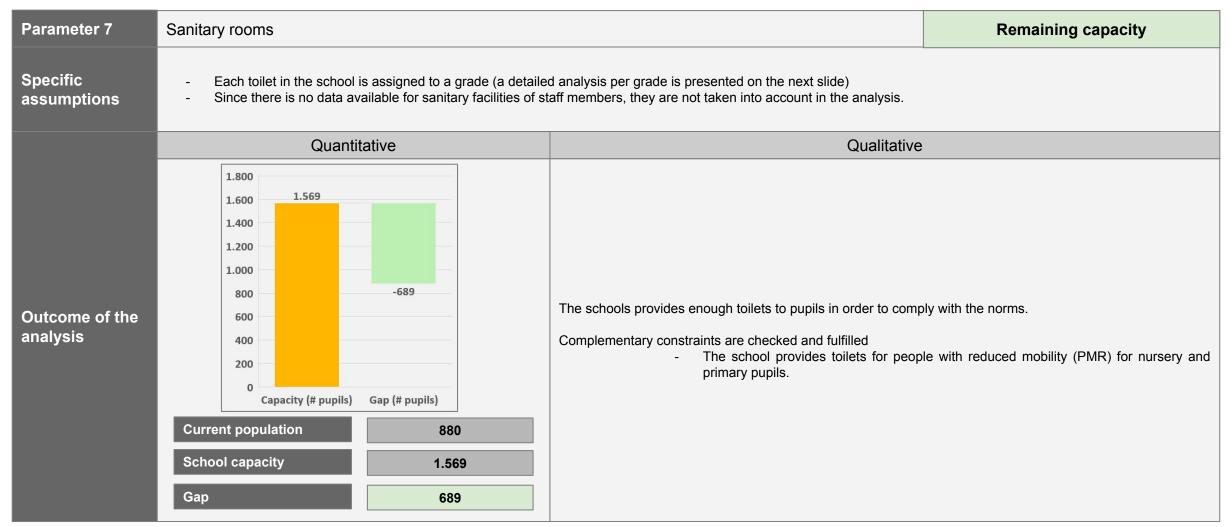
## 7.7 Sanitary rooms

Parameter 7	Sanitary rooms							
Definitions	Sanitary facilities refer to the infrastructure dedicated to toil	ets.						
	The capacity of sanitary is limited by two different norms:  (1) The minimum surface required in sanitary for pupils (well-being norm). In Belgium, these		Minin	num surface fo	r sanitary	facilities	Wel	I-being norm
			European Schools	Federal Government	FWB	AGION	Ad-hoc	Lower boundary
		Surface per pupil				<b>✓</b>		AGION
Norms and	norms are defined by regional entities (AGION).	Minimum supply of facilities					Well-being norm	
standards	(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).		European Schools	Federal Government	FWB	AGION	Ad-hoc	Lower boundary
		Number of toilets/sinks per pupil/staff		~		<b>✓</b>		AGION/Codex

