



European
Commission

Project Loi 130 Architectural Competition



Competition Brief - Submittal Jury colloquium

25 June 2018



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represented through

Office for Infrastructure and Logistics Brussels – OIB

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Project Loi 130 Architectural Competition

Real estate complex for the European Commission in Brussels
International restricted interdisciplinary architectural competition

Competition Brief - Submittal Jury colloquium

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Greetings by the European Commission



The European Commission headquarters have been installed in the EU-Quarter in Brussels since the start of the European Project. Over the years the number of Commission services in this area has gradually increased, and the European Quarter became a predominantly administrative area. This is why the Brussels-Capital Region took the initiative to draft a new masterplan with the ambition to make the European Quarter more lively, welcoming and mixed.

The Commission seizes this opportunity created by the Brussels-Capital Region to contribute with its own building projects to the transformation of the European Quarter into a multifunctional neighbourhood where offices, leisure, retail and public spaces coexist harmoniously. We aim at replacing our Commission aging office buildings by state-of-the-art, cost-efficient and environmental friendly complexes.

The new Loi 130 building complex will not only house more than 5,250 staff members, but should also become a lively meeting place for citizens visiting or living in the neighbourhood. A Visitor Centre, shops, restaurants and green spaces will bring the EU even closer to all those citizens who are eager to learn more about the European Commission or who simply live around the corner.

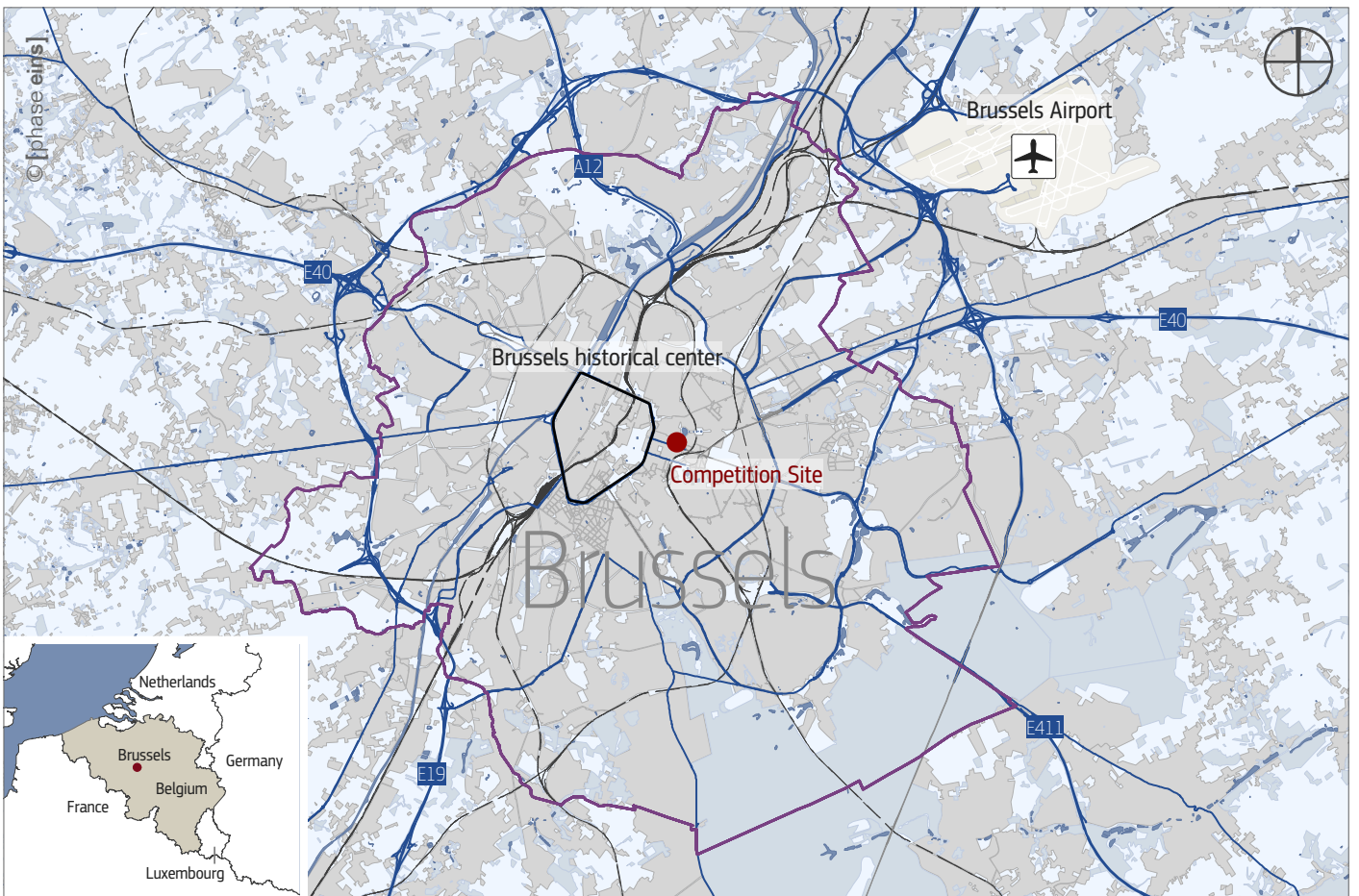
My fellow Commissioners and I count on your knowledge, experience and creativity to help making this flagship redevelopment a project we can all be proud of, and to show through the designs that the European Commission is not only present in the heart of Brussels, but above all that Brussels is also in the heart of the European Commission.

