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Chiara Tagliaro, Alessandra Migliore and Rossella Silvestri (eds.)

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Workplace in Africa: the planning of administrative and didactic spaces for the Somali National University

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ABSTRACT

Planning workplaces for universities is a complex matter because it concerns the regulatory framework within which each university operates. For instance, the European Union provides specific guidelines on how to deal with safety, security, HVAC, the size of space, health and wellbeing of users, etc. Then, each State is responsible for implementing these guidelines, depending on the context and users' specific needs. In other contexts, such as the African one, there isn't a regulatory framework on the subject matter. Therefore, the process of sizing on-campus administrative spaces and workplaces (for example the offices for professors) becomes even more complex. The paper presents the experience of the authors while supporting the Somali National University of Mogadishu in developing their new campus. The methodology entailed a questionnaire that was administered to the Rector and the members of eight faculties to gather information on the number of people and type of activities that the campus should have hosted. The questionnaire results allowed a preliminary analysis of the quality and amount of space necessary for administrative, didactic, and research activities and helped solve the lack of African laws on the subject matter. In conclusion, the paper shows how Italian laws and European standards and regulations were used to estimate the need for on-campus spaces and define some benchmarks. This contribution reflects on the need for flexible enough regulations that allow decisions tailored to each specific case in order to better address different users' needs.

Keywords

Workplace planning, Regulatory framework, African universities, University campus design, Administrative and didactic activities.

1 INTRODUCTION

In recent years the scientific debate in the field of university campus design has focused on how universities are facing a season of renovation on the buildings through adaptability of spaces (den Heijer, 2008). Furthermore, how these renovations have an impact on the work of faculty and students and how spatial configurations are changing rapidly together with new needs (Kuntz et al., 2012). Also, since university and society are organically linked together (Huhtelin and Nenonen, 2015), the debate is investigating how universities play a key role in "building community" and "creating a sense of place" (den Heijer, 2008). This is the reason why physical campuses are becoming essential parts of cities and they need reinvestments, but also new understanding of academic office design (Huhtelin and Nenonen, 2019) with different requirements for workplaces of different disciplines. The literature review also showed that the pandemic has led the university campus to face an opportunity for bigger changes, by being more focused on economy, flexibility, space use, demographic aspects, and urban development

(Nenonen and Danivska, 2021). Moreover, the European third generation universities are increasingly distributed in multiple places within a city (Poutanen et al., 2021), with important consequences on mobility and on the academic work environment. These are the main trends affecting today's university planning. Thanks to these new opportunities, for some universities it is possible to optimise their role within the cities they are based in. However, there are universities that do not fit into the topics recently analysed by the scientific debate because they are facing completely different challenges in contexts very far from the European one. Starting from the literature review on European university campuses, the paper investigates how to plan the university campus design of an African country as a case study, in the absence of specific literature on the subject. The key intention is to understand users' needs and find an agreement between users' expectations and reality, to provide insight for the university campus design in a developing country.

2 AIM

Over the years the university campus has had different forms in the urban context: the campus as a separate city, the campus as a "gated community" in the city (with or without the actual gates), and the campus integrated within the city (den Heijer, 2008). While the first model is gradually disappearing because of the growth of cities enclosing the campuses, the other two models reflect the role of university among society and how this has changed in the last 20 years (Poutanen et al., 2021). It is common knowledge that university campuses nowadays combine the traditional functions (i.e. teaching and research) with the so-called "Third Mission" (Molas-Gallart and Castro-Martínez, 2007), which refers to all activities concerned with the generation, use, application and exploitation of knowledge and other university capabilities outside academic environments (den Heijer, 2008). This is the reason why university campuses are more strategic than ever, with society at the centre of university's activities and an increasing demand for flexibility that involves adaptability of buildings from a technical point of view, a mix of owned, leased and rented space from a financial point of view, and a better use of the capacity from an organisational point of view (den Heijer, 2008). A campus that contains buildings for education, research, housing, hotels, related businesses, retail and leisure – and is accessible by car and public transport – is a city itself (den Heijer, 2008). The literature review brought up another trend among the so-called third generation universities, the network universities, which have premises located in multiple places within a city (den Heijer & Tzovlas, 2014). Therefore, the academic workplace can be seen as distributed and creates a challenge for the campus development because of the increasing number of university organisation mergers (Poutanen et al., 2021). However, in the literature the multi-campus seems to refer mainly to regional level situations (Zeeman & Benneworth, 2017) and in terms of in-city university mergers, the studies focus on policy and change management (Tienari, et al., 2015). A great number of external stakeholders play a role in the campus development nowadays (Poutanen et al., 2021) and are involved in delicate matters regarding the new ways of management. The debate focuses not only on the role of technology, but also on the challenge offered by the latest methods and tools to support the decision making process (Heijer, 2008). At the same time a large part of the existing campus is ageing and needs reinvestment or at least reconsideration (den Heijer, 2008). Literature reports several examples of consolidations operations reported as case studies focusing on the European context. Concerning what was just mentioned, the scientific debate on European universities focuses on realities that have been consolidated for centuries and recognized all over the world. This is not the case with African universities, which are born in a very different context from the European one. Historically younger and often privately owned, they are small businesses that have only been consolidating in recent years. The purpose of this paper is to share the insights

