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EDF-FED/2014/354785

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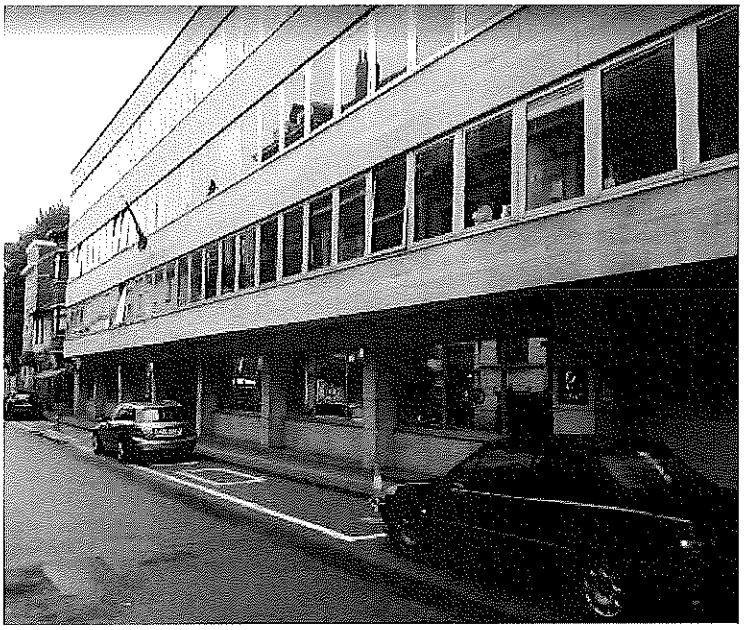
TECHNICAL ASSISTANCE FOR A COMPLETE ARCHITECTURE AND ENGINEERING MISSION AND PROJECT MANAGEMENT SERVICES FOR THE EXTENSIVE RENOVATION OF THE , AVENUE GEORGE HENRI 451 – 1200 BRUXELLES, Ref: ACP 4/1/83 (Vol. 1) 3/2016

ALTIPLAN architects



Inception Report

Extensive Renovation of the ... Brussels

Version	Date	Subject of the revision	Author(s)	Auditor(s)
C	15/04/2019	4th release, according to "Comments in Altiplan Inception Report V3" issued by COWI in April 2018	FIE/ALT	FIE/ALT
B	05/04/2019	3rd release, according to ACP Meeting of 29/03/2019 and additional comments to Inception Report of 27/03/2019	FIE/ALT	FIE/ALT
A	22/03/2019	2nd release, according to ACP consolidated comments to Inception Report of February 2019 - ref: ACP 4/1/83 (Vol.1) 3/2016	FIE/ALT	FIE/ALT
-	16-01-2019	1st release	FIE/ALT	FIE/ALT

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0. List of acronyms

ACP	:	Africa, Caribbean, Pacific Secretariat
BEP	:	Building Energy Performance
CCTV	:	Closed circuit television (video monitoring)
HVAC	:	Heating, Ventilation and Air Conditioning
IBGE	:	Institut Bruxellois pour la Gestion de l'Environnement
SIAMU	:	Service d'Incendie et d'Aide Médicale Urgente
ToR	:	Terms of Reference

1. Introduction

The aim of this note is to summarize the information about:

- the existing situation of the building;
- the programme of the project;
- the applicable regulations and the permits requirements;
- the budget;
- the project planning;

and to address t he questions that will allow us to continue our studies and establish the preliminary design.

The main conclusions of our work are given below.

2. Present situation and required refurbishments works

2.1. Architecture and stability

2.1.1. Plans

It seems that there are no more plans for the building of the existing situation: the only available plans from the municipality are the planning permits plans, which does not match the reality. We have contacted the firms in charge of the maintenance of the building but they do not have plans either.

For that reason, a detailed survey of the building has been carried out by our surveyors in December 2018. Those plans are attached as appendices. An overview of estimated existing areas of the building are given below (see Table 1). See drawings Existing Situation in annex.

Table of existing surfaces (gross)

+4	518,83		518,83	
+3	629,29		629,29	
+2	629,29		629,29	
+1	629,29	613,79	1.243,08	
Groundfloor	787,66	675,82	1.463,48	
		total above ground	**4.483,97**	m^2
-1			1.812,77	
-2			1.812,77	
		total under ground	**3.625,54**	m^2

Table 1 - Table of existing surfaces (gross)

2.1.2. Architecture – Technical description

This chapter confirms and complement the observations in Annex E of the ToR. This analysis is based on several site visits that took place in December 2018 and January 2019.

Office building

This building has 4 floors above the ground floor. Each floor has the same layout: a central corridor and offices on both sides.

The offices are separated by fixed wood lightweight walls, wall-cupboards are located along the corridor. Those central storage units take a lot of space and create a total closure towards the corridor, which does not benefit from natural light.

One central staircase, 2 lifts and one men-women sanitary block per floor.

The floor is covered with carpet over the screed. There is no electricity distribution in the floor.

The ceiling are in plaster, there is no acoustic correction. The ceiling height is limited, which is a constraint for technical installations, in particular for the ventilation.

After verification carried out in feb.2019 it appears that the height under structural slab is +/- 2.75m. This means that the height under ceiling in the corridor will have to be reduced to +/-2.30m (max.) to house the ventilation and other techniques.

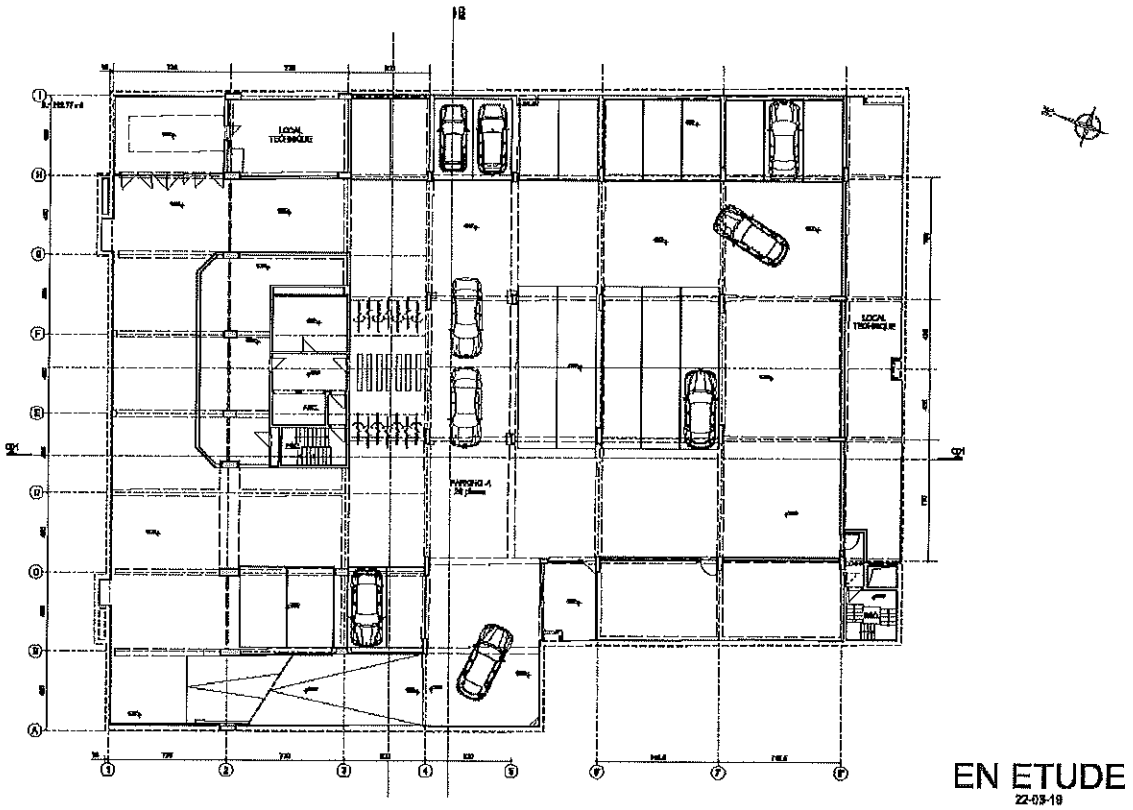
On ground floor, a large multi-functional lobby area is linked to the conference center and has a reception desk, a very little used "library" space and storage areas.

The basement is organised over 2 floors, with 88 parking spaces, technical installations and meters room. Archives are stored without partitioning. An unused guard room is located down the ramp.

The one-way access ramp creates traffic issues when important meetings are taking place. It is not possible to widen the ramp due the building structure. This issue will be dealt with in details to improve current situation.

Different options have been considered:

1. creation of a vehicle route with drop off area, regulation of traffic in/out by traffic lights;
2. construction of a new exit ramp on the other side of the building;
3. doubling of the existing ramp with a parallel exit ramp.