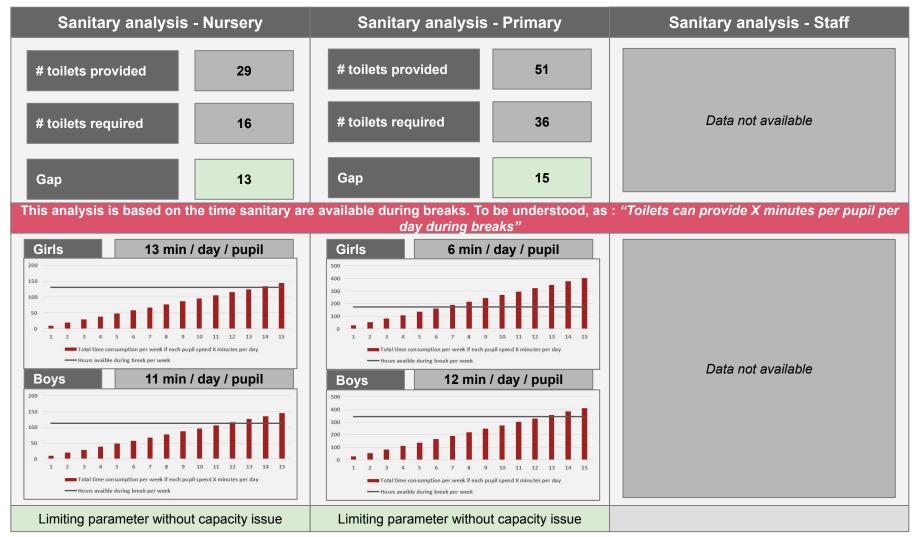
## 7.7 Sanitary rooms

Parameter 7	Sanitary rooms				
		Oo School population	⊝ <sub>රි</sub> School organisation	School infrastructure	
	The capacity of sanitary rooms was	Number of pupils	Typical schedules	Surface of sanitary facilities	
Key data	computed based on data of the Academic year 2020 - 2021.	Number of staff	Number of toilets (and sinks) per grade		
General assumptions	<ul> <li>The school must provide toilets for pe</li> </ul>		ride ratio. r respective population. Common urinals are	e only assigned to primary boys.	