gained by a recent research and consultancy work performed by the authors while supporting the Italian Agency for Development Cooperation (AICS) in the process of Somali National University's (SNU) structural strengthening and expansion. Interdisciplinary collaboration between professors of Politecnico di Milano, with Rector Jimale's involvement, has been fundamental for gaining useful insights. The reconstruction of the SNU could provide the occasion for the university's rebirth on the European and Italian model in particular, but the paper aims to understand if the context allows it. In fact, not only in Africa there is a lack of useful laws to do this (the last ones date back to 1985, pre-civil war) but also references in the same context to look at as "good examples". The research can be considered one of the few contributions on African development to the field of universities. Moreover, it can give new indications about the evolution of design in the African context, where the spatial and functional needs are very different from those of European campuses. In fact, the faculties present in the SNU (i.e. Veterinary and Agriculture) are much more concrete than theoretical and this is the reason why spaces such as stables for animals and botanical gardens are necessary to support traditional classrooms.

3 METHODOLOGY

3.1 SNU history and new masterplan

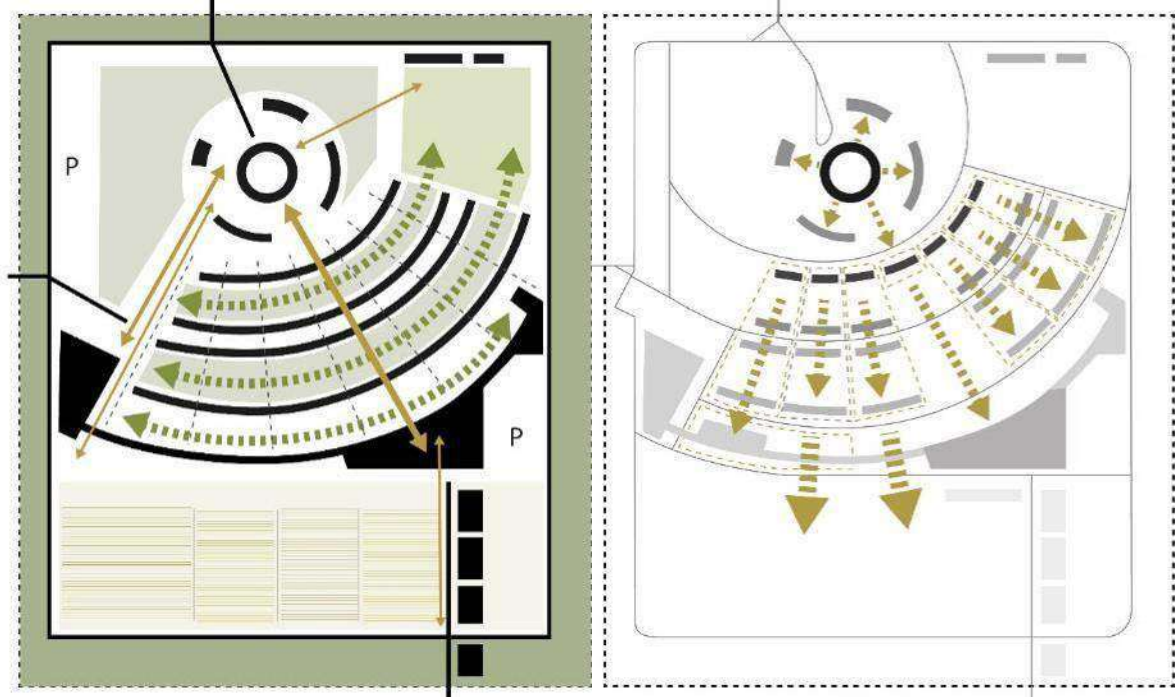
SNU was founded in Mogadishu with the support of Italian cooperation in the mid-1970's, and was open until the beginning of civil war in 1991. The Gahayr campus was realised with the help of the European Common Fund on a project made by two Italian architects, Ludovico Quaroni and Salvatore Dierna (Figure 1). Due to the civil war, SNU was abandoned for twenty-seven years and finally reopened in 2018, but the buildings still need to be completely renovated. SNU is 6 km away from Mogadishu's centre and 5 km away from the seaside. It is decentralised with respect to other universities on the territory (such as, The City University of Mogadishu, The Atlas University of Somalia, and The Capital University), but this may be an advantage thanks to a greater flexibility of the open space.