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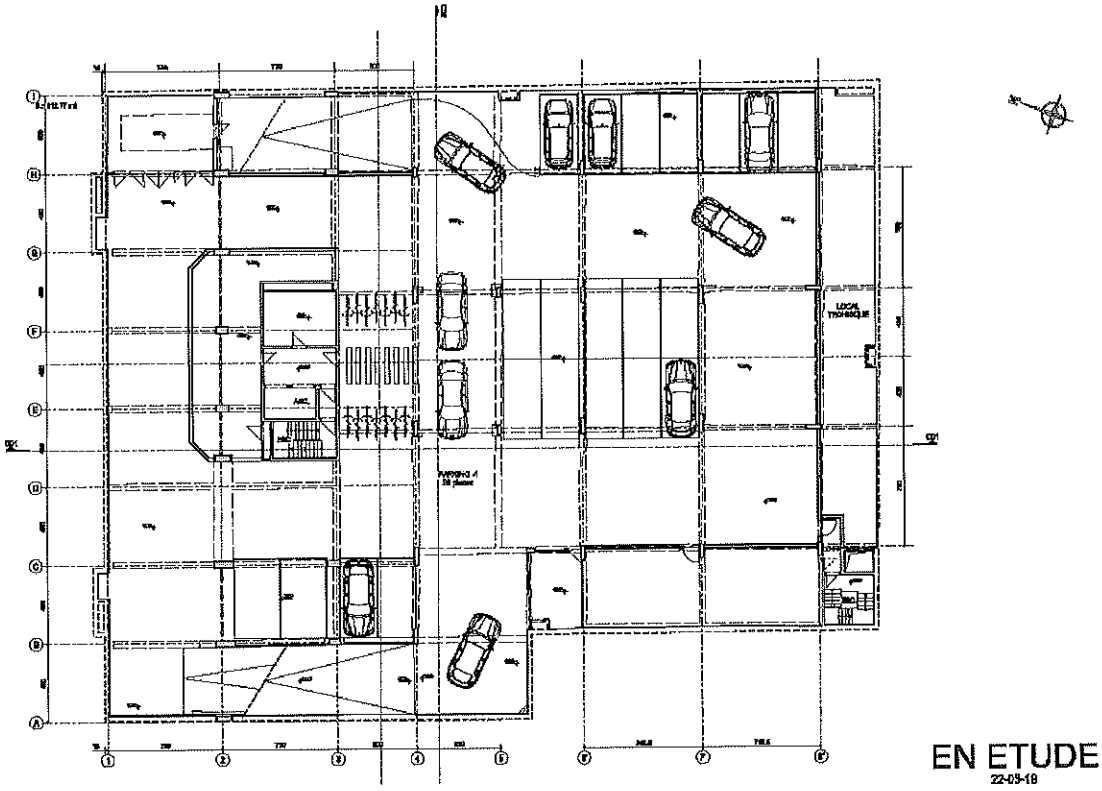

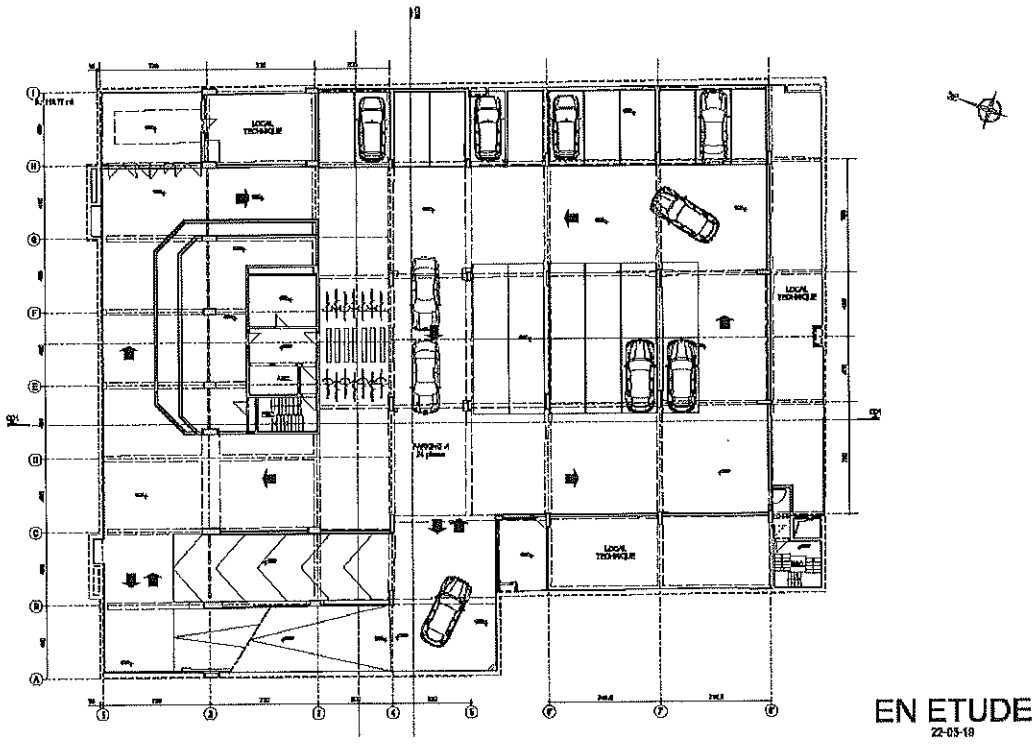

Façades no longer comply with current thermal and acoustic standards. The external joinery and isolation will have to be totally replaced.

This will result in a complete change in the appearance of the building. Several variants will be presented for approval in the preliminary architectural study.

Roofs have to be totally renewed to meet current standards. Green-garden roofs will have to be created to meet the legislation in force in the Brussels Region.

In conclusion, a heavy renovation of the building is required with replacement of the facades and roofs and all interior finishes along with the technical installations.

2.1.3. Stability

- We visited the building with our structural engineer, Mr. Warnant from Ellyps.
  Overall, he confirms the conclusions of the report in Annex H – Structural Assessment Report: the overall condition of the reinforced concrete structure is satisfactory and can be kept for the renovation project.

- This site visit brought out 2 issues, which were not stated in the above-mentioned report:
  - Strong deformation of the slab at level -1, more precisely where the archives are stored: this issue should be investigated.
  - Structural cracks starting from the ramp: this issue should be investigated.
- Additional investigations need to be carried out to have a clear vision of the structure, which imply targeted demolition of the ceiling in order to evaluate the floor structure:
  - Ground floor
  - Office floor

  ACP collaboration is being asked to identify the potential locations and organise the works.

Additional investigations have been carried out in Feb. 2019 to check the void above the ceilings, we now have a clear understanding of the position of the concrete slabs. However, deeper investigation will have to be carried out at some stage of the project to identify what reinforcement exists in the concrete structure, where necessary at the request of the stability engineer in function of the planned works. These investigations will have to be organised in accordance with ACP with intervention of a contractor, they will imply production of noise and dust.

Depending on the new layout of the conference center, it is likely that new foundations will have to be built locally and that existing foundations will have to be verified. This will involve performing soil tests with local destruction of the concrete floor of -2.

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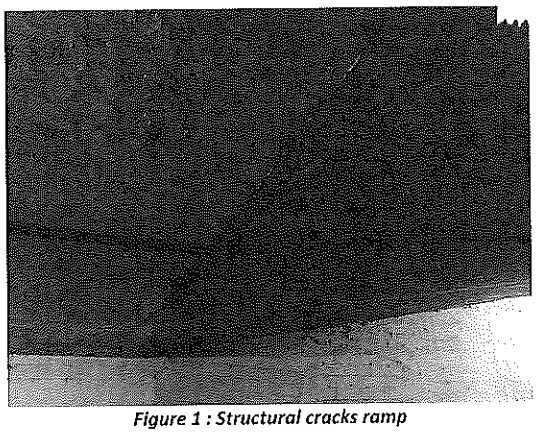

Figure 1 : Structural cracks ramp

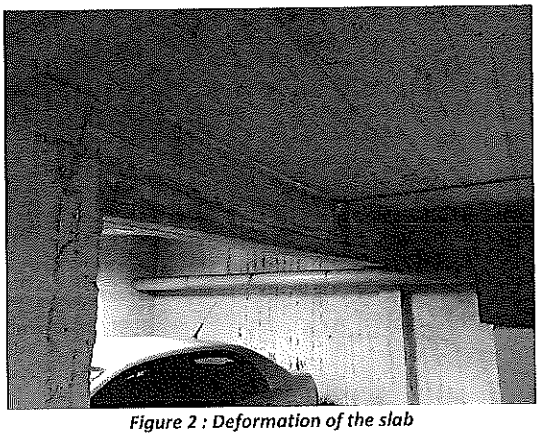

Figure 2 : Deformation of the slab

2.2. Heating, Ventilation and Air Conditioning

2.2.1. Heating

Presently, the heating system of the building consists of 2 cascading atmospheric gas boilers of 350 kW (installed in 2005), a distribution network made of steel pipes, two-pipe radiators (in the Office Building) and fan coil units (in the Conference Building).

According to technical documents we received from ACP authorities and observations we carried out during our last on-site visit of 24/10/2018, we have a drafted a list of non-compliances of the heating system. The main points of our list are given below:

- Existing boilers are not designed to benefits from the condensation heat resulting from smoke vapors. Condensing technology could indeed improve the overall performance of the heating system by reducing gas consumption, and using lower water temperatures (60...50...40°C) with suitable heating units.
- The distribution losses of the heating system must be very high due to the low thermal insulation of primary and secondary distribution networks (see Figure 3). Such a lack of insulation does not comply with the last legal requirements.

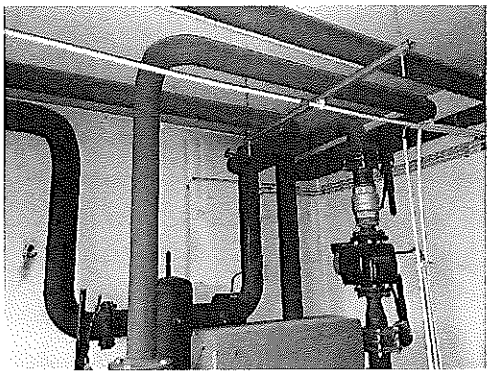

Figure 3 : The lack of insulation noticed on primary pipes of the heating network

- Since the implementation of heating network, there is no evidence of systematic treatment to prevent scaling or to proceed degassing of steel pipes. This leads to an advanced degradation of the heating pipes and a loss of efficiency for the entire heating system.
- The boiler room configuration does not meet the applicable standards: there are no low-level ventilation, no gas detection system, no emergency stop system, etc.
- The implementation of the gas meter room and the internal gas supply network must be improved and adapted to the needs of the refurbished building as-well-as the latest requirements of the Distribution Network Manager – Sibelga (see Figure 3Figure 4).
- The existing radiators and fan coils units will no longer be able to respond effectively to the comfort needs of the building occupants after refurbishment works. Ideally, these terminal units should be replaced with new ones. The new terminal units should make it possible to cover both heating and cooling requirements of the building, so as to limit the impact on useful surfaces and to avoid any risk of energy destruction.