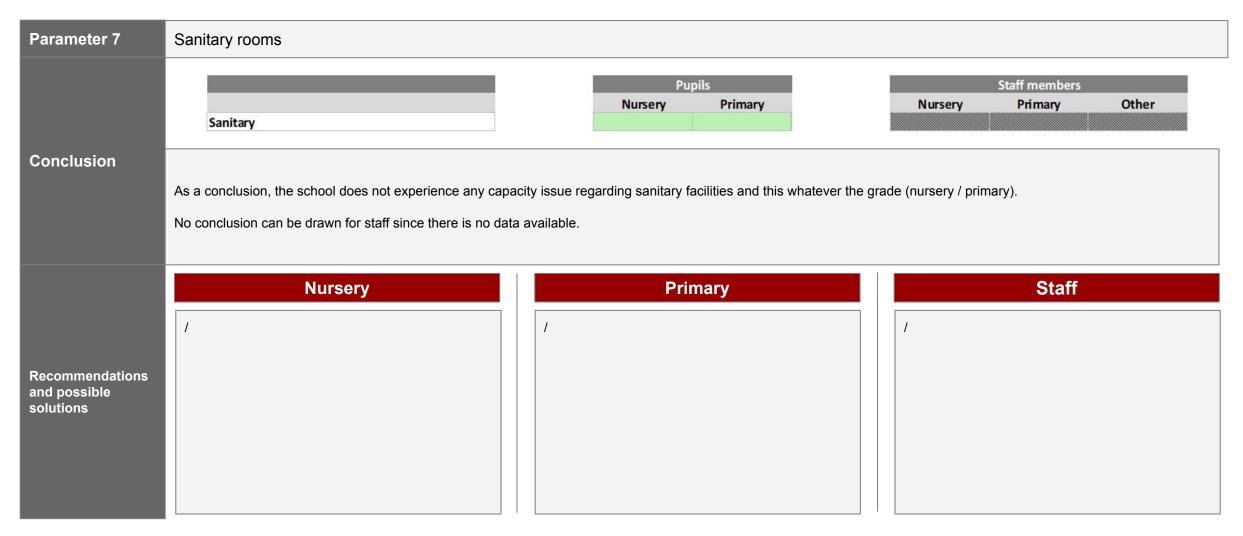
## 7.7 Sanitary rooms



## 7.7 Sanitary rooms



## 7.7 Sanitary rooms



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## 7.7 Sanitary rooms

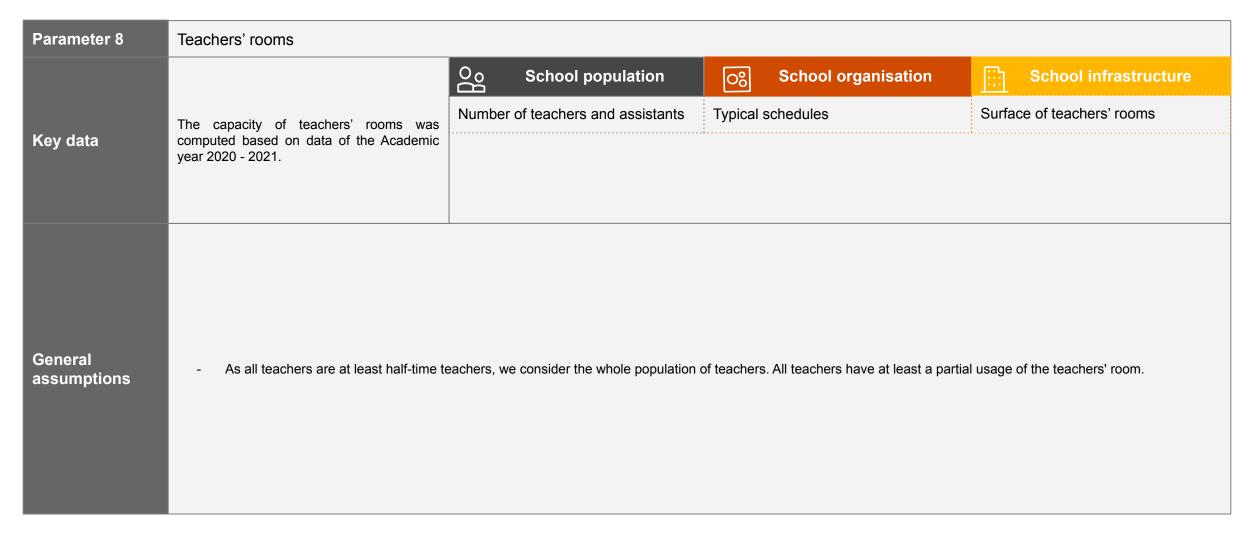
Parameter 7	Sanitary rooms					
Guidelines - Excel model	7.1 Sanitary	The objective of this sheet is to summarize all aggregated data, standards and norms and assumptions used to compute school capacity of the parameter.	Semi - automated			
	7.2 Sanitary	The objective of this sheet is to represent all individual data used to compute school capacity of the parameter, as well as assumptions which are directly linked to individual data.				
	7.3 Sanitary	The objective of this sheet is to compute school capacity of the parameter by computing the number of people the school could host with current infrastructure while maintaining well-being.	Fully - automated			
	7.4 Sanitary	The objective of this sheet is to compute school capacity of the parameter by assessing the amount of time each pupil / staff can use sanitary facilities during breaks.	Fully - automated			