Figure 1. Aerial view of the campus designed by Quaroni and Dierna – Quaroni archive



The new masterplan, developed by a team led by professor Laura Montedoro, maintained the original structure centred on the rectorate, with an incremental strategy to be implemented in stages with the growth of the student population (Figure 2).

Figure 2. Masterplan developed by professor Montedoro – elaboration of Politecnico di Milano



3.2 Methodology applied

This study started with the collection of data through different methodologies, both qualitative and quantitative. The survey method aims at referring to the “design process approach”, as suggested by Costa (2014), which consists in involving all the stakeholders, merging several disciplines and applying different methodologies (questionnaire, interviews, and a collection of regulatory framework as reference) toward the full understanding of the actual situation.

First, a questionnaire - listed in Appendix A - was administered to the Rector Jimale, with the aim of systematically collecting some information about expectations and needs, but also on the current situation and on SNU’s history. Indeed, the questionnaire covered several aspects and was composed of nine different sections. Some of them in more detail regarded:

- General data (such as, student population);
- Educational and Researching activities (such as, Faculties, offices, and departments);
- General services (such as, libraries, sports centre, and canteen);
- Accommodations (such as, dormitory, residence, and guest house); and
- External area (such as, botanical gardens, stables, and recreational areas).

The questionnaire was written in two languages (Italian and English) to facilitate understanding and compilation.

Figure 3. Sample section of the questionnaire - elaboration of the authors

Servizi generali / General services							
Ambito	Area of interest	Tempo	Period	Domanda	Question	Chiarimento	Explanation
1	Rettorato	Presente	Present	Quanto è grande l'edificio del rettorato?	How big is the rectorate?	mq	square metres
				Che cosa comprende?	Which kind of spaces are there now?	Descrizione degli spazi principali che fanno parte dell'edificio. Ad esempio: sale riunioni, sale di rappresentanza, uffici, ...	Description of what are the main spaces that are part of the rectorate. For example: meeting rooms, representative rooms, offices, ...
		Futuro	Future	Che cosa comprenderà?	Which kind of spaces will be there?	Descrizione degli spazi principali che saranno parte dell'edificio. Ad esempio: sale riunioni, sale di rappresentanza, uffici, ...	Description of what are the main spaces that should be part of the rectorate. For example: meeting rooms, representative rooms, offices, ...
				Quanto sarà grande?	How big will it be?	mq	square metres
2	Amministrazione	Presente	Present	L'amministrazione è divisa in dipartimenti?	Is the administration composed of departments?	Descrizione dei vari dipartimenti	Description of departments
				In quali spazi si svolgono le attività amministrative?	Where is the administration located in the campus?		
		Futuro	Future	Verranno aumentati?	Will they be increased?		
3	Biblioteche	Presente	Present	Esistono biblioteche?	Are there any libraries?		
				Quante?	How many libraries are there in the campus?	Una unica per tutte le facoltà, una per facoltà, ...	One per all the faculties, one per faculty, ...
				Quanto sono grandi?	How big are they?	mq	square metres
				Includono postazioni per gli studenti?	Do they include spaces for students?		
		Futuro	Future	Quante biblioteche ci saranno nel nuovo campus?	How many libraries will there be in the new campus?		
					Descrizione degli spazi principali che saranno	Description of what are the main spaces that	

Second, semi-structured interviews were conducted with the goal to bring together impressions and willingness towards the project. The questionnaire proved to be useful to better organise the meetings, since they involved nine people (the Rector and the Deans of Faculties) and were all virtual. Supported by a detailed checklist, the team punctually registered the number of:

- Students;
- Professors;
- Administrative personnel;
- Faculties; and
- Degree courses.