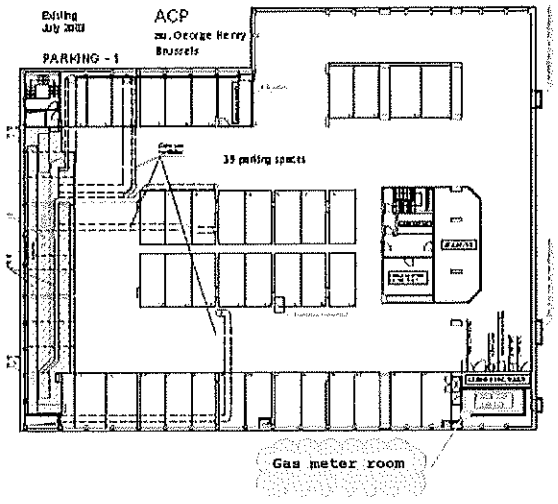

Figure 4 : Implantation of the existing gas meter local on floor -1. Such a local must be located on the street side, with fire-resistant walls and doors, as well as high and low ventilations complying with all the requirements of the Network Distribution Manager (Sibelga)

Considering the year of construction of the building (1976) and technical data provided by ACP authorities, it appears that the composition of the building envelope (exterior walls, including those in contact with

the ground, windows, external doors, the floor and the roof) does not meet the legal requirements applicable in the Brussels-Capital Region. So, for the sake of energy coherence, it is mandatory to organize and coordinate refurbishment works in order to improve the building envelope at the same time as heating and cooling systems.

2.2.2. Ventilation

Presently, there is no controlled ventilation system in the front part of the building (Office Building). In the Office Building, ventilation is done in a natural and uncontrolled way. Air enters naturally into the building through doors, windows, defects and openings in the envelope. It is exhausted following the same way, without any mechanical control on air flow rates. Hence, there is no control over the sanitary quality of the air breathed by the occupants of the Office Building.

At first sight, if the air quality was satisfactory during our on-site visit, this is due to the low airtightness of the building. Actually, a low level of airtightness leads to significant air infiltration rates. These air infiltrations can then cause a number of disadvantages such as:

- a thermal discomfort in the occupied areas;
- dirt or mould on external walls (due to dust and condensation);
- noise pollution (outdoor noise can find a path through weakening of the wall);
- overconsumption of energy (by compensation of the thermal discomfort).

Therefore, the improvement of the Office Building airtightness must necessarily be completed by the implementation of a supply and exhaust air handling unit, equipped with a highly efficient energy recovery system.

In the rear part of the building (Conference Building), hygienic fresh air is introduced by through 2 supply air handling units of 4.030 m^3/h and 15.840 m^3/h. This fresh air is blown into meeting rooms after being filtered, reheated or cooled with hot or cold-water batteries. Hot and chilled water from these batteries are respectively generated by the existing boiler and the outdoor cooling machine. The air which is mechanically blown into the Conference Building is exhausted through the suction side of the same air supply fans. In the current situation, the extracted air recirculates by being mixed with a fresh air portion. The proportions of air mixtures are not controlled. Depending on the tightness of the envelope and the pressure of the wind on external walls, a part of the air volume of the building is naturally renewed by infiltration or exfiltration. We note that these air exfiltrations can cause various inconveniences such as:

- decay or deterioration of the masonry (due to repeated condensation of hot and humid air coming out of the wall thickness);
- dirt or mould on the walls (due to dust and condensation).

As in the first case, the improvement of the Conference Building airtightness must also be completed by the implementation of a supply and exhaust air handling unit, equipped with a highly efficient energy recovery system. Considering the difference in use between conference rooms and offices, this air handling unit will be different and independent of the first one mentioned above.

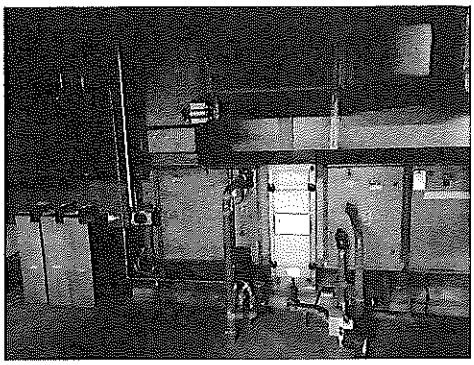

Figure 5 : Existing supply air unit #1

The building includes a covered car park with 88 spaces spread over two basement levels. At the moment, the parking ventilation is carried out by means of different exhaust fans taking the polluted air from the car park to reject it on the roof. According to the technical documents provided by ACP authorities as well as our on-site visit, we have noticed the following non-compliances:

- The car park is not equipped with a CO detection system in order to regulate the operation of exhaust fans. These fans are presently managed according to the parking occupancy schedule.
- Air flow rates used here are lower than current standards: 9.480 m^3/h for 88 parking spaces, or 107 m^3/h per parking space. As of now, IBGE-Brussels Environment recommends a minimum flow rate of 200 m^3/h per parking space.
- The supply of fresh air in the parking lot comes mainly from the access barrier opening. The car park does not have a sufficient number of ventilation openings, well distributed over the entire parking volume.
- The current ventilation system is not designed to allow a complete air wash of the car park and to avoid stagnation of gas.
- Existing fans are not equipped with a speed variation system that can modulate the ventilation rate down to 50% of the nominal flow when the car park is less used.
- Archives are stored in the parking lot, which is a significant risk in case of fire. This is especially true as the car park does not have a sprinkler system (see Figure 6).

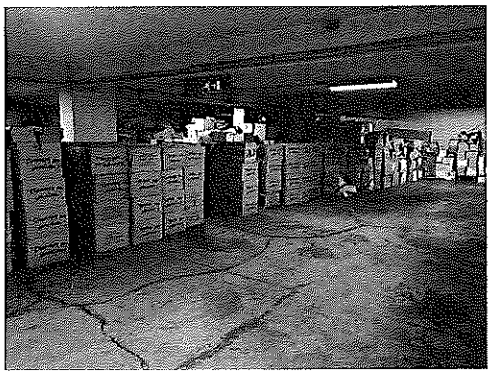

Figure 6 : Archives stored in the parking (floor -1)

As a result of the foregoing, the parking ventilation system must be completely replaced by a new system that complies with the requirements of IBGE-Brussels Environment. If necessary, the new ventilation system must also meet the Firefighters Service (SIAMU) requirements for smoke extraction.

2.2.3. Air Conditioning

Some premises of the Office Building are currently cooled by means of multisplit air conditioning units. These units were installed in a very disparate way, according to changing needs of users. These air conditioning units shall therefore be removed and replaced by an integrated and complete solution, in order to comply with thermal comfort requirements for offices, meeting and conference rooms during summer time.

The Conference Building is refreshed by a 200 kW monobloc cooling machine, with a scroll compressor (retrofitted in 2016). As stated before, this cooling machine generates chilled water for cold batteries mounted on the supply air handling units of the building. It also provides chilled water to a set of fan coils located in the different meeting rooms.

As part of the upcoming refurbishment works, the entire air-conditioning system has to be redesigned in order to meet updated needs of both Office and Conference buildings, while minimizing investment, maintenance and exploitation costs. To achieve this, project studies will focus on:

- the selection of a powerful cooling system adapted to updated thermal gains of the building;
- the selection of suitable sizes and locations for the cooling machine(s) as well as terminal units;
- the design of a distribution network adapted to the building geometry.

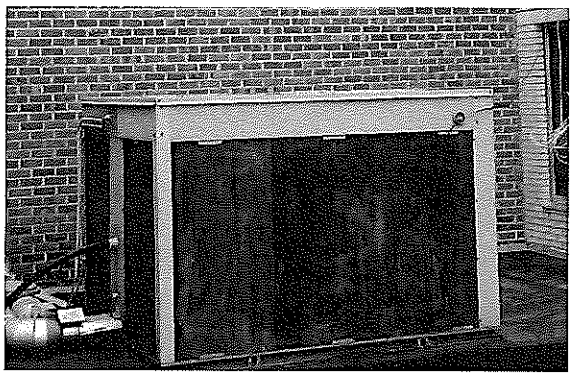

Figure 7 : Existing cooling machine (Trane® monobloc chiller with scroll compressors)

2.3. Sanitary facilities

2.3.1. Water supply

The city water connection of the building is done from the basement (floor -1). The main counter is located in one corner of the car park, very close to a traffic area. It is too easily accessible, since it is not located in a technical room. In the future, the water meter and all the connection kit should be moved and mounted in a dedicated technical room (see Figure 8).

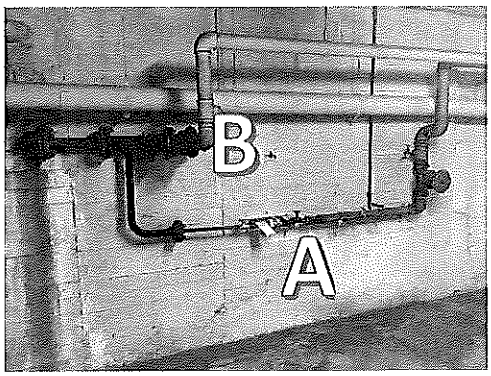

Figure 8 : (A) Main water meter; (B) Firefighting network pipe

The water supply network is made of galvanized steel. It has been installed since the construction of the building (in 1976), without minor modifications since. To reduce the risk of scaling, corrosion, formation of bacterial biofilms, and even a contamination by heavy metals, the entire water supply network should be replaced by pipes made of synthetic material or stainless steel.

