# INTERNATIONAL DESIGN COMPETITION EUROPEAN PARLIAMENT PAUL-HENRI SPAAK BUILDING BRUSSELS

PRE-QUALIFICATION PROCEDURE ANNEX PART 2: PROJECT DESCRIPTION



MAY 2020

## European Parliament, Renewal of Paul-Henri SPAAK Building - Brussels

International design competition

Pre-qualification procedure Annex Part 2: Project description

## **1. PURPOSE OF THE COMPETITION**

The European Parliament has decided to launch this restricted international design competition for the renewal of the Paul-Henri SPAAK Building. The notion of "renewal" covers all approaches between a "renovation" of the building, and a "reconstruction" of the building. It is one of the main components of the competition task to identify the right approach.

The Paul-Henri SPAAK Building is part of an estate of around ten buildings with a total area of some 665,000 sq m. The gross floor area of the current building is around 84,000 sq m<sup>1</sup> and could be increased within existing urban planning constraints. It houses the Chamber of the European Parliament in Brussels for its 705 Members from all over the European Union.

The European Parliament, as a multicultural and multilingual assembly where no fewer than 24 languages are routinely spoken and interpreted, embodies the European motto 'United in diversity'.

The main building of the European Parliament's Brussels site, the Paul-Henri SPAAK Building, houses not only the Chamber, where Members meet in par-sessions, but also facilities for holding parliamentary committee meetings, organising press conferences and welcoming visitors.

The aim of the competition is to select the concept that reaches the best equilibrium between the different objectives of the project and to select the planning team with whom their design is to be realised.

## 2. VISION

The European Parliament is a symbolic heart and home of European democracy, central to the continent's modern history. Its building heritage is significant not only for the European legislators, but also for citizens, in that it provides important public spaces for dialogue and for experiencing European democracy and its values and is also a focal point for European celebrations and commemorations of our joint democratic heritage. The building heritage should be preserved and further developed as a strong symbol of our modern history.

In the course of the European project, there have been a number of enlargements; there are currently 27 Member States. The European Parliament, through its directly elected Members, represents more than 445 million European citizens. During this historical process, it has expanded the parliamentary estate and adapted its facilities so as to reflect its growing role as a fully-fledged co-legislator by providing Members with the best possible working conditions. Parliament's expanded powers have made it necessary to strengthen ties with citizens and give them a better insight into the European project.

<sup>&</sup>lt;sup>1</sup> Usable surface area: approx. 39,000 sq m.

The overall strategic goal of the project is to improve the sustainability of the building in terms of all dimensions of sustainability.

## Social sustainability: The Parliament of Members IS the parliament of the people:

It is open to citizens, interacts with them and provides them with an extraordinary experience. Interaction with citizens is an evolutionary process: beginning as passers-by, citizens progress to becoming visitors, participants and, finally, co-legislators. Welcoming citizens in all their diversity and with all of their values encourages them to be a part of the European project.

The European Parliament seeks to set an example in its overall environmental approach:

The prospective building will be integrated into and linked to its urban, natural and social environment.

## Environmental Sustainability: the renewal project seeks to bring about a positive environmental impact

It is intended to be sustainable, with sustainability being measured in terms of operability, maintainability, flexibility and adaptability. This flexibility should be considered in terms of space, time and technologies.

The building and its development process should incorporate best durability and sustainability practices with a considered balance between simplicity and technology (particularly bioclimatism and the circular economy).

At this, the European Parliament has outlined its environmental ambitions in the form of a Charter for an Exemplary Building from an Environmental, Social and Working Conditions Perspective. The detailed charter is part of the documents provided to the contest participants.