Thanks to the questionnaire and the interviews, it was possible to cluster the spaces, following typological and functional criteria, to have some insight into how the space was used and to generate the hypothesis to verify afterward. Moreover, the numbers obtained from the questionnaire and the interviews were used to calculate periodic increases of the new campus (e.g., the construction of new buildings) in 20 years.

Third, the Italian regulatory framework as reference was collected to set the activity in the legislative context (Table 1) and to properly weigh and interpret information gained during the interviews through some quantitative investigations.

Table 1. Italian legislative framework – elaboration of the authors

Legislative framework	Contents
D.L. 18/12/1975	Updated technical standards relating to school buildings.
D.L. 81/2008	On the protection of health and safety at work.
D.M. n. 218 del 26/08/1992	Fire prevention standards for school buildings.
D.M. n. 503 del 24/07/1996	Rules for the elimination of architectural barriers in buildings, spaces and public services.
D.M. n. 236 del 14/06/1989	Technical requirements necessary to guarantee the accessibility, adaptability and visitability of private buildings and public residential buildings, for the purpose of overcoming and eliminating architectural barriers.
Legge n. 338 del 14/11/2000	Provisions on housing and residences for university students.

UNI EN 1521:2008	On the relationship between natural ventilation and energy saving, establishing levels of indoor air quality in buildings, evaluating the energy performance of buildings, in relation to quality indoor air, thermal environment, lighting and acoustics.
UNI EN 12845:2015	On recommendations for design, installation, and maintenance of fixed fire-fighting systems in buildings.
UNI/PdR 24:2016	Technical indications for the removal of architectural barriers and guidelines for the redesign of the building based on accessibility for all, analysis of the context, detection of criticalities, and analysis of design choices.
UNI EN 81-41:2011	On safety rules for construction and installation of special lifts for the transport of people and things and vertical lifting platforms for people with reduced mobility.

Therefore, information gathered through the application of the methodologies above mentioned have been matched together and useful insights have been obtained.

4 RESULTS

To verify the data, the information gathered through the questionnaire and the group interviews regarding student population have been compared with quantitative data collected through the number of students enrolled in January 2021 (Table 2). This highlights that people's perception may be incorrect sometimes, or even that it may deviate from reality with the aim of demonstrating a better scenario.

Table 2. Student population - elaboration of the authors

Faculty	Students enrolled at SNU (January 2021)	Projections in 20 years (data gathered through the interviews June 2020)	Projections in 20 years (data gathered through the questionnaire October 2020)
Natural Science	394	2500	4000
Engineering	488	1750	2800
Law	394	500	500
Economy	463	1500	2100
Social Sciences	479	3000	4200
Educational Sciences	1228	1500	1500
Islamic Studies	178		
Veterinary	391	1500	1500
Agriculture	512	1500	2100

It is important to remark that the questionnaire was submitted to the Rector, and therefore should represent the highest reliability on it. Moreover, it was not possible to collect information about the lectures schedule to understand how many people are actively inside the buildings at each moment. Table 2 confirms the misalignment between the Rector's perception and reality. The Rector and the deans of the Faculties' answers evidently demonstrate on one side that they are overestimating the SNU's development and growth process, on the other side that they are still influenced by the idea of building a traditional Italian campus. In fact, African culture is still attached to the idea of the "great Italian model". Therefore, it seems extremely

difficult to eradicate this concept and both the Rector and the deans of faculties try to keep it, avoiding the embrace of the sustainability policy unless it is strongly necessary. Instead, the effort to be made is to provide for their real needs through resources of the African territory. For what concerns the availability and use of raw materials and plants, during the interviews the Rector and the deans of faculties signalled a general lack of plants, in particular of a water drainage system and in specific zones of a waste disposal plant.