Most sanitary apparatus in the building (WC, washbasin, sinks, etc.) were installed during the construction of the building. These appliances must therefore be replaced and arranged according to following elements:

- future occupancy rates of the building;
- updated architectural standards for the layout of sanitary spaces (see an example on Figure 9);
- updated technical regulations applicable to the water supply inside a building.

Depending on the needs of the occupants, a centralized or decentralized hot water solution can also be considered (see Table 2 to evaluate pros and cons). The most suitable solution will be implemented according to ACP needs, the work budget; and the last regulations and standards concerning hot water supply.

Upstream of the main water meter, the water supply network is preceded by a tee. This branch corresponds to the firefighting network (see Figure 8). The firefighting network is made of a set of fire hoses and hydrants distributed in the building. Due to the absence of a counter on the firefighting network, each connected equipment is preceded by a sealed shutoff valve. Due to the obsolescence of firefighting network pipes and the new requirements for the connection of firefighting equipment, the entire network must be replaced and adapted according to the needs of the refurbished building.

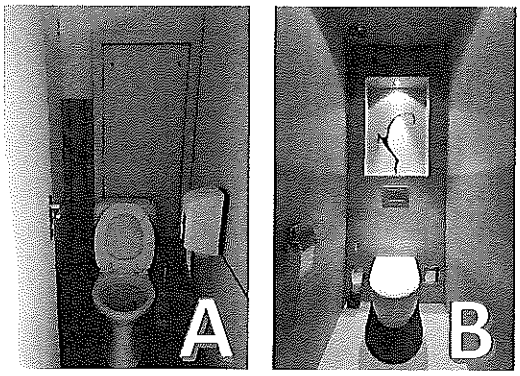

Figure 9 : (A) Existing toilet; (B) Contemporary toilet

Comparison of hot water production methods	
Centralized production	**Decentralized production**
(+) Positive elements	**(+) Positive elements**
+ Room savings on floors (outside the planned technical room); + Can easily integrate renewable energy technology; + Single and common maintenance (reduced maintenance costs).	+ Easier to implement an individual counting of consumptions; + Provides more safety compared to the risks of developing the Legionella bacteria; + Reduced installation costs; + Smaller network losses (increased efficiency of the system).
(-) Negative elements	**(-) Negative elements**
- Increase in energy losses due to the size of the network and the possible presence of a recirculation loop; - Increased risk of Legionella bacteria growth in case of stagnant branches at less than 55°C and the possibility of inhalation of water jets or nebulization; - Higher installation costs.	- Maintenance interventions multiplied by the number of production units (increase in maintenance costs); - Can hardly integrate renewable energy sources, with the exception of photovoltaic solar panels connected to the main electrical installation; - Usually requires space below or near the affected sanitary appliances.

Table 2 : Pros and cons of centralized and decentralized method to produce hot water for sanitary use

2.3.2. Sewage system

Sewage (grey and black waters) of the building is discharged mostly through a gravitational drainage system. For underground levels, a wastewater pump allows water to flow up to the main sewer collector. The existing drainage system is principally made of PVC tubes. It dates from the year of construction of

ACP headquarters. At different locations of the basement, we have seen repairs or modifications with HDPE pipes integrated into the existing drainage system. The sewage network of the building is a unitary system. In other words, it means that wastewater and rainwater are joined drained together, through a visit chamber located on the property line, in the same collector before joining the public sewer.

Figure 10 : Sewage system – (A) HDPE (black) and PVC (white) pipes; (B) Location of the wastewater pump

Due to the obsolescence of sewage and rainwater networks, it is mandatory to replace all drainage pipes by new ones (in HDPE and/or PVC), with layout and dimensions adapted to the constraints of the refurbished building.

For major refurbishment works, IBGE - Brussels Environment generally requires to provide rainwater retention systems (storm basin) and recovery systems (recovery tanks). Indeed, recovered rainwater can be used for the regular maintenance of surrounding area and the supply of toilets. In any case, the legal requirements for a specific rainwater treatment will be fully listed in the Environmental Permit that should be granted before the beginning of refurbishment works.

2.4. Electricity

2.4.1. High-current facilities

The building equipped with a high-voltage cabin situated on floor -1, right under the front building (Office Building). The high-voltage cabin is equipped with a static transformer of 400 kVA and it powers the whole ACP building (Office and Conference buildings) through the main electrical panel located right next to the transformer.

Electrical appliances, notably luminaries and wall sockets are powered by secondary electrical panels on each floor. There is an electrical panel for each floor and each building, as shown in the schematic below:

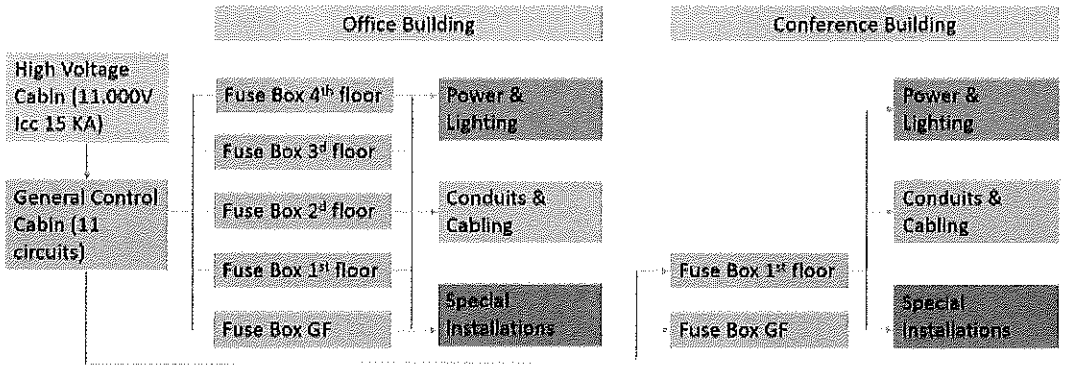

Figure 11 : Electrical distribution diagram

According to the reports of Vinçotte (the certified inspection body of electrical facilities) and Electrabel (the power supplier of the building) stated in technical documents provided by ACP authorities, all electrical devices of the building are obsolete and do not comply with current requirements. This applies to the high-voltage cabin as well as to secondary distribution boards. Cables and terminal devices have also reached the end of their lifecycle.

Due to the obsolescence of existing electrical facilities (both high and low-voltage appliances), it is mandatory to replace each and every electrical devices of the building. The new electrical facilities should be designed and implemented according to updated need of the refurbished building.

The future high-voltage cabin will be installed following the requirements of the Grid Manager (Sibelga). The present location of the high-voltage cabin should be reused and adapted to the last standards and requirements. A larger technical room will be designed and provided for this purpose.

The same low-voltage distribution principle should be applied for the refurbished building. This means that using one distribution board on each floor is the most suitable solution in the current application.

For the data room, we recommend the use of an uninterruptible power supply (UPS) system to keep the main IT devices running in case of a power failure.

The new electrical cables must be halogen free and in perfect compliance with the latest requirements.

Based on the flat roofing surface on top of the offices building, we expect the installation of photovoltaic panels on this surface. The available photovoltaic area is about 330m², as shown in the roofing plan here below.

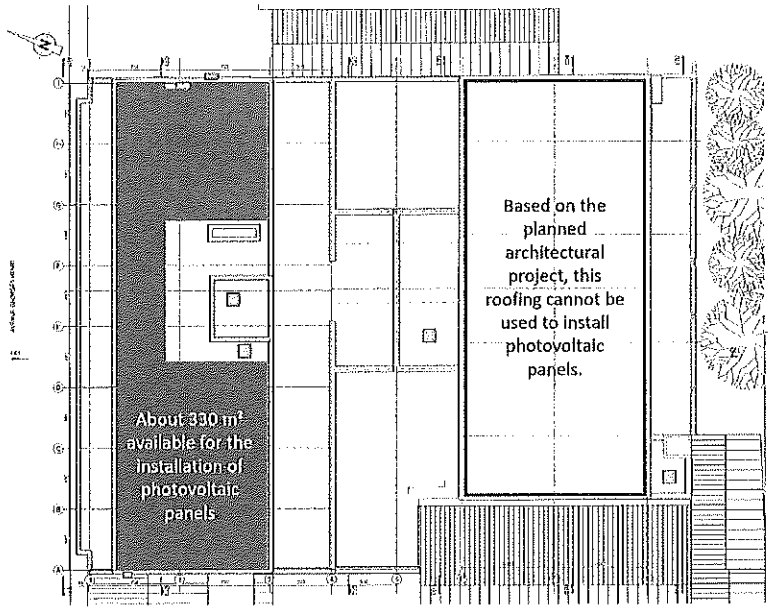

Figure 12: Available area for the installation of photovoltaic modules

Based on the available area, the peak power of the modules and the installation factors, the photovoltaic installation should produce about 44.115 kWh/year, as detailed in the following table.

Available roofing area	330 m²
Number of photovoltaic modules to be installed	173 units
Nominal power of 1 photovoltaic module	300 Wp
Total nominal power of the photovoltaic plant	51,9 kWp
Inclination/orientation reduction factor for a south orientation, with an inclination of 15°	0,96 [-]
Expected output per unit of theoretical nominal power	850 kWh/kWp.year
Expected annual photovoltaic production	44.115 kWh/year

Table 3: Estimated annual photovoltaic electrical production

2.4.2. Low-current facilities

2.4.2.1. IT and telephone networks

The ACP building is currently equipped with a data network. A central server supplies all the Wi-Fi routers and every work station with RJ-45 data sockets. The data network is very old and needs to be replaced.