Welcome to the Loi 130 architectural competition!

Günther H. Oettinger
Commissioner for Budget and Human Resources



Aerial photo



Map 1: Region of Brussels

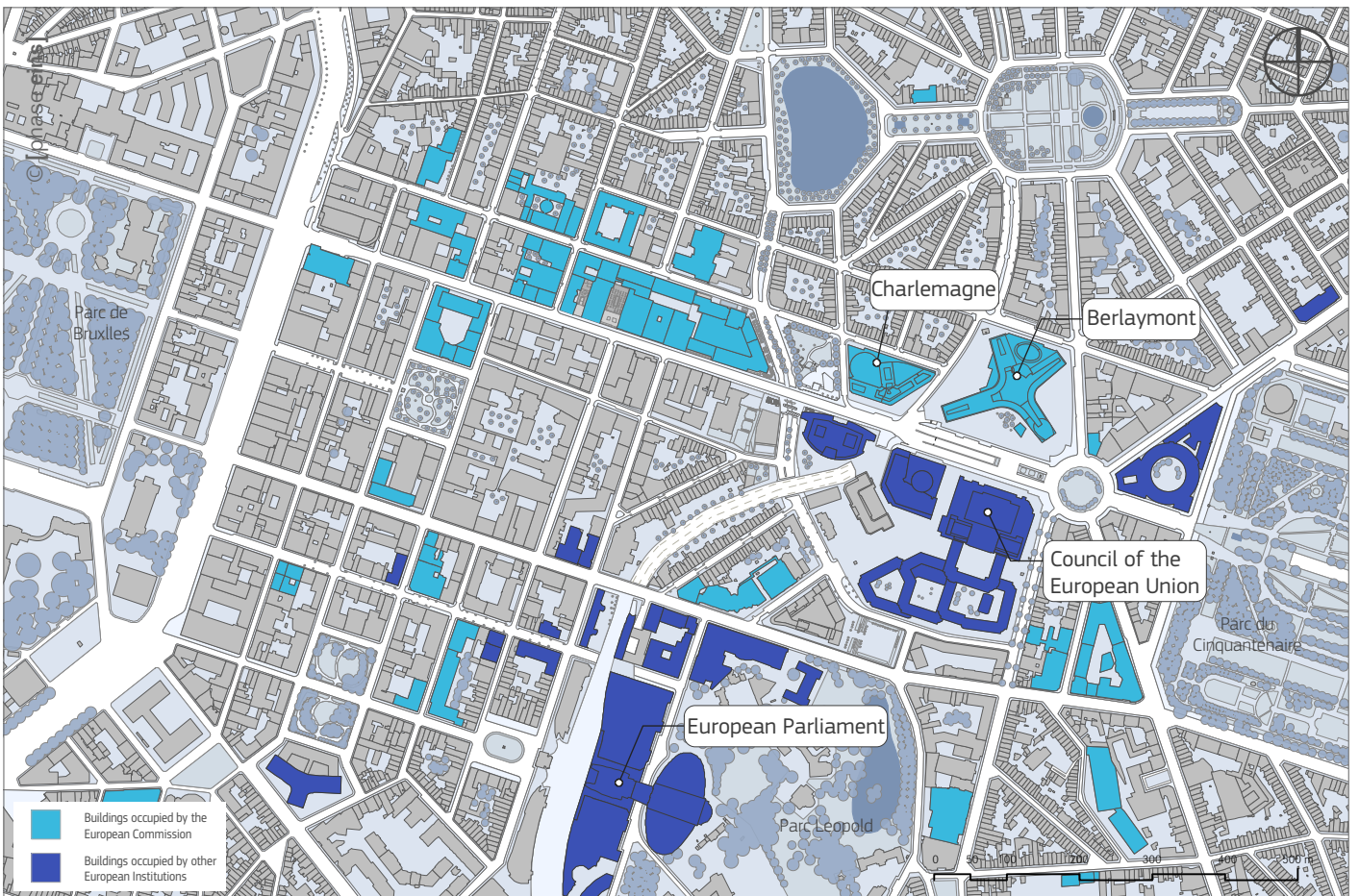
A

Introduction

- | | | |
|------|---|-----------------|
| A.01 | On behalf of the European Commission – the Office for Infrastructure and Logistics Brussels (OIB) – is organizing an international restricted interdisciplinary architectural competition in two phases for the construction of a building complex "Project Loi 130" in Brussels. | |
| A.02 | The site for the architectural competition is located at the Rue de la Loi 130 in the midst of the so called "European Quarter" in Brussels. The architectural competition is expected to contribute to the redevelopment of the Rue de la Loi, which is a central avenue of the quarter and has been planned in close cooperation with the Brussels-Capital Region and the City of Brussels. | The site |
| A.03 | The site is circumscribed by the streets Rue de la Loi, Rue de Spa, Rue Joseph II and the Chaussée d'Etterbeek and has an approximate size of 24,000 sq m. The majority of the eight existing buildings are occupied by the European Commission and a number of them have reached or will soon reach the end of their life cycle. | |
| A.04 | The goal of the architectural competition is to redevelop the site into an efficient building complex for the European Commission with an approximate gross floor area above ground between 175,000 and 190,000 sq m. Urban planning regulations allow for two high-rise buildings of respectively 165 and 114 m high to be constructed on the site. | The project |
| A.05 | The mixed-use complex should provide office space for more than 5,250 employees as well as meeting facilities, two childcare centres, the European Commission's Visitor Centre, retail facilities and a car park. In addition, the design should comprise a new entrance to the Maelbeek metro station. | |
| A.06 | The "Project Loi 130" is the biggest and most important real estate project for the European Commission in Brussels at the moment and is in line with its real estate policy. | |
| A.07 | The European Commission expects forward-looking, innovative and cost-efficient constructions aiming at the highest sustainability targets for a new construction project. The new complex should offer a flexible and modern working environment for European Commission staff. A mark of "excellent" under BREEAM label certification system with near zero-energy-status is required. | Strategic goals |
| A.08 | The project is intended to be implemented in two construction phases. | Implementation |



Berlaymont-Building



Buildings occupied by EC

The European Union and the European Commission