Table 3. Coefficients used to dimension the spaces – elaboration of the authors

Space	Mq/person used	Legislative framework	Mq/person (from legislative framework)
Classrooms	1,4	D.L. 18/12/1975; UNI EN 1521:2008	0,8-1,8
Study rooms	1,3	D.L. 18/12/1975; UNI/PdR 24:2016	1,2-1,5
Meeting rooms	1,3	D.M. n. 218 del 26/08/1992; UNI EN 12845:2015	1,2-1,5
Offices	8	D.M. n. 218 del 26/08/1992; UNI EN 12845:2015	6,5-12
Conference rooms	1,2	D.M. n. 218 del 26/08/1992; UNI EN 12845:2015	0,8-1,5
Laboratories	5	D.L. 81/2008; UNI EN 1521:2008	4,5-5,5

Then, the coefficients reported in Table 2 were estimated on the basis of Italian laws and used to dimension the SNU spaces. At first, it was necessary to find a mean value, since the legislative framework gives large parameters to be adapted to the specific case. It was also important to assign specific coefficients for each type of space, so to be easily multiplied by the number of users. Finally, these coefficients were applied to a sample existing building identified as Didactic Module 4, assigned to the Faculty of Engineering. The number of students enrolled (Table 2) was taken into account to proceed with the strategic planning of the buildings in the masterplan, and the sizing of the interior spaces. The estimation of space for the Faculties took into consideration several factors, such as:

- Type of room: classic or equipped, big or small, and laboratory;
- Presence of studying rooms, libraries, conference rooms, meeting rooms, and offices;
- Estimated number of users per faculty;
- Estimated number of seats per room; and
- Total number of each type of room to satisfy users' needs.

Considering the maximum variety of spaces and the maximum capacity of Didactic Module 4, the results obtained will allow an efficient use of spaces, with full satisfaction of users. Therefore, Table 4 shows hypothetical occupancy of buildings in the masterplan, with a double hypothesis on the number of floors per building.

Table 4. Results of the hypothetical occupancy of buildings - elaboration of the authors

Building	Gross area (per floor)	Net area (per floor)	N° of students (total users)	
	sqm	sqm	On 2 floors	On 3 floors
A (first ring – to be strengthened)	770,00	481,25	875	1 313
B (second ring – to be built)	910,00	568,75	1 034	1 551

C (third ring – to be built)	1 060,00	662,50	1 205	1 807
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In consideration of the parametric values adopted and the clustering previously illustrated, it was possible to determine the overall sizing of the Gahayr Campus. The buildings (existing and to be built) within the Gahayr Campus have a total gross area of 100 910 square metres while the net area is 68 850 square metres. The buildings of the existing Faculties, which constitute the first ring around the Rectorate, will be strengthened in order to accommodate the students currently enrolled. At a later stage, simultaneously with the growth of student population, it will be possible to proceed with the construction of the two-floors buildings that will form the two outermost rings. This second phase will be completed over a more fluid time frame than the first one, which will be completed as soon as possible to provide adequate space for meeting actual users' needs. However, considering the number of students currently enrolled in the Faculties (Table 2), it should be noted that there is an average of 100 students per year per Faculty, with only two out of nine Faculties actually exceeding the average, the first with 102 students and the second with 245. Therefore, it is far from the Rector's forecasts, but this allows to carefully monitor the growth of student population on an annual basis in order to be able to intervene at the most appropriate moment, expanding SNU with the new buildings designed in the masterplan to make up for the lack of space in case of need.

5 DISCUSSION AND CONCLUSION

Concerning the specific objective of the consultancy, results can confirm the viability of welcoming the number of people expected. In fact, the occupancy of Didactic Module 4 allows for hosting a large number of people and is very far from saturation point. Moreover, considering the results from the interviews, we can say that the downsizing was quite careful, if we look at the number of actual enrolled students. This is, for sure, due to a positive attitude towards the growth of the SNU. But it probably also depends on a lack of studies on the Somali graduated students that should have been carried out before the project. It would only be possible to develop a project that fits the real needs of a university on the basis of a precise knowledge of how that university works and its evolution trends. These conclusions can be considered reliable thanks to the application of an integrative approach. This led to correctly interpreting the misleading inferences that can occur by taking into consideration only one source of information. Through cross checking quantitative and qualitative methodologies, on the contrary, it has been possible to carefully weigh the data retrieved by different sources (e.g. the questionnaire submitted to several people, group interviews, the number of students enrolled in relation to the university's growth expectations) and therefore obtain consistent information. Consequently, it appears that the size and capacity of the buildings (especially the new ones to be built) need to be carefully calculated, to meet end user's requirements more effectively. This suggests the favourable application of flexible solutions for the classrooms. For example, movable walls, that would allow assembling or separating the spaces according to contingent necessities, can be very useful; two rooms for 25 people could be merged to obtain one for 50. Indeed, "affordability" of a place is up to users. To this extent, it can be important to maximize flexibility of spaces and equipment adaptability (such as foldable walls, movable tables and chairs and writable surfaces) to ease the change and facilitate the interactions between users and spaces. The research development has faced a few limits, some of them in technical-methodological matter, but also in a more general respect. Among the techniques applied for reaching the required level of knowledge, the interview technique may fail to some extent. While it is necessary for collecting qualitative information that only human researchers can bring, thanks to their individual expertise and sensitivity, it is not the most