The same thing applies to the telephone system present in the building, its replacement is necessary.

To precisely determine what type of network ACP desires, it is critical to schedule a meeting between the person in charge of the IT system and our technical team. This meeting will allow us to determine what is needed and thus create a «cookbook» for the IT part of the project with:

- cable types (copper, optical fiber, foiled, unfoiled, category, etc.);
- number of data sockets for every work station;
- specific data process and applications (CCTV, Wi-Fi, etc.);
- and so on.

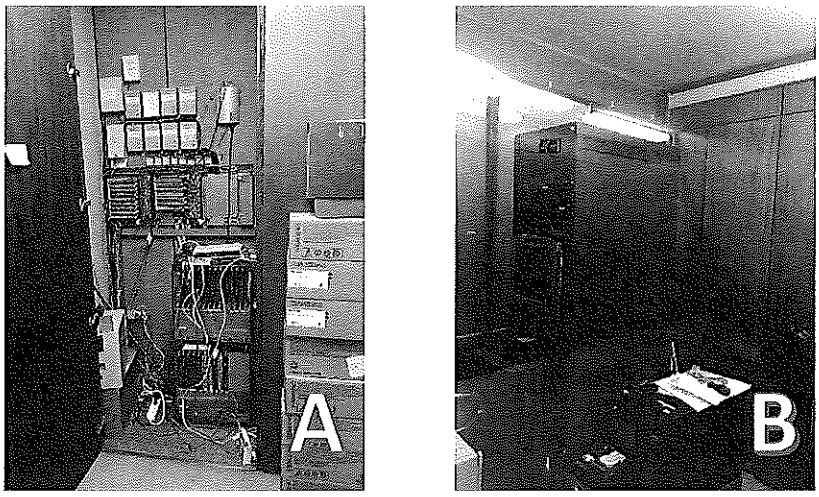

Figure 13 : (A) telephony main distribution frame; (B) data room

2.4.2.2. Fire safety

Presently, the building is equipped with the following fire safety installations:

- pressure hoses;
- extinguishers;
- a fire alarm system apparently disconnected.

Although the fire alarm system has been reactivated a few years ago, this system is quite old and has to be completely renewed. The future fire alarm system will comply with both national and European standards and legal requirements.

In addition to extinguishers, pressure hoses and hydrants, current applicable standards imply the following elements:

- It is mandatory to carry out a fire safety risk analysis for the refurbished building. Such analysis could help to define the specific fire safety strategies to implement in different areas of the building (server room, archives, offices, etc.). For this purpose, a meeting must be scheduled with the Fire and Safety Officer of ACP.
- A global fire detection system shall be implemented for the entire building, with addressable digital fire detectors, pulsing sirens (to order building evacuation), fire alert and fire alarm buttons, a signal transmitter to inform Firefighting Services (SIAMU), a fire panel, a fire alarm repeater panel and an electric board dedicated to firefighters.

2.4.2.3. Access Control

Beyond the current CCTV system which surveys the ground floor and the car park entrance, there is no other security system in the building. None of the doors are secured and the security system at the entrance of the car park is out of order.

All these aspects must be discussed and take into account when the building will be renovated.

In order to define the needs of ACP authorities, it is imperative to schedule a meeting with the person in charge of security matters for the headquarters. This meeting will help us to discuss the following elements:

- The schematic diagram as-well-as the concept plan of coverage areas of the new CCTV system;
- The schematic diagram of the intrusion detection system to be implemented;
- The schematic diagram and the concept plan of the new access control system as-well-as the physical security barriers to be implemented;
- All the constraints regarding structural loads and costs in order to implement bulletproof glasses.

Following this meeting, we will draw up a priority list based on ACP requirements. It is actually hard to define a priority list without having a short discussion with your team to define your expectations. As detailed in your response, we already work on including a Security fencing system for the exposed sides and back of the ACP building.

2.4.2.4. ISAV

The conference building has 3 meeting rooms, each one is equipped with a system that allows interpreters to directly translate to all the participants.

This working principle shall be reused and improved during renovation works.

According to technical documents provided by ACP authorities, a study was already done concerning all these aspects. After our first analysis on the content of this study, it seems that the minimal criteria respond to ACP needs, which means:

- a passive coupling between room C (master room) and rooms A + B (slave rooms);
- each conference room can operate independently;
- only the room C will be equipped with an advanced camera system, rooms A + B will be equipped with a lighter camera system.
- each room needs to be equipped with an electro acoustical system;
- delegate and lectern desks integrate a microphone with an individual activation button and a loud speaker to correct the natural intelligibility of the room;
- the president position needs to be equipped with the same system and some additional functions ("floor priority", etc.);
- and so on.

We are currently working with an ISAV specialist in order to draw up a suggested functional principle.

2.5. Lifting devices

There are currently two kinds of lifting devices in the building:

- 2 OTIS lifts in the office building installed in 2004. According to the technical note we received, they both appear to be in good condition and get regular maintenance from OTIS.
- 1 lift chair placed on the staircase that connects the ground floor with conference room C.

Regarding the existing devices, it appears that the Office Building does not need any improvement, since the lifts are well maintained. However, we do need a risk analysis report issued by a certified inspection body before making a final decision concerning lifting devices of the building. In the estimate of the overall budget, we considered the worst case with a complete replacement of the elevators. A risk analysis is to be expected during the project phase.

However, the same cannot be expressed about the lift chair. This is the only existing facility for handicapped persons in the Conference Building, which is not enough regarding the high occupation of room C. Depending on the architectural solution, it is therefore expected to install either a fully lift or reuse the existing ones from the offices building to access the meeting room C.

Regardless the solution chosen, it must be studied in accordance with the escape route rules.

2.6. Asbestos removal

An inspection report has been drawn up in 2013 by the company WASCOS. See Inventory Report, Annex F of the ToR.

It is a non-destructive inventory, conducted in accordance with the Belgian standards. A limited number of offices were inspected. Some non-accessible spaces were not inspected.

An additional inspection is requested when the whole building will be empty and available for construction works.

The removal of the identified asbestos will have to be carried out by a specialised company before the demolition works.

3. Permitting process

3.1. Global review of existing licences and licences to obtain

The environmental permit, requested for the exploitation of the building, was valid until 2007.

According to the request of Administration for the Management of the Environment of the Brussels Region (IBGE – Brussels Environment) emitted in 2011, ACP has introduced an application for environmental permit for the following classified installations:

- 40A – Combustion installations with a nominal heating power between 100 kW and 1 MW;
- 68B – Garages, covered parking for 25 to 200 vehicles;
- 132B – Cooling installations with power equal or above 100 KW;
- 148B – Electric transformers with nominal power from 250 KVA to 1000 KVA.

With more than 4.000 m² of built-up area and covered car park with 88 spaces, the ACP building is considered as an infrastructure with significant impact on the environment. Therefore, IBGE has requested a class 1B permit, which also implies the simultaneous submission of an application for planning permit, together with the application for environmental permit.

Due to the planned refurbishment works still to be defined, the building permit immediately requested by the municipality of Woluwe-Saint-Lambert to ACP authorities has not yet been presented. Hence, the application procedure started in 2011 remains incomplete at this point.

According to the information received from the technical department of the Commune of Woluwe-Saint -Lambert (visit of the 14/12/2018), the following steps must be taken:

1° An application for Urban Planning Permit:

A detailed description of refurbishment works is to be provided and submitted to the Brussels Capital Region. To this end, detailed design plans for architecture and technical installations must be drawn. A public enquiry will have to be organized by the Commune in order to inform the neighborhood about the project and to collect any remarks. As the building is located in a predominantly residential area, particular attention should be paid to any changes in the existing situation that could increase the impacts on the neighborhood: modification of the construction template with impact on the views from neighborhood, shadows, increased car traffic, noise.

Because of the diplomatic status of ACP, the planning permit will be treated by the Brussels Capital Region and not by the Commune.

At the same time, those detailed design plans must be submitted to firefighting services (SIAMU), which should deliver a certificate of conformity for the building and its facilities for fire prevention and firefighting.

At this stage, we have not taken contact with the Region, visits will be organized at the next stage (preliminary design) to receive any comments based on the first preliminary drawings.

2° A proposition based on Building Energy Performance requirement:

This proposition presents the project division as defined by the regulations for BEP Works. In the case of refurbishment works, an overview of the measures planned to meet the BEP requirements is also mandatory. It is annexed by the BEP adviser to the Urban Planning Permit application.

3° A new application form must be completed and submitted to IBGE, according to the upgrading of technical facilities of the ACP building. Additional documents which must be attached to this new application are listed below:

- Updated and detailed technical plans;
- An Impact Report including the rationale for the project, a description of its objectives and the timetable for its implementation, and finally a description of the elements and the geographical area likely to be affected by the project;
- A Soil Pollution Study that must be carried out in order to verify the chemical conditions of the soil on which ACP building is located.

Regarding a change in the capacity of the car park, it will be necessary to check to what extent, because of its diplomatic status, ACP could derogate from the new regional standards (COBRACE) which fix the maximum number of authorized parking places according to the zone of accessibility. In zone B, this number is fixed at 1 place per 100m² which would limit the number of places to +/-45.

We note that ACP and its consultants interviewed the IBGE legal services in 2016 and that it replied that COBRACE would not apply. This item will have to be officially confirmed.