- A.09 The EU was created in the aftermath of World War II. The first steps were to foster economic cooperation, the idea being that countries that trade with one another become economically interdependent and so more likely to avoid conflict. What began as a purely economic union with a common agricultural policy and the development of a huge single market has evolved into an organization spanning policy areas, from climate, environment and health to external relations and security, justice and migration.
- A.10 Today, the EU covers over 4 million sq km and has 508 million inhabitants: it makes it the world's third largest population after China and India. At the core of the EU are the Member States and their citizens. In diverse domains, ranging from agriculture to humanitarian aid, the Member States have delegated some of their decision-making powers to the shared Institutions they have created, so that decisions on specific matters of joint interest can be made at European level.
- A.11 A wide range of Institutions compose the EU: the European Parliament, the Council of European Union, the European Commission, the Court of Justice of the European Union and the European Central Bank, just to name a few. They all have specific functions determined by the Treaties.
- A.12 The European Commission was established in 1958 and is the politically independent executive arm of the European Union. Political leadership of the European Commission is provided by a team of Commissioners (one from each EU Member State) – led by the European Commission President.
- A.13 The day-to-day running of European Commission business is performed by its staff organized into departments, better known as Directorates-General (DGs), each responsible for a specific policy area. A total of around 33,000 people are employed by the European Commission, of which 24,000 European Commission staff members are based in Brussels. The total building portfolio in Brussels measures approximately 1 million sq m including offices and supporting areas, such as logistic and childcare. Staff members are recruited from all EU Member States and come from different cultural, linguistic and social backgrounds. This staff diversity is characteristic for the European Union and makes the European Commission a meeting point of European cultures and languages. Today the European Union works in 24 official languages.

Office for Infrastructure and Logistics in Brussels (OIB)

- A.14 Within the European Commission, the Office for Infrastructure and Logistics in Brussels (OIB) is responsible for the Institutions' buildings. Created by the European Commission Decision of 6 November 2002, this service strives to ensure a functional, safe and comfortable workplace for all those working for the Institution and to provide good quality support and well-being services, based on a client-oriented approach, in an environmentally-friendly and cost-effective way. OIB is the service in charge of organizing the current architecture competition.