appropriate method from a scientific point of view. An enormous effort was required above all to elaborate the coefficients derived from the analysis of the Italian and European legislative framework. Last but not least, one of the most restrictive obstacles encountered is the lack of specificity for the development of a university campus in Africa, both in terms of laws and “good examples” to follow. The substantial differences found are between the initial expectations and the reality of the project (for example, the idea of the Italian campus is impossible for all the reasons described above). The challenge is not linked only to the missing legislative material but to the need to adapt the processes to the African reality, very different from the European one. In the African context, the present research can be considered as a pioneering achievement. Hopefully, it will contribute to a shift in mindset that is necessary to boost and advertise the importance of such studies. After the collection of a proper number of case studies, i.e. extending the sample, it will be possible to build benchmarks on new university campus design features and perfect the research methodology. Consequently, the study may provide African universities with useful indications on methods and tools for data collection toward design planning. The opportunity to apply construction times and budget to the project needs to be further investigated. In fact, it is not yet clear what the final budget will be for the whole project, as the buildings will have different benefactors and, it can be assumed, different construction times.

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APPENDIX

APPENDIX A: English version of the questionnaire - elaboration of the authors

<i>General data</i>						
		<i>Area of interest</i>	<i>Period</i>	<i>Question</i>	<i>Number</i>	<i>Notes</i>
Number of users	Educational activity + Researching activity	Students	<i>Present</i>	<i>First-year students</i>		
				<i>Second-year students</i>		
				<i>Third-year students</i>		
				<i>Fourth-year students</i>		
				<i>Fifth-year students</i>		
				<i>PhD students</i>		
			<i>Future</i>	<i>Expected first-year students</i>		
				<i>Expected second-year students</i>		
				<i>Expected third-year students</i>		
				<i>Expected fourth-year students</i>		
				<i>Expected fifth-year students</i>		
				<i>Expected PhD students</i>		
		Structured university personnel	<i>Present</i>	<i>Teachers</i>		
				<i>Full time researchers</i>		
				<i>Fixed-terms lab assistants</i>		
			<i>Future</i>	<i>Expected teachers</i>		
				<i>Expected full time researchers</i>		
				<i>Expected fixed-terms lab assistants</i>		
		Unstructured university personnel	<i>Present</i>	<i>Post-doctoral fellows</i>		
				<i>Fixed-term researchers</i>		
				<i>Temporary teaching assistants</i>		
<i>Future</i>	<i>Expected post-doctoral fellows</i>					
	<i>Expected fixed-term researchers</i>					
	<i>Expected temporary teaching assistants</i>					

General services	<i>Administrative personnel</i>	<i>Present</i>	<i>Secretaries</i>		
		<i>Future</i>	<i>Expected secretaries</i>		
	<i>Support personnel</i>	<i>Present</i>	<i>Maintainers</i>		
			<i>Door-keepers</i>		
			<i>Cleaners</i>		
			<i>Security officers</i>		
		<i>Future</i>	<i>Expected maintainers</i>		
			<i>Expected door-keepers</i>		
			<i>Expected cleaners</i>		
			<i>Expected security officers</i>		
	<i>Rector, vice-rector and support personnel</i>	<i>Present</i>	<i>Rector</i>		
			<i>Vice-rector</i>		
			<i>Support personnel</i>		
			<i>Personnel per department</i>		
		<i>Future</i>	<i>Expected vice-rector</i>		
			<i>Expected support personnel</i>		
	<i>Expected personnel per department</i>				
	<i>Libraries, exhibition centre, canteen, sports centre, spaces for commercial activities</i>	<i>Present</i>	<i>Librarians</i>		
			<i>Canteen service operators</i>		
			<i>Sports centre instructors</i>		
<i>Shop assistants</i>					
<i>Future</i>		<i>Expected librarians</i>			
		<i>Expected canteen service operators</i>			
		<i>Expected sports centre instructors</i>			
		<i>Expected shop assistants</i>			
Incubator for start-ups and new companies	<i>Offices, laboratories</i>	<i>Present</i>	<i>Start-ups</i>		
			<i>Workers per start-up</i>		
		<i>Future</i>	<i>Expected start-ups</i>		