The permit process is summarized in the following illustration:

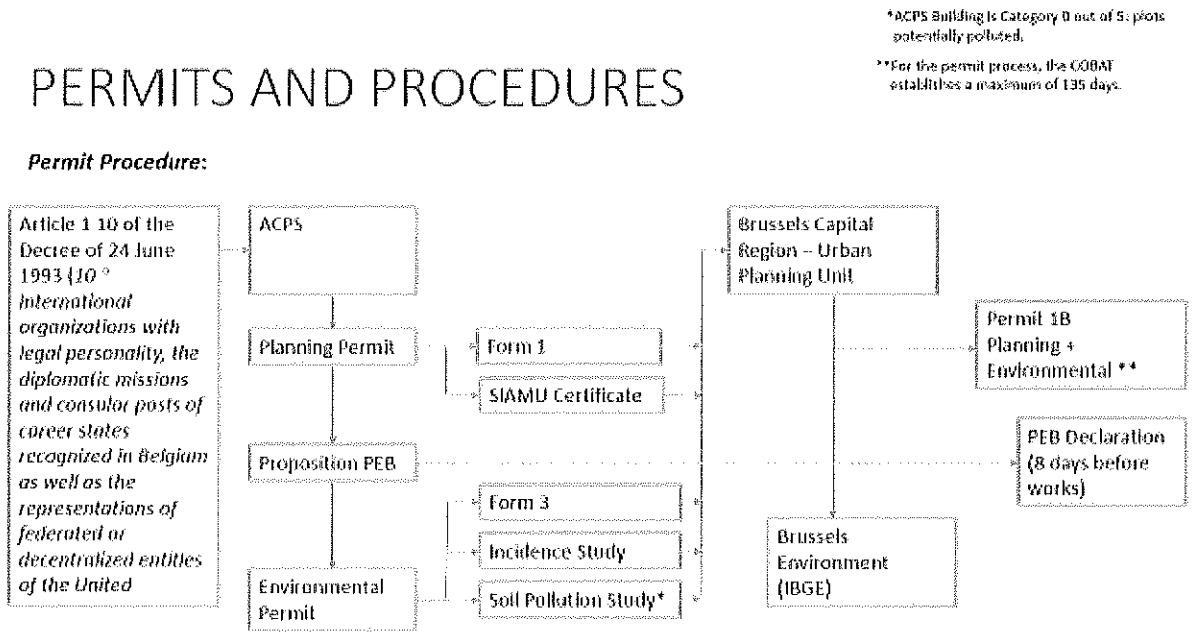

Figure 14 : Summary diagram of permits process and procedures (source: Annex G -Abridged Study Permit and Procedures)

3.2. Building Energy Performance (BEP) requirements

For each application for Urban Planning Permit submitted after 01/07/2017, it is mandatory to identify all the BEP units included in the project as well as the nature of construction works to be undertaken.

By definition, a BEP unit is a set of premises located in the same insulated volume. These premises are designed or modified to be used separately. The ACP building consists essentially of a non-residential BEP unit. This BEP unit is a set of premises, including ancillary premises, which are assigned to the management or administration of ACP activities as an international organization. In this BEP unit, the premises are grouped by functionality. Each functional part is delimited by walls and consists of adjacent spaces housing the same activity. The circulation zone between two adjacent spaces housing the same activity is considered as included in this functional part.

For the refurbishment project, BEP functions are identified are as follows:

- Offices;
- Gathering – important occupation;
- Gathering – cafeteria or refectory;
- Technical premises;
- Common;
- Other (storage premises).

For the non-residential BEP unit of the ACP building insulated volume, we note that renovation works will meet the following characteristics:

- they are subject to a planning permit;
- they influence the energy performance on at least 50% of the thermal loss area;
- they consist of the replacement of all the technical installations.

Therefore, we can consider that the BEP requirements applicable for this project are mainly those of a heavily renovated unit. This set of BEP requirements can be summarized as follows:

Type of work	***BEP Unit with major refurbishment***
Requirements	
Net heating requirement [kWh/m².year]	/
Primary energy consumption [kWh/m².year]	/
Overheated	/
Technical facilities	/
Calculations of thermal bridges	/
Heat transfer coefficient: U [W/m².K] or Heat resistance: R [m².K/W]	*Only for walls delimiting the insulated volume, such as:* • *Glazing: U_{max} = 1,8 W/m².K* • *Frame: U_{max} = 1,1 W/m².K* • *Roof / ceiling: U_{max} = 0,24 W/m².K* • *Exterior walls without ground contact: U_{max} = 0,24 W/m².K* • *Exterior walls with ground contact: R_{min} = 1,5 m².K/W* • *Vertical and sloping exterior walls in contact with a crawl space or with a cellar outside the insulated volume: R_{min} = 1,4 m².K/W* • *Floors in contact with outdoor environment or located above an unheated adjacent space: U_{max} = 0,3 W/m².K* • *Other types of flooring (above ground, above a crawl space or above a cellar outside the insulated volume, underground cellar floors): U_{max} = 0,3 W/m².K or R_{min} = 1,75 m².K/W* • *Doors and garage doors: U_{max} = 2,0 W/m².K* • *Curtain wall systems: U_{max} = 2,0 W/m².K; $U_{glazing,\ max}$ = 1,1 W/m².K*

	• *Glass blocks walls: U_{max} = 2,0 W/m².K* • *Walls between 2 insulated volumes: U_{max} = 1,0 W/m².K* • *Opaque walls inside the insulated volume: U_{max} = 1,0 W/m².K*
Ventilation	*The requirements related to Annex XVI of the BEP decree issued by Brussels Region authorities have to be complied*
Procedures	
BEP-Reporter	*Mandatory designation*
Feasibility study	*To be ordered by the Project Manager only with the area of refurbishment and new building zones are higher than 5.000 m²*
BEP Proposition	*To be submitted to Brussels Region*
BEP Walver request	*To be submitted to IBGE – Brussels Environment*
BEP Early works notification	*To be submitted to IBGE – Brussels Environment*
BEP Declaration + calculation file	*To be submitted to IBGE – Brussels Environment*

Table 4 : BEP requirements in case of major refurbishment works

BEP guidelines and options will be provided to ACP authorities in order to help them making their building to be as eco-friendly as possible.

3.3. Fire regulations requirements

The renovated building will have to meet fire protection standards (AR du 7/12/2016).

Safety during evacuation is a particular point of attention:

- The office building has only one staircase. This situation is only acceptable as long as there are no more than 50 people per level and evacuation by the fire department can be done through front façade (operable window). This limits the possibility to have meeting rooms at upper floors.
- The conference centre is aimed to host a large number of people. Meeting rooms of over 50 people must have 2 exits with a width calculated on the number of people to evacuate, as well as the escape stairway. For information, a meeting room with capacity for 420 people at first level requires a door measuring 420 cm wide and a staircase measuring 525 cm wide per flight of stairs. It seems that this issue has been largely underestimated in the assumptions detailed in annex "Abridged study".
- The lobby emergency exits at ground floor will also have to be sized with regards to the number of people.
- A visit to SIAMU took place on 7/02/2019 to present a first sketch of the project. Firefighters have particularly emphasized the evacuation safety measures of the large conference room located on the first floor: the widths of doors, corridors and stairways must be calculated in accordance with the Belgian standards, an emergency escape corridor must be created who goes off the street and not in the lobby.
- The current situation of the staircase in the office building (width 100cm instead of 120cm) can be accepted provided that no more than 50 people are located on each floor.

Service d'Incendie et d'Aide Médicale Urgente
de la Région de Bruxelles-Capitale

Ce document est à transmettre à la prévention (classement)
Ce document sera classé dans le dossier en attente d'une éventuelle demande

PV de réunion

Compte-rendu de l'entrevue du : 7/2/2019 A la caserne : Heli 2

Nom de l'Officier / de l'Assistant de Prévention: BAUDUIN

Nom de la / des personne(s) rencontrée(s) : Mr AERoos (Altiplan)

Adresse du lieu concerné ou situation cadastrale : 451, Rue Georges Henri - W&L.

Dossier existant ? ✓ Officier traitant : ✓

Résumé succinct de l'entrevue :

1. Description du projet :
   Rénovation d'un bâtiment de bureau et salle de conférence
2. Grandes options définies (par exemple : 2 escaliers demandés, sortie de secours supplémentaire, sprinklage, détection, ou avis défavorable !)
   bâtiment avant : une seule cage d'escalier : OK si <50 personnes
   bâtiment arrière : création d'une salle de conférence de 420 personnes
   ⇒ création d'une seconde possibilité d'évacuation jusqu'à la rue ⇒ 2ème cage d'escalier ~~jusqu'au rez~~.

Ce document ne constitue qu'une information donnée de bonne foi qui n'engage pas le SIAMU.
Un rapport officiel fixera les mesures demandées.

- Je souhaite que le dossier me soit attribué : oui / (non) Signature de l'officier:
- Un P.V. de l'architecte suivra : oui / (non)

Héliport, 15 1000 Bruxelles · Prévention Tél 02 208 84 40
www.firebru.brussels/siamu · Email: prev@fi

Figure 15 : Minutes of meeting with SIAMU of 07/02/2019

4. Project program

4.1. Assessment of space

Study for optimal use of floor space will be based on principles defined in annex C of ToR.

4.1.1. Office building

In the current situation, 69 people occupy floors 1 to 4, which represents a ratio of 32 sqm/people. This ratio is really high compared to current standards and shows that optimisation is possible.

In the future, the office building should offer 105 office spaces for personnel of various ranks of the Secretariat staff.

It seems that current organisation and work habits imply to keep individual or shared offices rather than an open space. The central corridor will therefore be maintained. To increase flexibility and adapt room size to occupancy, possibly changing with time, we recommend to use movable precast modular partitions set up based on façade window modules. Rear facade offices have a higher depth and are well suited for shared offices with several workstations.

A larger open space more suitable for exchange could be created by removing filing cabinets.

An optimisation of the currently under used central area will be studied to build small meeting rooms or technical rooms (IT, copy rooms, ...).