## Teachers' rooms

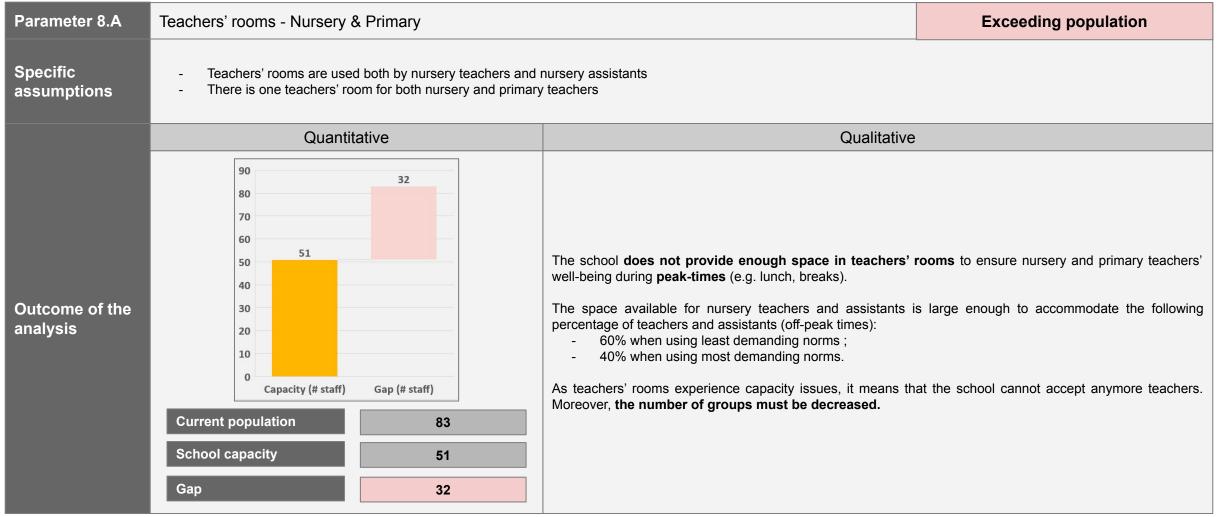
## 7.8 Teachers' rooms

Parameter 8	Teachers' rooms							
Definitions	Teachers rooms are rooms exclusively reserved for the teaching body of the school (teachers and assistants). These rooms should allow different usages: eating, working, preparing courses and stimulating exchanges between teachers.							
	The capacity of teachers' rooms is limited by different norms:  (1) The minimum surface required in teachers' rooms for staff (well-being norm). In Belgium, these norms are defined by regional (AGION) and federal (Codex) entities.		Minin	num surface fo	r teachers	s' rooms	Wel	I-being norm
			European Schools	Federal Government	FWB	AGION	Ad-hoc	Lower boundary
		Surface per teacher		✓		<b>✓</b>		Codex
Norms and standards								

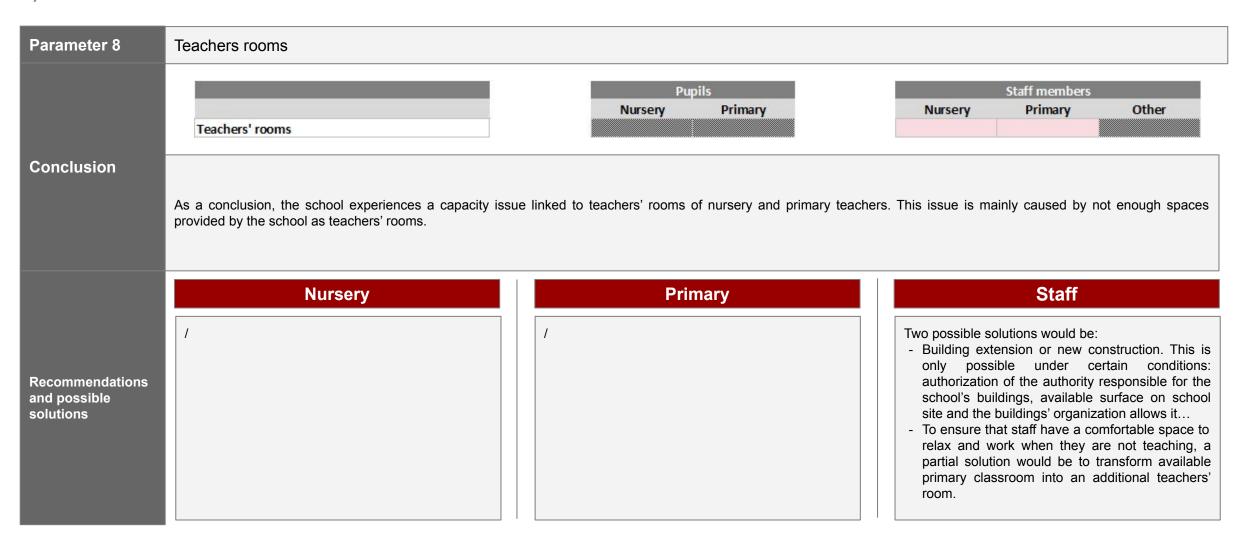
## 7.8 Teachers' rooms



## 7.8 Teachers' rooms - Nursery & Primary



## 7.8 Teachers' rooms



## 7.8 Teachers' rooms

Parameter 8	Teachers' rooms					
Guidelines - Excel model	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			
	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.				
	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