<http://www.ec.europa.eu/oib>

B

Procedure

B.I | Contracting authority

European Commission

Represented by

Office for Infrastructure and Logistics Brussels – OIB

CSM1 – 5/P001
B - 1049 Brussels

The competition is endorsed by

Union Internationale des Architectes (uia)
Tour Maine Montparnasse - B.P. 158
33, Avenue du Maine
Paris/France

 Jury

- B.01** The evaluation of the design concepts submitted in the first and the second phase, including the selection of the prize winners, shall be conducted by the jury.
- B.02** The following jury members have been nominated by the European Commission:

Guenther H. Oettinger

Member of the European Commission

 General Jurors

M. Rudi Vervoort

Minister-President of the Brussels-Capital Region

Irene Souka

Director-General Human Resources and Security, European Commission

Vladimir Sucha

Director-General Joint Research Center, European Commission

Marc Mouligneau

Director Office for Infrastructure and Logistics Brussels, European Commission

Peter Benuska

Master Architect, European Commission, Belgium

 Architectural Jurors

Kristiaan Borret

Master Architect, Brussels-Capital Region, Belgium

Brian Cody

Engineer, Ireland

Dominique Lyon

Architect, France

Monica von Schmalensee

Architect, Sweden

Benedetta Tagliabue

Architect, Italy / representative UIA

Maive Rute

Deputy Director-General Joint Research Center, European Commission

 Deputy General Jurors

Bernard Magenhan

Deputy Director-General Human Resources and Security, European Commission

Michael Hager

Head of Cabinet G.H. Oettinger, European Commission

Marc Séguinot

Head of Real Estate Department of the Office for Infrastructure and Logistics Brussels, European Commission

to be confirmed

Representative of the Brussels-Capital Region

Olivier Bastin

Architect, Belgium

 Deputy Architectural Jurors

Paul van Bergen

Engineer, Netherlands

Almut Grüntuch-Ernst

Architect, Germany

Bjarne Hammer

Architect, Denmark

Technical experts

- B.03** The European Commission appointed experts from the following fields of expertise:
- Urban planning
 - Building law / fire prevention
 - Cost surveillance
 - Energy and environmental engineering
 - Structural engineering
 - Traffic planning
 - Functional / technical / security requirements
 - Landscape architecture
 - Wind
- B.04** The experts were selected from among Commission staff members having expert knowledge of specific topics and also from external specialists. Without voting right, they provide advice in the preparation of the competition documents, the preliminary examination of submissions and during the jury deliberations.

B.II | Conditions of the procedure / competition rules

- B.05** The competition regulations have been published on 27 March 2018 together with the design contest notice (OJ/S 560 131598 of 27/3/2018) and apply to the competition procedure. In the following the texts of the regulations are repeated with exception of the paragraphs that are related to the selection process of the candidates. To facilitate the reading, the reference paragraphs of the regulations as published with the design contest notice are put in brackets.

General conditions

- B.06** By virtue of their participation in or contribution to the competition, the candidates, jurors and technical experts declare their consent to all terms and conditions set forth in the competition brief and, where appropriate, shall waive their own general or specific terms and conditions.

Legal framework (1.7.)

- B.07** The architectural competition is governed by the:
- (a) Regulation (EU, Euratom) No 966/2012 of the European Parliament and of the Council of 25 October 2012 on the financial rules applicable to the general budget of the Union, as amended (the Financial Regulation)
 - (b) Commission Delegated Regulation (EU) No 1268/2012 of 29 October 2012 on the rules of application of Regulation (EU, Euratom) 966/2012 of the European Parliament and of the Council on the financial rules applicable to the general budget of the Union, as amended
- B.08** complemented where necessary by the applicable rules and regulations under the Belgian law.
- B.09** Candidates must comply with applicable environmental, social and labour law obligations established by European Union law, national legislation, collective agreements or the international environmental, social and labour conventions listed in Annex X to Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on public procurement and re-pealing Directive 2004/18/EC.

Liability restriction (1.8.)

- B.10** Candidates are deemed to possess the capability and experience to duly assess all risks of the present procurement procedure and to understand and evaluate the information provided by this document and other documents provided in the course of this procurement procedure, for which purpose they are deemed to be assisted by external advisers, where necessary. In this regard, the applicants shall analyse and verify the completeness and the correctness of the content of these documents.
- B.11** The European Commission provides no express or implied warranty declaration concerning the completeness, relevance and interpretation of the information included in this document or other documents provided and does not assume any liability in this respect.

- B.12 The European Commission does not assume any liability for the documentation provided in course of this architectural competition, except for errors of fact contained in documents drawn up by the European Commission provided that the applicant could not have been reasonably aware of such errors of fact.
- B.13 The European Commission does not assume any liability for damages and/or losses resulting from or connected to the use of this document or other procurement documents, as may be amended from time to time.