			Expected workers per start-ups		
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<i>Educational activity</i>					
<i>Area of interest</i>	<i>Period</i>	<i>Question</i>	<i>Explanation</i>	<i>Answer</i>	<i>Notes</i>
<i>Faculties' presidency</i>	<i>Present</i>	<i>Where is it located now?</i>			
		<i>Which kind of spaces are there now?</i>	<i>Description of what are the main spaces that are part of the presidency. For example: meeting rooms, offices, ...</i>		
		<i>How big is it?</i>	<i>square metres</i>		
	<i>Future</i>	<i>Will it be increased?</i>			
<i>Classrooms</i>	<i>Present</i>	<i>How many classrooms are there now?</i>			
		<i>How big are they?</i>	<i>square metres</i>		
	<i>Future</i>	<i>Will you need more classrooms?</i>			
		<i>How big will they be?</i>	<i>square metres</i>		
<i>Auditorium</i>	<i>Present</i>	<i>Does the auditorium already exist?</i>			
		<i>Which type of events do you host nowadays?</i>	<i>For example: conferences, graduations, keynote lectures, seminars, ...</i>		
		<i>How big is it?</i>	<i>square metres</i>		
	<i>Future</i>	<i>How many seats will you need?</i>	<i>Number of seats</i>		
		<i>Where will it be located in the campus?</i>			
<i>Spaces for students</i>	<i>Present</i>	<i>Do spaces for students exist now?</i>			
		<i>How are they distributed over the campus?</i>			
	<i>Future</i>	<i>How many studying spaces will you need?</i>			
		<i>How many seats per studying space?</i>			
		<i>How many quiet studying spaces will you need?</i>			

		How many studying spaces for groupworks will you need?			
		How many studying spaces where you can talk will you need?			
Educational laboratories	Present	Are there laboratories now?			
		How many seats per laboratory?			
	Future	Which faculties will use the laboratories?			
		How many laboratories per faculty?			
		How many seats per laboratory?			

Researching activity					
Area of interest	Period	Question	Explanation	Answer	Notes
Departments / Institutes	Present	How many departments are there now?			
		Where are the departments located in the campus?			
		How many closed offices?			
		How many open spaces?			
	Future	Will other departments be added?	Number of forecasted departments		
Laboratories	Present	Are there researching laboratories already?			
		How big are they?	square metres		
	Future	Will they be increased?			

General services					
Area of interest	Period	Question	Explanation	Answer	Notes
Rectorate	Present	How big is the rectorate?	square metres		
		Which kind of spaces are there now?	Description of what are the main spaces that are part of the rectorate. For example: meeting rooms, representative rooms, offices, ...		
	Future	Which kind of spaces will be there?	Description of what are the main spaces that should be part of the rectorate. For example: meeting rooms, representative		

			rooms, offices, ...		
		How big will it be?	square metres		
Administration	Present	Is the administration composed of departments?	Description of departments		
		Where is the administration located in the campus?			
	Future	Will they be increased?			
Libraries	Present	Are there any libraries?			
		How many libraries are there in the campus?	One per all the faculties, one per faculty, ...		
		How big are they?	square metres		
		Do they include spaces for students?			
	Future	How many libraries will there be in the new campus?			
		What will they involve?	Description of what are the main spaces that should be part of the libraries. For example: studying spaces, researching spaces, ...		
How big will they be?		square metres			
Exhibition centre	Present	Are there any exhibition centres now?			
		Where are they located in the campus area?			
		Which kind of exhibitions are hosted nowadays?			
		How big is it?	square metres		
	Future	Will you need one exhibition centre or more than one?			
		How big will it be?	square metres		
Canteen	Present	How many canteens are there now?			
		How big are they?	square metres		
	Future	How many canteens will there be?			
		How will they be located in the campus?			