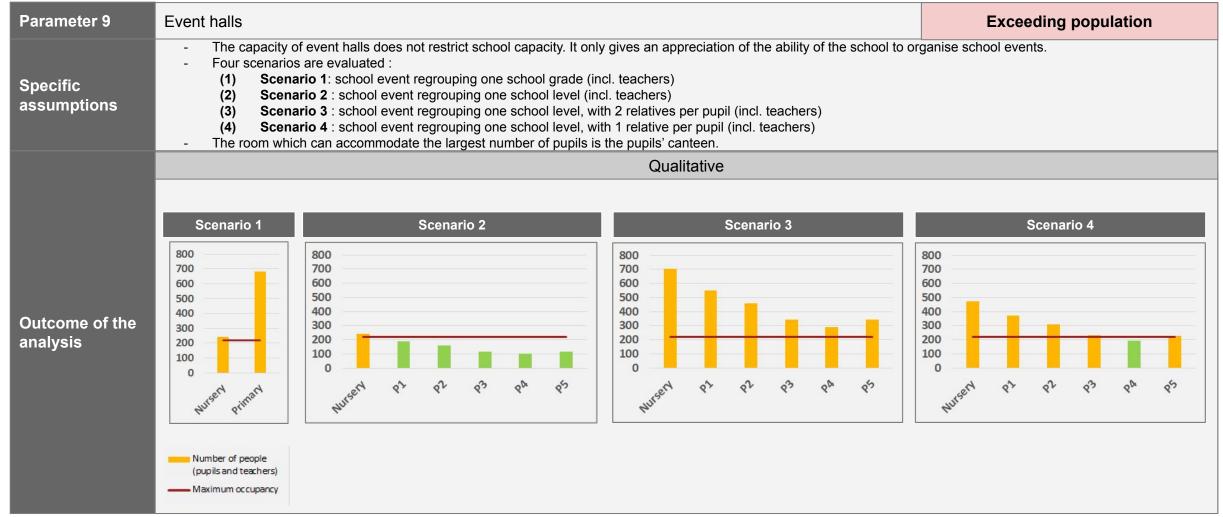
## 7.9 Event halls

Parameter 9	Event halls							
Definitions	Event halls welcome different type of activities such as extra-curricular activities, occasional events and exams. It should also allow the invitation of external people (parents, families, etc.).							
			Minim	um surface for	r polyvale	nt rooms	Wel	II-being norm
Norms and standards			European Schools	Federal Government	FWB	AGION	Ad-hoc	Lower boundary
	The capacity of event halls is limited by one norm:  (1) The minimum surface required in polyvalent rooms for pupils (well-being norm). In Belgium, these norm is defined by regional entities (AGION).	Surface per pupil		<b>✓</b>		<b>✓</b>		AGION

# 7.9 Event halls

Parameter 9	Event halls								
		ဝဓိ	School population	0%	School organisation	<u>m</u>	School infrastructure		
	The capacity of event halls was computed based on data of the Academic year 2020 - 2021.	Number of pupils		Typical	Typical use of event halls		Surface of rooms which can be used as an event hall		
Key data		Number	of teachers and assistants			as ai	i event nam		
General assumptions	<ul> <li>Event halls should provide enough sp</li> <li>Each pupil should be allowed to bring</li> <li>A particular event cannot be split into</li> <li>Since there are no restrictions from find classroom is used as a proxy.</li> </ul>	two relativ two differe	es/parents with him. nt sites/rooms. Therefore, we w	Il only cons	ider the room which can host the	largest nu	umber of people.		

## 7.9 Event halls



## 7.9 Event halls

Parameter 9	Event halls		
Conclusion	Event hall	Pupils Nursery Primary	Staff members Nursery Primary Other
	pupils, or when pupils invite their relatives (exception for P4		
	Nursery	Primary	Staff
Recommendations and possible solutions	Renting an event hall outside the school infrastructure for large events requiring to invite relatives or to gather several grades.	Renting an event hall outside the school infrastructure for large events requiring to invite relatives or to gather several grades.	