Competition procedure (2.1)

- B.14 The competition is organized as an international restricted interdisciplinary architectural competition in two phases for applicants providing the key competences (architecture, landscape architecture, building services engineering and structural engineering) with a preceding selection phase.
- B.15 Applicants can come either i) from the EU Member states, ii) from third countries which have public procurement agreements with the EU, or iii) from countries which have ratified the WTO plurilateral Agreement on Government Procurement (GPA).
- B.16 For British candidates: Please be aware that after the UK's withdrawal from the EU, the rules of access to EU procurement procedures of economic operators established in third countries will apply to candidates or tenderers from the UK depending on the outcome of the negotiations. In case such access is not provided by legal provisions in force candidates or tenderers from the UK could be rejected from the procurement procedure.
- B.17 In case that the key competences are provided by a team of economic operators (joint application, the leader of the team shall be the economic operator representing the professional field of architecture.
- B.18 An economic operator can only be part of the team of one candidate. Each candidate may present only one project. Variants are not admitted.
- B.19 The architectural competition is endorsed by the International Union of Architects (uia), and derives from the 1978 UNESCO Standard Regulations for international competitions in architecture and town planning.
- B.20 According to the Belgium Law of 20/02/1939 on the protection of the title and the profession of architect (art.6) "exercising the profession of architect should be independent from the profession of a building constructor in the public or private sector." Therefore, building contractors linked to the economic operator providing the key competence of architecture cannot tender for any construction work concerning the project.

Phases (2.2.)

- B.21 The selection and competition phases are the following:
- Selection phase**
- B.22 Based on requests to participate, 30 applicants were admitted to phase 1 of the architectural competition and invited to attend a site visit/ candidates' colloquium.
- Phase 1 of the architectural competition**
- B.23 The candidates admitted to the phase 1 will be invited to submit an initial outline design concept. Based on each project's merit, the jury will select a maximum of 10 candidates from phase 1 for participation in phase 2.
- Phase 2 of the architectural competition**
- B.24 The candidates admitted to the phase 2 will be invited to submit a more detailed design concept for the project. The jury will award three prizes for the best design concepts.

Anonymity (2.4.)

- B.25 Anonymity of the candidates during the assessment of the projects by the jury (phases 1 and 2 of the architectural competition) is paramount and shall be guaranteed amongst others by the following rules:
- All documents and items submitted by the candidates for the purpose of the architectural competition must be submitted in an anonymous format. Details for respective requirements are provided in the present document (see par. B.70f);
 - An independent body is charged with taking the necessary measures to safeguard the anonymity of the candidates;
 - No juror will participate at the candidates' colloquium in phase 1 of the architectural competition;
 - The jury will be informed of entries which are not compliant with the anonymity requirements.

Competition language

- B.26 The candidates selected for the architectural competition receive the competition brief and its annexes in English.

Confidentiality (2.5.)

- B.27 Any announcement concerning the content or running of the architectural competition made before or during the course of the procedure, including the first publication of competition entries and the competition's results, shall be made only through the European Commission.
- B.28 All documents and digital files submitted or supplied as part of the competition task may only be used in the context of the competition. Any other use, in parts or as a whole, is conditional to prior written consent by the European Commission.
- B.29 The candidates shall treat all documentation in a strictly confidential manner. The publication of the material or their disclosure to third parties is prohibited.
- B.30 All candidates will be required to submit a non-disclosure agreement before distribution of the competition materials (see Annex X).

Criteria for the evaluation of projects (4.)

- B.31 The jury's criteria as to the evaluation of the design concepts are listed below, where the listing order does not reflect any priority ranking.
- Overall concept
 - Urban qualities
 - Architectural and outdoor space design
 - Compliance and organization of the room programme
 - Concept for structural design and building services
 - Economic performance and feasibility
 - Environmental performance and energy efficiency

Information about payments and prize(s) (5.)

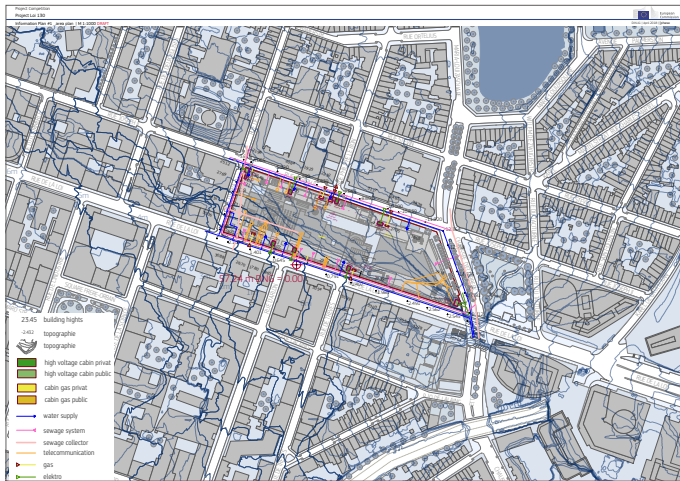
- B.32 The European Commission provides a budget of 900,000 EUR for honoraria and prizes, of which 300,000 EUR are designated for honoraria in phase 1, 300,000 EUR for honoraria in phase 2 and 300,000 EUR for prizes in phase 2.
- B.33 In both architectural competition phases the respective budget for honoraria will be divided into similar shares among all candidates who submit a detailed design concept conforming to the requirements laid down in the competition brief for the respective competition phase.
- B.34 No other expenses will be paid or reimbursed.
- B.35 As regards the amount of 300,000 EUR provided for prizes in phase 2, the following distribution is foreseen:
- 1st prize: 120,000 EUR
 - 2nd prize: 100,000 EUR
 - 3rd prize: 80,000 EUR
- B.36 The European Commission is exempt from all taxes and duties, including VAT, in accordance with Articles 3 and 4 of the Protocol on the privileges and immunities of the European Union.
- B.37 Taxes or charges on these payments the candidate might be obliged to pay in his / her country of establishment are in his / her responsibility and won't be compensated by the European Commission.