		<i>How big will they be?</i>	square metres		
<i>Sports centre</i>	<i>Present</i>	<i>Is there a sports centre already?</i>			
		<i>How many square metres overall?</i>			
		<i>Which are the most practiced sports?</i>			
	<i>Future</i>	<i>How big will it be?</i>	square metres		
<i>Spaces for commercial activities</i>	<i>Present</i>	<i>Which kind of commercial activities are there now inside or around the campus?</i>			
		<i>How big are they overall?</i>	square metres		
	<i>Future</i>	<i>Will the spaces be increased?</i>			

<i>Incubator for start-ups and new companies</i>					
<i>Area of interest</i>	<i>Period</i>	<i>Question</i>	<i>Explanation</i>	<i>Answer</i>	<i>Notes</i>
<i>Offices</i>	<i>Present</i>	<i>How many offices are there now?</i>	Number of offices		
		<i>How many closed offices are there?</i>	Number of closed offices		
		<i>How many open spaces are there?</i>	Number of open spaces		
		<i>Where are the offices now?</i>			
		<i>Which kind of offices are there?</i>	Researching activities, manufacturing growth, ...		
	<i>Future</i>	<i>Will they be increased?</i>			
		<i>How big will they be?</i>	square metres		
<i>Meeting rooms</i>	<i>Present</i>	<i>How many meeting rooms are there now?</i>			
		<i>How big are they?</i>	square metres		
	<i>Future</i>	<i>Will you need more meeting rooms?</i>			
		<i>Will you need bigger meeting rooms?</i>			
		<i>How big will they be?</i>	square metres		
<i>Classrooms</i>	<i>Present</i>	<i>Are there any classrooms now?</i>			
		<i>How many classrooms are there?</i>			
		<i>How big are they?</i>	square metres		

	Future	Will you need more classrooms?			
		Will you need bigger classrooms?	square metres		
Laboratories	Present	How many laboratories are there now?			
		Which type of activities are carried out?	For example: 3D printer, research products, ...		
		Which products are developed?			
	Future	Will they be increased?			
Event room	Present	Is there an event room nowadays?			
		How big is it?	square metres		
		Where is it located?	Location in the campus		
	Future	Will you need it?			
		How big will it be?	square metres		
Conference room	Present	Is there a conference room?			
		How many seats are there?	Number of seats		
	Future	Will you need a bigger conference room?			
		How many seats will you need?	Number of seats		
Accommodations					
<i>Area of interest</i>	<i>Period</i>	<i>Question</i>	<i>Explanation</i>	<i>Answer</i>	<i>Notes</i>
Student dorms	Present	Are there any dorms nowadays?			
		How many beds are available now?			
		How far are they from the campus?			
		Are they inside or outside the campus?			
	Future	How many beds will you need?			
Which services will you need?		Description of services, for example: canteen, studying rooms, gym, auditorium, ...			
Accommodation for teachers and researchers	Present	Are there any residences nowadays?			
		How many beds are available now?			
		How far are they from the campus?			

		Are they inside or outside the campus?			
	Future	How many beds will you need?			
		Will they be separate buildings from the student dorms?			
		Which services will you need?	Description of services, for example: canteen, studying rooms, gym, auditorium, ...		
Guest house	Present	Are there any residences nowadays?			
		How many beds are available now?			
		How far are they from the campus?			
		Are they inside or outside the campus?			
	Future	How many beds will you need?			
		Will it be in the student dorms or will it be a separate building?			

External area					
Area of interest	Period	Question	Explanation	Answer	Notes
Green areas	Present	How are they used?	Description of how they are used, for example as recreational spaces, studying spaces, ...		
		How big are they?	square metres		
	Future	Will they be increased?			
Parking areas	Present	How do people reach the campus?	By which means of transport, for example: by car, by bike, by bus, ...		
		Which is the most common means of transport?			
		Are there any parking areas?			
		How many parking areas are there now?			
	Future	Do you need parking lots?			
		How many will you need?			

History					
Area of	Period	Question	Explanation	Answer	Notes

<i>interest</i>					
<i>History</i>	<i>Past</i>	<i>How did the campus work?</i>			
		<i>How many faculties were there?</i>	<i>Number of faculties</i>		
		<i>Which faculties were there?</i>	<i>For example: scientific area, humanistic area, ...</i>		
		<i>How many students were there?</i>	<i>Total average number</i>		
		<i>Do you remember how the campus was before the war?</i>			

Budget					
<i>Area of interest</i>	<i>Period</i>	<i>Question</i>	<i>Explanation</i>	<i>Answer</i>	<i>Notes</i>
<i>Budget</i>	<i>Future</i>	<i>How much money will it be available?</i>	<i>Amount for the whole project</i>		
		<i>Will there be any special funds?</i>	<i>Amount for special spaces, for example: the auditorium, researching spaces, ...</i>		
		<i>Will there be any incentives for green areas?</i>	<i>Amount for external spaces</i>		