# 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 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

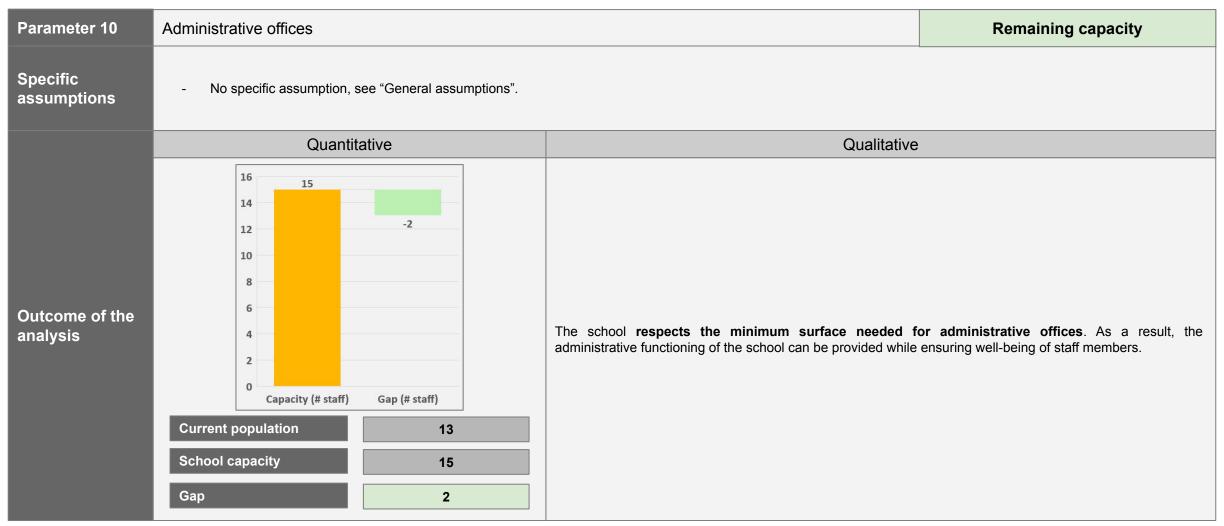
# 7.10 Administrative offices

Parameter 10	Administrative offices							
Definitions	Administrative offices include all rooms used for the management of school activities: direction offices, secretariat, psychologists offices and other educational staff offices.							
			I	Minimum surfa	ce for off	ices	Wel	l-being norm
			European Schools	Federal Government	FWB	AGION	Ad-hoc	Lower boundary
	The connective of administrative offices in limited by one	Surface per staff				<b>✓</b>		AGION
Norms and standards	The capacity of administrative offices is limited by one norm:  (1) The minimum surface required in offices for staff (well-being norm). In Belgium, these norm is defined by regional entities (AGION).							

# 7.10 Administrative offices

Parameter 10	Administrative offices						
Key data	The capacity of administrative offices was computed based on data of the Academic year 2020 - 2021.		School population of administrative staff	Current	School organisation use of administrative rooms	Surfa	School infrastructure
General assumptions	- All staff referred as "Other" in the data - The capacity of administrative offices						

# 7.10 Administrative offices



# 7.10 Administrative offices

Parameter 10	Administrative offices		
Conclusion	Administrative offices	Pupils Nursery Primary	Staff members Nursery Primary Other
	As a conclusion, the school globally does not experience a  Nursery	capacity issue regarding administrative offices. However, the re	emaining capacity is quite limited.  Staff
Recommendations and possible solutions			

Study related to school capacity –  $\ensuremath{\mathsf{EEB1}}$  – Final report

# 7.10 Administrative offices

Parameter 10	Administrative office	Administrative offices					
Guidelines - Excel model	10.1 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				
	10.2 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 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				



# 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

	apacity to ensure the school's mary objective	Maximum school capacity to ensure pupils' and staff well-being			
Pupils	977 people	Pupils	606 people		
Staff	119 people	Staff	0 people		

# 8. Conclusion and recommendations

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

#### Recommendations

#### **Nursery**

#### **Classrooms**

- Building extension or new construction (under certain conditions)
- Use primary classrooms which can host large groups of pupils. This is only a partial solution as the number of remaining large primary classrooms is limited.

#### Recreation areas

- Build covered recreation areas
- Extend/use indoor spaces (hallways, classrooms...)
- 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).

#### **Primary**

#### **Sport facilities**

- Building extension or new construction (under certain conditions)
- Use outdoor sport facilities even when weather conditions are unfavourable.

#### Staff

#### Canteen

- Building extension or new construction (under certain conditions)
- Use the pupils' canteen. However, this does not represent a viable situation if the school continues to grow in the future.

#### Teachers' rooms

- Building extension or new construction (under certain conditions)
- Transform available primary classroom into an additional teachers' room partial solution if the school continues to grow

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



# 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



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