Project's ownership (6)

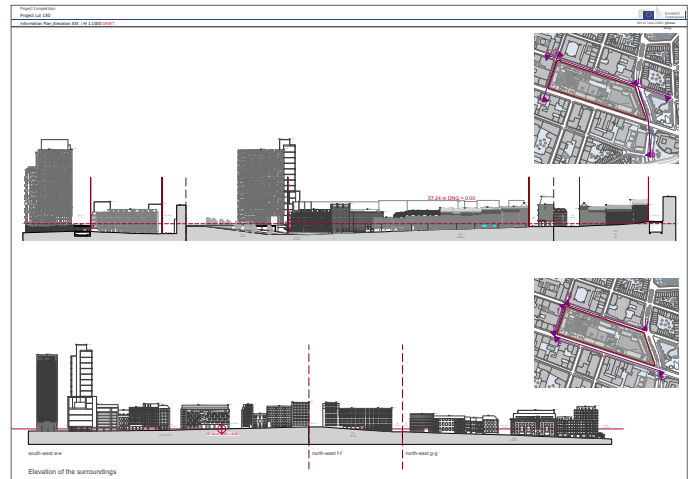
- B.38 The candidates will be required to individually provide a duly signed Declaration of Authorship with the submittal of their concepts (see par. B.110 and B.157).
- B.39 The statements made in the Declarations of Authorship forms (Form A1 and Form A2 distributed with the competition brief – see Appendix) are considered legally binding.
- B.40 A disagreement between the information in the request to participate and Declarations of Authorship may lead to rejection from the procedure.

Ownership of documents submitted in the architectural competition (6.1.)

- | | | |
|------|---|---|
| B.41 | The candidates are entitled to retrieve their submitted plans, documents and models after the exhibition of the competition entries. The European Commission shall return them to the candidates upon request made in writing within 4 weeks after the end of the exhibition of the competition results. | |
| B.42 | All reproducible material (plans, documents and other material in paper or digital form) submitted by the prize-winning candidates shall however become property of the EU and will not be returned to the candidates. Models shall be returned to their authors if they are not needed anymore by the European Commission. | |
| B.43 | By submitting a project, candidates represent and warrant that they are the sole authors and rightholders of the submitted projects. Candidates retain their intellectual property rights of the submitted projects. They grant the European Union the right to use, store, reproduce, display, print, publish, communicate to the public or distribute in hard copies, in electronic or digital format, or on the internet (including social networks as a downloadable or non-downloadable file), the submitted project or copies of the submitted project for the purpose of communicating or informing about the competition. The names of the authors will be noted along with their projects. The exercise of the above-mentioned rights by the European Union is subject to the display of a proper notice in due acknowledgement of the author/s unless this is not feasible. | Intellectual property rights of all the submitted projects (6.2.) |
| B.44 | For the avoidance of doubt, the European Union holds the right of first publication and is entitled to document and exhibit the competition entries subsequent to the conclusion of the procedure or to have them published by UIA and other third parties without being obliged to pay any further compensation. | |
| B.45 | The payment of the honorarium or prizes to the candidates includes any fees or royalties payable to the candidates about the acquisition of rights by the European Union for all the above-mentioned forms of exploitation and of use of the project. | |
| B.46 | The European Commission may use for the intended purpose of the competition, minor partial solutions proposed by any of the candidates, provided they consent to such use. | |
| B.47 | The European Union is entitled to obtain the rights related to the project whose author is commissioned with further planning services subject to the conditions stipulated in the relevant service contract. The authors and their assignees are obliged to allow deviations or modifications to the works. To the extent that the European Commission may reasonably be expected to do so, the European Commission must consult the candidate prior to making major modifications. Proposals submitted by the candidates are to be taken into account unless, in the opinion of the European Commission, they are judged to be infeasible or impracticable, for example on economic, functional, security or design-related grounds. | Intellectual property rights of the project retained for execution (6.3.) |
| B.48 | Irrespective of the result of the architectural competition, the European Commission reserves the right, for whatever reason, not to execute the whole project or parts of it, to amend, to abandon it or to implement it later. | Further processing (7) |
| B.49 | The European Commission intends to launch a negotiated procedure for the award of the contract for general planning services with the first prize winner of the architectural competition. If these negotiations are not successful, the Commission will negotiate with the second prize winner and if again not successful, with the third prize winner. The prize winners are not entitled to any compensation if the negotiated procedure is not launched. | |
| B.50 | The prize-winner providing all key competences invited to the negotiated procedure must be the same as during the competition, though he may take any legal form he deems necessary for the proper implementation of the project. | |
| B.51 | If the prize winner is relying on other entities (e.g. subcontractors, parent company, other company in the same group, or third party) in order to achieve the level of economic, financial, technical and professional capacity required for the subsequent negotiated procedure, it must prove in its tender or request to participate that it will have their resources at its disposal. This obligation may be fulfilled by presenting statements from those entities or the grouping agreement. The European Commission reserves the right, depending on the result of the architectural competition, to request the prize winner during the negotiated procedure to revise his design concepts in line with the recommendations issued by the jury and the European Commission. No payment will be made for this separately. | |
| B.52 | The service contract will cover the tasks of the architect, landscape architect, building services engineer, structural engineer (key competences), as well as expertise required to ensure that the project is properly implemented (a list of services can be found in Annex 8). The scope of services shall in principle imply all design and implementation phases with a minimum to the design phases until building permission application provided that the project is implemented and in respect of budget reservation. The European Commission reserves the right to work with a general contractor or investor for the execution of the project. The contract will be based on the European Commission's general conditions of contract and will be subject to Belgium law. | |