## 3. CHARTER FOR AN EXEMPLARY BUILDING FROM AN ENVIRONMENTAL, SOCIAL AND WORKING CONDITIONS PERSPECTIVE

## The overall ambitions:

- 1. The Paul-Henri SPAAK Building must be **exemplary** from an environmental perspective. Environment-friendliness is a central concept for the entire project;
- 2. The prospective building will be able to **offset its carbon footprint** and be energy-autonomous and independent as regards use of non-drinking water;
- 3. The prospective building will produce more electricity than it consumes;
- 4. The prospective building will **regenerate** the environment around it; its construction will be regarded as having a **positive impact** on the environment and on the city with regard both to energy and to air quality and local **biodiversity**;
- 5. Throughout its life from the preparatory stage to the end of its useful life the building will apply the principles of the circular economy (longer useful life, product repurposing, recycling, capitalising on local know-how, maximum reuse of materials ex situ / in situ, soil decontamination, reuse of inert materials, reuse of excavated soil, retaining hierarchy of soil strata, prioritising short production and supply circuits, etc.);
- 6. The building's design should be based on **bioclimatic design** principles as regards adapting to geographical circumstances, solar orientation, exposure to wind, weather resistance, external and internal comfort, climate neutrality, maximum use of sunlight, making use of the topography for siting the building, etc.;
- 7. The prospective building should reforge links between the urban and the natural, in particular by extending towards Parc Léopold and connecting up with Place du Luxembourg. The way in which the district is urbanised, and accessibility for people, will be determined by those links and by the form of the building, bringing more life to the European Parliament site;

- 8. Project processes from construction to commissioning will be certification-based: WELL (for well-being), ISO (for accessibility) and DGNB (for environmental parameters).
- 9. Project management will be based on the LEAN collaborative method.

## Emissions:

- 10. Achieve *carbon-neutral status*;
- 11. Possibility of **carbon capture** via construction elements and by introducing new types of vegetation;
- 12. Use vegetation for air treatment, for oxygen production and for improving **air quality** in the district;
- 13. Design spaces without toxic products or chemical solvents.

## Energy:

- 14. Concept of **positive energy** based on renewable energy production and energy storage on site;
- 15. Feasibility study on the creation of a hot/cold energy grid on site, and transfer of surplus hot/cold energy across the complex and district;
- 16. Establish a **smart grid** by connecting the building to other Parliament buildings and ensuring integrated site management;
- 17. Use of **natural resources** (solar, wind, earth, thermic exchanges, etc.) for energy production;
- 18. Use of **artificial intelligence** systems for energy management of the building.

## Water:

- 19. Footprint 100% permeable or equivalent across the entire site;
- 20. 100% equivalent as regards balance between consumption and regeneration;
- 21. 100% autonomous as regards non-drinking water (sanitation circuits and air conditioning);
- 22. Feasibility study on the autonomy of the **water cycle** managed on the site.

## Short-term impacts:

- 23. Design the building in **consultation** with prospective users, neighbours and authorities in order to establish a shared and balanced conceptual basis;
- 24. Ensure that the **construction site is exemplary** (visitable, participatory, reduced footprint, limited pollution and waste production, but also educational and interesting;
- 25. Reforge urban, environmental and social links (vegetation, mobility, biotope);
- 26. *Build local* and *build light*, incorporating the concept of reversible/adaptable construction through dry construction systems.

## Long-term impacts:

- 27. Study on killing the European Parliament's overshoot day and the prospective building's impact;
- 28. **Modularity, evolution and flexibility** in order to cope with technological and social changes and developments;
- 29. Intelligent and modular utilisation geared to different needs and events;
- 30. Future-proof design > maximum resilience / design for change (in connection with climate change, changes to legislation and changes in purpose for particular areas). The structure of the building must be stable, resistant, flexible and modular in order to allow adaptation in the future plus new usages;
- 31. Installations that are straightforward to operate and run *open source*.

## Consumption:

- 32. Reduce all 'procs'-related consumption (IT, room facilities, kitchen, etc.) and not only comfortrelated consumption > exploit knowledge sharing as a joint development with universities;
- 33. **Trigger a change in habits** address/anticipate as far as possible (in collaboration with prospective users) all avenues for reducing environmental impact by attempting to incorporate, at the design stage, opportunities for future 'changes in habits' as regards the

activities carried out in the building, i.e. working methods, mobility, telepresence, rational use of resources, impact of catering services and data equipment, etc.;

34. Changes in satisfaction levels for climatic comfort (acceptable ambient temperature in summer and winter; real-time information for users on hydrothermal conditions.