4.1.2. Conference halls

4.1.2.1. Room C

The study will be based on option 4 detailed in annex "Abridged Study", with a total capacity increased to +/- 420 people, with respect of the obligations of protocol of seating 90 – 100 persons of the same status/rank in the first row of one big table.

However, this layout implies a great loss of space in the centre of the table. Our study will evaluate feasible alternatives.

As mentioned above, the capacity of the meeting rooms affects significantly the exit and escape staircase widths, as well as HVAC installations power and flows. The need of this maximum capacity should be confirmed in view of those constraints.

We recommend to limit the theoretical capacity of room C to 420 persons instead of 425 as the width of emergency exits, stairs, corridors is based on multiples of 60 p. according to the fire standards (5 more people would involve increase the width of doors and corridors by 60cm and stairs by 75cm). See basic standards of fire prevention (AR 7/12/2016).

The abridged study suggests that the room could be divided in its middle by a foldable partition. This would implicate additional problems for emergency exits, audio-visual and HVAC systems. Therefore, we would advise not to retain this possibility.

4.1.2.2. Room A and B

The study foresees an increase of capacity of these 2 rooms, the room A adopting a configuration in theater. The increase of capacity to more than 50 people per room implies the creation of a 2nd emergency exit, which could compromise the central office.
The column located in the center of Room B is a problem, it will be necessary to consider the possibility of replacing it with a new smaller or displaced structure. It is likely that a structural column is integrated in the rear wall of room A, the extension on the current cafeteria will pose a structural problem which will have to be addressed.

4.1.3. Ground Floor

The abridged study provides for the creation of an area for stand-up events for up to 400 people, with a space for catering activities, and a cafeteria for at least 50 people.
The capacity of this space will have to be re-evaluated according to the remaining space available according to the emergency exits necessary for the conference rooms.
If the cafeteria is equipped for the preparation of hot dishes, the fire standards will impose a fire partitioning. In this case, the space could not be used as an overflow for large events.

A data center and a library are requested by the program close to the entrance. The need for this space should be reconsidered given the evolution of technologies.

4.1.4. Street level

ACP wishes to improve the facilities to cope with a large number of vehicles bringing attendees to conferences or receptions. The creation of a second drop-off lane in front of the building, on the other side of the street, is subject to approval by the competent authorities and will probably not be allowed. An improvement of the access to the underground parking will be examined.

- **Issues to be addressed concerning the construction program**

Before getting into detailed design, we would like to find answers to the following question:

- Given the protocol requirements is it possible to provide another provision of the tables in room C?
- Is the number of people attending meetings in room C (425) imperative or can it be reduced?
- Can you confirm that the cafeteria will not be equipped for the preparation of hot dishes?
- Is it possible that the less valid people access to the conference room C by the central lifts?

These issues will be examined in the preliminary design phase and solutions proposed.

4.2. Assessment of technical and comfort needs

In this chapter, we have tried to do a pre-assessment of HVAC and electrical needs of the building according to the optimization study previously carried out on Conference Halls and Office Building (see Annex C in technical files provided by ACP authorities). Calculations we made do not allow us to reach definitive conclusions. The main goal here is to give an early estimate about energy matters regarding the building to be refurbished.

Depending on Annex C, ACP authorities have shown a marked preference for 2 options regarding refurbishment works to be implemented in Office and Conference buildings: option #2 was chosen for Office Building, while option #4 was selected for Conference Halls.

The results of our first calculations are given in the tables below.
Table 5 gives an overview of the energy and aeraulic balance of the building. For obvious reasons of energy saving, all rooms with intermittent or variable occupancy will be equipped with self-adapting regulation. Our calculations have been made according to current legal requirements and standards. We have also considered the technical specifications notified in the European Commission Manual of Standard Buildings. Unless ACP authorities object, this manual will be used as a reference document during the design phase.

Moreover, beyond the energy balance provided in

Table 5, we have also been able to carry out a pre-assessment of the electrical power required for building facilities. Table 6 shows that the new electrical transformer will be slightly more powerful than the existing one. With our first calculations (see Table 3), we have also been able to show that using around 330 m²of the available roof space for photovoltaic panels (see Figure 12) could help to produce around 44.000 kWh/year (between 5 and 10 % of the average electrical needs of a comparable size building in Brussels). Of course, our estimates still have to be studied in more detail, but they already announce interesting prospects for the definition of the technical facilities of the refurbished building.

At this stage, we draw the reader's attention to the fact that these estimates are not to be considered as definitive values. Indeed, the next configuration of the building as well as the various interior fittings required by ACP authorities are far from being defined. It is therefore premature to consider these estimates, based on usual empirical ratios, as definitive indications. Although they do not limit the final size of the installations, these preliminary estimates allow us to define an order of magnitude for the main components of technical facilities. In other words, these provisional results are useful for pre-dimensioning and integrating in an architectural way the constraints related to the layout of technical rooms, hoppers, false ceilings and all the main facility areas. Once the details of the projects will be defined, full and detailed sizing calculations will be carried out, according to the rules of the art, to determine:

- Heat losses in winter (room by room);
- Heat gains in summer (room by room);
- Ventilation rates (room by room, and according to maximal occupancy rates defined by ACP authorities);
- Needs of hot water supply for sanitary use (in full accounting of every single user outlet);
- Needs of cold-water supply for sanitary use (in full accounting of every single user outlet);
- Flow rates of the sewage system (including all sanitary appliances, drains and gutters);
- Flow rates of evacuation of the rainwater drainage system (in full accounting each and every impervious area to be treated);

- Dimensions of the stormwater basin and any possible rainwater storage tank, as well as the leakage rate and the overflow;
- Energetical balance of the electrical installation (area by area, in full accounting of each specific equipment);
- Characteristics of the computer network, as-well-as Wi-Fi and VoIP solutions;
- Characteristics of audio-visual and digital solutions required for conference rooms, meeting rooms and common areas;
- Characteristics of security equipment (access control, intrusion detection, physical barriers and CCTV).

Logically, only the results of these accurate calculations will be taken up and used for the design of final heating, air conditioning, ventilation, adduction, drainage, electricity, multimedia broadcasting and site security installations.

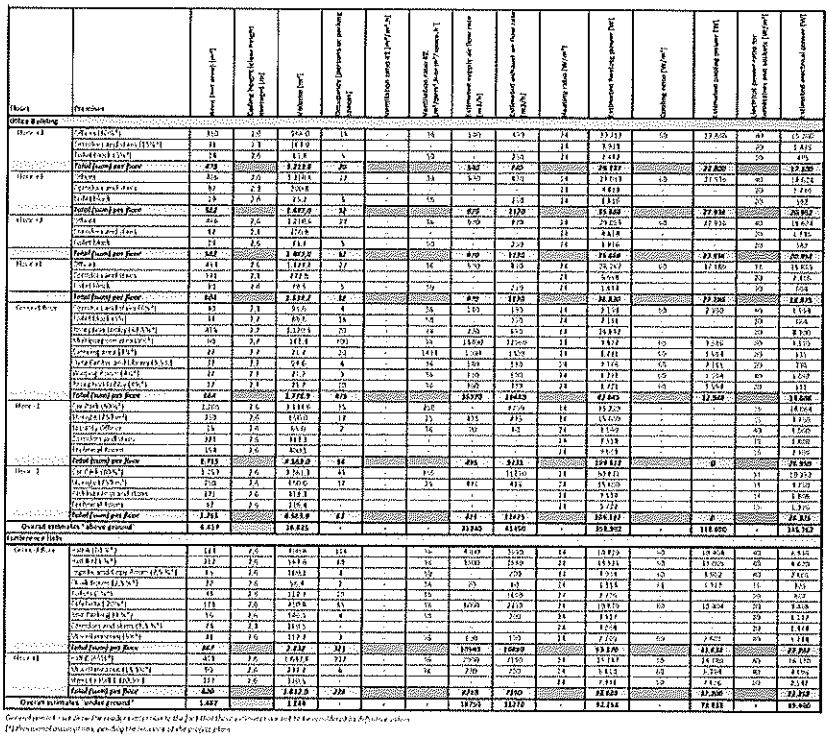

Table 5 : Energy balance of the building

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Major consumers			Nominal Power	Simultanity factor	Power output
Office Building electrical power for lighting and sockets			146 kW	0,8	117 kW
Conference Building electrical power for lighting and sockets			49 kW	0,8	40 kW
Supply Air Handling Unit for Office Building - GP1			7 kW	1,0	7 kW
--> Air flow rate :	*21.340*	*m³/h*			
Exhaust Air Handling Unit for Office Building - GE1			8 kW	1,0	8 kW
--> Air flow rate :	*21.450,0*	*m³/h*			
Supply Air Handling Unit for Office Building - GP2			7 kW	1,0	7 kW
--> Air flow rate :	*18.750,0*	*m³/h*			
Exhaust Air Handling Unit for Office Building - GE2			6 kW	1,0	6 kW
--> Air flow rate :	*18.270,0*	*m³/h*			
Exhaust Fan for Car Park - GE Parking			7 kW	1,0	7 kW
--> Air flow rate :	*20.000,0*	*m³/h*			
Heating system			20 kW	1,0	20 kW
Cooling system			56 kW	1,0	56 kW
Security system (CCTV + access control + intrusion detection + fire alarm system and so on)			20 kW	0,2	4 kW
Data room with an integrated UPS system			32 kW	1,0	32 kW
ISAV system			20 kW	0,6	12 kW
Lifting devices			36 kW	0,8	29 kW
Catering services / cafeteria			255 kW	0,6	153 kW
Electric charging stations			28 kW	0,6	17 kW
Surroundig areas (lighting and power)			10 kW	0,2	2 kW
Gross subtotal					516 kW
Overall simultanneity					0,7
Reserve factor					1,15
Service voltage					400 V
Cos ϕ					0,9
Estimated total electric power					415 kW
					462 kVA
Electrical transformer to be selected for the cabin					630 kVA

General remark : we draw the reader's attention to the fact that these estimates are not to be considered as definitive values

Table 6 : Pre-assessment of the building electrical power

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5. Strategy and methodology of Relocation

The difficulty of finding a building to rent for a short time and meeting the needs of ACP should not be underestimated. For this reason, we initiated preliminary contacts with the real estate sector (real estate agents, large landlords) in order to identify existing opportunities on the market.