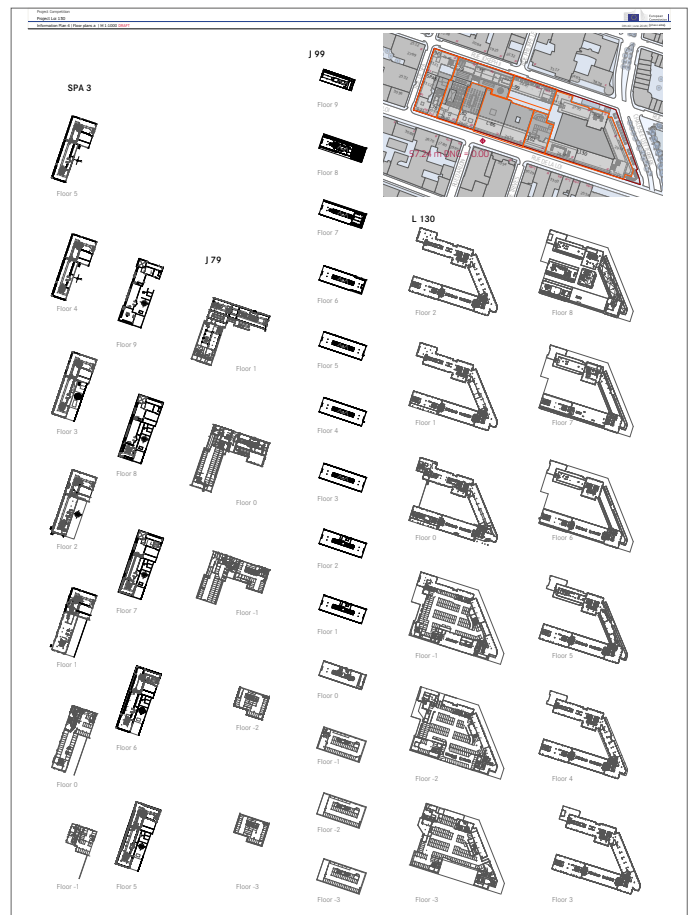
Information plan 1, Area Plan



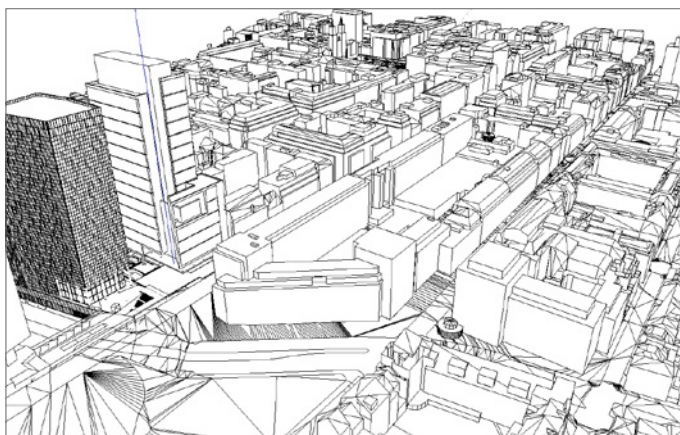
Information plan 2, Elevation



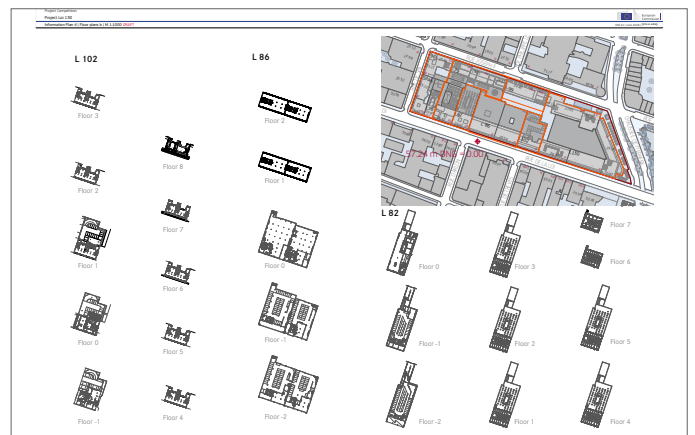
Information plan 3, sections Rue de la Loi



Information plan 4a, Floor plans of existing buildings



3D-model



Information plan 4b, Floor plans of existing buildings

B.III | Competition materials

- B.53** In addition to this hard copy, all competition documents and plans are distributed to the candidates on CD-ROM as digital files in PDF (competition brief), DXF, DWG, VWX and PDF (plans), PDF, JPG (images), mp4 (films) respectively as XLSX and PDF (tables and forms) format. In addition, these files will be made available for download from a password-protected area on the e-Tendering website:
<https://etendering.ted.europa.eu/cft/cft-display.html?cftId=3021>

Competition materials for phase 1 and phase 2

- B.54** The competition materials include:
- This competition brief including appendices
 - The minutes of the candidates' colloquium held during phase 1 and questions and answers as published on e-tendering
 - And the competition materials listed below:

Information plans

- B.55** In the brochure:
- Map 1: Region of Brussels Scale 1: 150,000
 - Map 2: City of Brussels Scale 1: 25,000
 - Map 3: Perimeters of the European Quarter Scale 1: 20,000
 - Maps 4 – XX: Area and site plans different scales
 - Pictures and Aerial photographs of the competition site
 - Diagrams "Main entrances", "Building heights", "Trees and Vegetation", "Parking", "Public transportation", "Bicycle itineraries", "Rate of road occupancy", "Utility lines", "Topography" and "Construction phases"

- B.56** As digital files:
- Information plan #1 (area plan with existing buildings, roads, pathways, plazas and alleys, utility lines, vegetation and topography) Scale 1: 1,000