#### Exchange and sharing with the community:

- 35. **Co-sharing** > sharing information via an open database, involving a participatory and educational approach that will make it possible, *a posteriori*, to replicate good examples and innovations;
- 36. Forging links social links (though consultation and communication), urban planning links and eco-links.
- 37. Make provision for urban and social amenities in order to **improve quality of life** in the district.

## 4. OBJECTIVES OF THE PROJECT

#### URBAN INTEGRATION AND LINKS

We seek the best planning solutions for the Paul-Henri SPAAK building and its surrounding area. The future renovated or reconstructed building must create the links between the urban and the natural, and become a symbol and integral part of the city and of the landscape.

#### **ARCHITECTURAL IDENTITY**

We seek a paradigm of architecture and strong visual identity for the building and the Chamber. This design should support the architectural quality of the city and resonate with the European citizens as a representation of the power of their voice.

#### **CULTURAL HUB**

We seek a building that engages in dialogue with citizens and the city, a welcome centre for visitors and a focus of culture and debates for city residents.

#### FLEXIBLE USE

We seek a building that offers flexible spaces and must be able to adapt easily to the EP's development over time. The project must take into account the relationship between functions and between the building's different users.

#### SUSTAINABILITY

We seek a positive example of sustainable and regenerative building. The design should feature bio-climatic principles, environmentally friendly solutions and a circular economy approach to reusing materials, which is in accordance with the Brussels-Capital Region environmental objectives. The building must strive to set an example in terms of well-being, accessibility and environmental parameters.

## **5. PROJECT LOCATION**

## **Geographical location**

The Paul-Henri SPAAK Building is located in Brussels, capital of Belgium, specifically within the Brussels City local authority.

The building is located at the junction of two urban planning zones in terms of form and functions and is next to a large park in Brussels, Parc Léopold, where various cultural and scientific establishments are located.

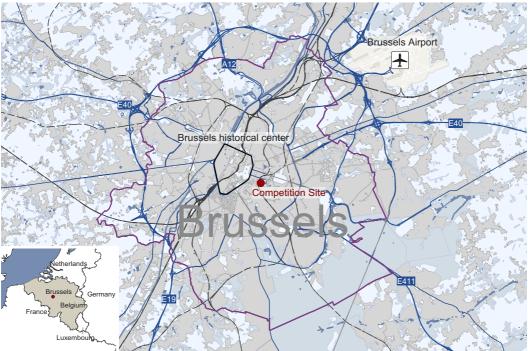


Figure 1: Competition site within the city context.



Figure 2: Competition site and its surroundings.

## Site

The Paul-Henri SPAAK Building is situated in Quartier Léopold, between rue Wiertz and Parc Léopold, on the edge of the estate of the European Parliament's buildings in Brussels.

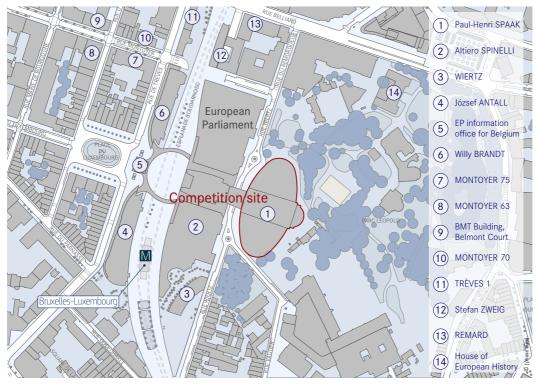


Figure 3: Site of the Paul-Henri SPAAK Building and its surroundings.

#### Views



Figure 4: View of the Paul-Henri SPAAK Building with Parc Léopold in the background and Place du Luxembourg in the foreground, © Façade and hemicycle: architect Michel Boucquillon).