With ACP it has been defined the following elements linked to relocation :

1. Superficies and available facilities on the temporary premises

- *Altiplan – FIE Question* : Minimum / maximum m² we need to foresee per person for the office area.

  ACP answer : European Commission Manual of Standard Buildings informs the following acceptable density.

  Extract From MIT 2011 pg 107 FV 3.3 Conditions d'occupation
  –Offices :
  - bureau individuel de deux modules de façade ou 10 m² minimum
  - bureau partagé de 8 m² minimum par personne (cloisonnement spécifique à chaque projet)
  - Salles de réunion : 2,5 m² par personne
  - Restaurants : 2 m² par personne
  - Cabine interprète : voir chapitre D.I.4

- *Altiplan – FIE Question* : Quantity of informal meetings room (10 to 25 persons) to foresee in addition with the 200 and 49 persons meeting rooms

  ACP answer : Consideration should be given to including **two small meetings rooms that can comfortably seat 12 to 15 persons** to facilitate internal departmental meetings (not necessary to have one per floor). These will be useful as well for small, brief meetings between Experts and a limited number of external parties. *Experts are currently obliged to sometimes hold such meetings in the cafeteria.*

  It might also be useful to have two small rooms, located near the conference rooms, which could be used for bilateral meetings (8-10 persons).

- *Altiplan – FIE Question* : Quantity of parking spaces and storage facilities?

- *ACP answer :*
  - *Parking spaces* : Minimum of 45 car spaces utilised by ACP Staff members on a daily basis + regular visitors = +/- 55 – 60 car park spaces.
  - *Storage facilities :* Storage will be required for cafeteria consumables, office paper & stationary supplies, Technical Maintenance tools and small stock of electrical items like light bulbs, and new furniture, Supplies and equipment for Cleaners, IT Equipment & Screens/Monitors, etc.

- *Do we need cafeteria and or catering facilities for the 200 and 49 persons meeting rooms* : Cafeteria Space for 50 persons should suffice
- *Inventory of the existing furniture's and equipment's :* A document has been provided but it is still that should be moved to temporary premises.

ACP needs are resumed in the table here under.

ACP's relocation project
Program of requirements

09/04/2019

Individual workspaces + services (meeting + common + support) : REQUIREMENTS

Dept	(Plusieurs éléments)		
Esp_Cat	Esp-typ	Area_Unit	Quant
Individual workspace	Workstation in Open plan	8	33
	Private closed office	13	43
	Private closed office with meeting area	18	4
	Private closed office SG	26	1
Total Individual workspace			81
Meeting area	Meeting room 10 p.	20	2
	Meeting room 15 p.		2
Total Meeting area			4
Common area	Library	50	1
	Kitchen	8	1
	Lobby	250	1
Total Common area			3
Support space	Printing room + Stationeries	15	1
	Server room	8	1
Total Support space			2

Individual workspaces + services (meeting + common + support) : NET AREA (M²)
NET AREA = PA (primary area) + CA (horizontal circulation area)

Dept	(Plusieurs éléments)		
Esp_Cat	Esp-typ	Area_Unit	Area_Total
Individual workspace	Workstation in Open plan	8	264 m²
	Private closed office	13	559 m²
	Private closed office with meeting area	18	72 m²
	Private closed office SG	26	26 m²
Total Individual workspace			921 m²
Meeting area	Meeting room 10 p.		60 m²
	Meeting room 15 p.	40	80 m²
Total Meeting area			140 m²
Common area	Library	50	50 m²
	Kitchen	8	8 m²
	Lobby	250	250 m²
Total Common area			308 m²
Support space	Printing room + Stationeries	15	15 m²
	Server room	8	8 m²
Total Support space			23 m²
Total général			1392 m²

OPTIONAL

Dept	OPTIONAL		
Esp_Cat	Esp-typ	Area_Unit	Quant
Meeting area	Meeting room 200 p.	500	1
	Meeting room 49 p.	142,1	1
	Translating room + Regie	7	6
Total Meeting area			8
Common area	Cafet 50 p.	100	1
Total Common area			1

OPTIONAL

Dept	OPTIONAL		
Esp_Cat	Esp-typ	Area_Unit	Area_Total
Meeting area	Meeting room 200 p.	500	500 m²
	Meeting room 49 p.	142,1	142,1 m²
	Translating room + Regie	7	42 m²
Total Meeting area			684,1 m²
Common area	Cafet 50 p.	100	100 m²
Total Common area			100 m²
Total général			784,1 m²

TOTAL

Dept	(Tous)
Esp_Cat	Area_Total
Individual workspace	921 m²
Meeting area	824,1 m²
Common area	408 m²
Support space	23 m²
Total général	2176,1 m²

Table 7 : Program of requirements for relocation project

2. Budget and timing for relocation

- *Altiplan – FIE Question :* What is the available budget per year that is available for the renting
  ACP answer : ACP has a specific budget for fitout works – renting offices and renting meeting rooms for bigger events.
  Temporary Rental totals 4.100.000€
  - 3.1 Conference 3.500.000€
  - 3.2 Offices 500.000€
  - 3.3 Temporary Office Fitting 100.000€

ALTIPLAN – FIE comments : Global budget is realistic but repartition of the budget is to be redefined

- *Altiplan – FIE Question :* If the works are not done by landlord of the temporary premises, is it mandatory to do a public call for tender for the fit out works?

  ACP answer : Altiplan does NOT need to follow PRAG rules; they are bound by the Belgian legal texts and, of course, by the provisions of the contract signed with the ACP Secretariat – response from Devco office of 9/4/19.

3. Technically speaking

   Moving of the ISAV equipment's to the temporary space : a visit was done to analyze this feasibility. During the visit, it was request to receive the plans (schematic plans and racks drawing and descriptions) of the existing installation so we can describe and give a cost estimation of the works that are to be done for this moving. This is still to be communicated.

- ACP should draw up an inventory of its furniture and equipment in order to identify those who will be moving for the transitional period and those who can be eliminated. A solution must be found for the storage of the archives.

Based on all those information's, the methodology for call for tender is to be finished and will be provided for the 26/04/2019. This methodology will include :

- A table with simulation of budgets for the different options of the market
- A clear methodology of each steps of the call for tender, visits, selection, negotiations, fit-out works,...
- A planning for each of those steps

6. Project planning

6.1. original contractual Gantt diagram work plan & time table

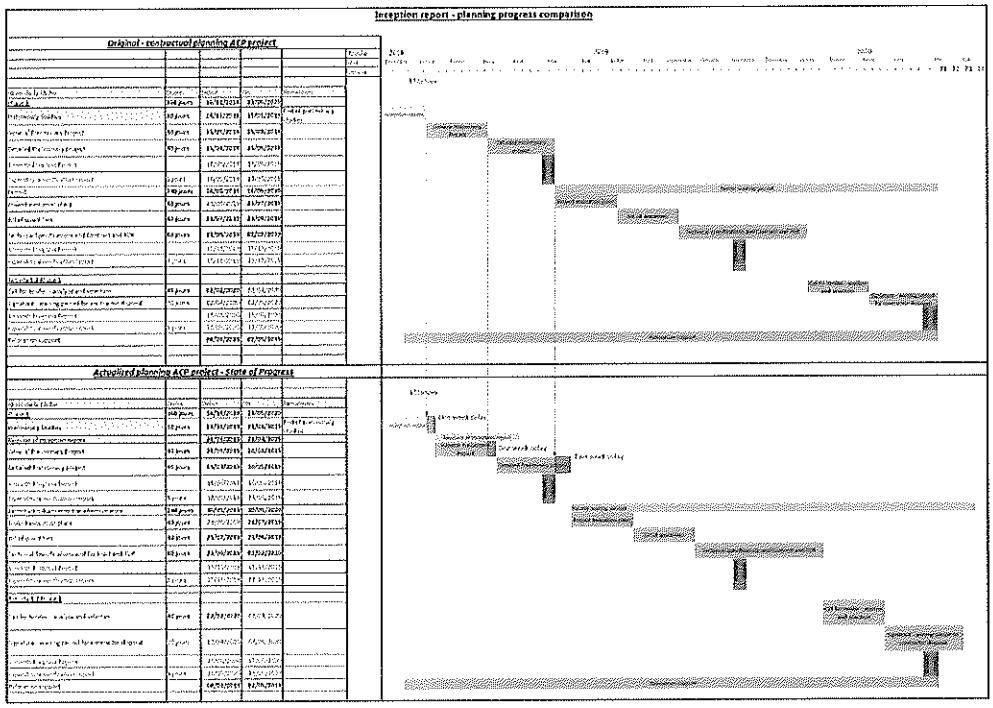

Table 8 : Gantt Diagram – planning progress comparison

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7. Conclusions

- Our analysis of the current situation of the building confirms the necessity of a heavy renovation, keeping only the reinforced concrete structure and implying the complete replacement of the roof and facades, interior finishing and technical installations.
- Increasing the conference room capacity implies heavier structural transformation works but the technical feasibility is a priori confirmed.
- Obtaining the administrative permits for those works should not be a problem but implies a long delay estimated at 12 months after introducing the demands.
- The detailed project development requires answers from ACP to questions asked in the present report with regards to the program and its technical equipment.
- The relocation process should start as soon as possible to find the suitable building and manage the move.

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