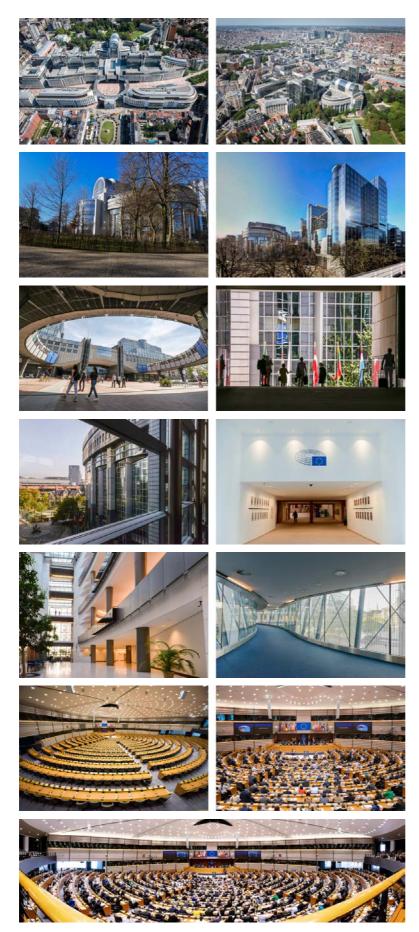


Figure 5: Further images of the complex.

## **6. FUNCTIONS**

The prospective building will contain:

- the Chamber, which will accommodate all Members as well as visitors;
- parliamentary committee and trilogue rooms<sup>2</sup>;
- a reception, meeting and educational area for citizens;
- protocol areas;
- media areas;
- areas for cultural activities;
- areas for social interaction;
- support areas for all European Parliament activities.

Functions should be organised in a very user-friendly manner, with natural visibility that minimises signage and with clear routes for users, including protocol, media, visitors and logistics.

Visitors should furthermore be able to follow a route that will give them a unique experience.

Building flexibility should be such as to allow, in the short term, for multiple uses to be made of areas and, in the long term, for functions to be easily altered.

## 7. RENEWAL

The notion of "renewal" allows any approach between a "renovation" of the building, or a "reconstruction" of the building. All are acceptable as a mean to reach the different objectives of the project, as described in article 4.

Although there have been many demolition/reconstruction operations in the district in which the European institutions are located, an environmental approach based on life-cycle analysis, together with the ambitions of the Brussels-Capital Region in terms of developing a circular economy make it necessary to give the same consideration to renovation as to reconstruction.

At all events, the general condition of the building necessitates radical renovation.

<sup>&</sup>lt;sup>2</sup> Trilogue meetings are legislative conciliation meetings between Commission, Council and Parliament representatives.

## **8. TECHNICAL DISCIPLINES**

In addition to the customary construction-related disciplines - to do with architectural design, structural engineering, heating, ventilation, power systems, sanitation, fluid distribution and lifting equipment - the project for renewal of the Paul-Henri SPAAK Building will be drawing on a host of other, specific disciplines:

- urban planning, landscaping and heritage;
- acoustics (soundproofing, reverberation, natural acoustics and room acoustics);
- air and water quality;
- wellbeing, comfort (climatic, visual, olfactory and noise-related), accessibility, ergonomics and health);
- security;
- facility commissioning, operation and maintenance;
- networking of technical facilities;
- water and air regeneration;
- nuisances and pollution (greenhouse gases, air, water, soil, light and noise);
- use and sustainable production of energy;
- bioclimatism and biodiversity (fauna and flora);
- cost analysis, planning and methods;
- life cycle analysis, forecasting models, certification;
- circular, social and inclusive economy;
- etc.

The above list is not exhaustive, but it will allow competition candidates to assess the scale of the technical skills needed for the project and to select those that will be conducive to the process of producing sketches, which is the purpose of the competition.

The list takes its inspiration in particular from the goals of technical quality, functional quality and environmental exemplarity.

## 9. ESTIMATED PROJECT PLANNING

- Request to participate submission deadline
- Dispatching of invitations for the design competition
- Participants colloquium
- First Deadline for submitting projects
- Second Deadline for submitting model and renderings
- Jury meeting
- Project confirmation by European Parliament
- Contract negotiation with Author of the confirmed concept
- Design Development stage

July 9, 2020 16:00 CET September, 2020 Date of invitation + 2 weeks Date of invitation + 12 weeks First deadline + 2 weeks Late January, 2021 February – March 2021 March - April 2021 12 months