 - Information plans #2 and #3, elevations and sections of existing buildings Scale 1: 500
 - Information plans #4 and #5, floor plans of existing buildings Scale 1: 1,000
 - Drone-movie of the area
 - Photos of the project site (camera positions shown in respective diagrams)

Working plans

- B.57** As digital files, for phase 1:
- Working plan #1, area plan Scale 1: 1,000
 - Working plan #2, site plan Scale 1: 500
 - 3D-model
- B.58** As digital files, for phase 2
- Working plan #3 Scale 1: 200
 - Working plan #4 (Elevation Rue de la Loi) Scale 1: 200
 - 3D-model

Forms

B.59 As digital files and appendix to the competition brief to be filled in and submitted:

- Form A1: Declaration of Authorship Phase 1
- Form B1: Key Indices Phase 1
- Form C1: Room Programme Phase 1
- Form D1: Building Specifications Phase 1
- Form E1: Building Dimensions Phase 1
- Form A2: Declaration of Authorship Phase 2
- Form B2: Key Indices Phase 2
- Form C2: Room Programme Phase 2
- Form D2: Building Specifications Phase 2
- Form E2: Building Dimensions Phase 2

Appendixes:

B.60 As digital files

- Appendix 1: Detailed Room programme
- Appendix 2: Règlement Régional d'Urbanisme Zoné (RRUZ)
- Appendix 3: Report on Geotechnical and geological situation
- Appendix 4: Measuring code and measuring code table
- Appendix 5: Note on RRUZ "Urban planning framework for block B of the 'Projet Urbain Loi' urban redevelopment project
- Appendix 6: Summary on fire safety regulations

Model

B.61 To be distributed with the competition brief as base for the model making:

- Insert plate for the competition model Scale 1: 500
- Photos of the competition model
- Guide with regard to the technique of model building

Additional competition materials for phase 2

B.62 In Addition to the Materials provided in phase 1:

- Questions and answers as published on e-tendering for phase 2

Model

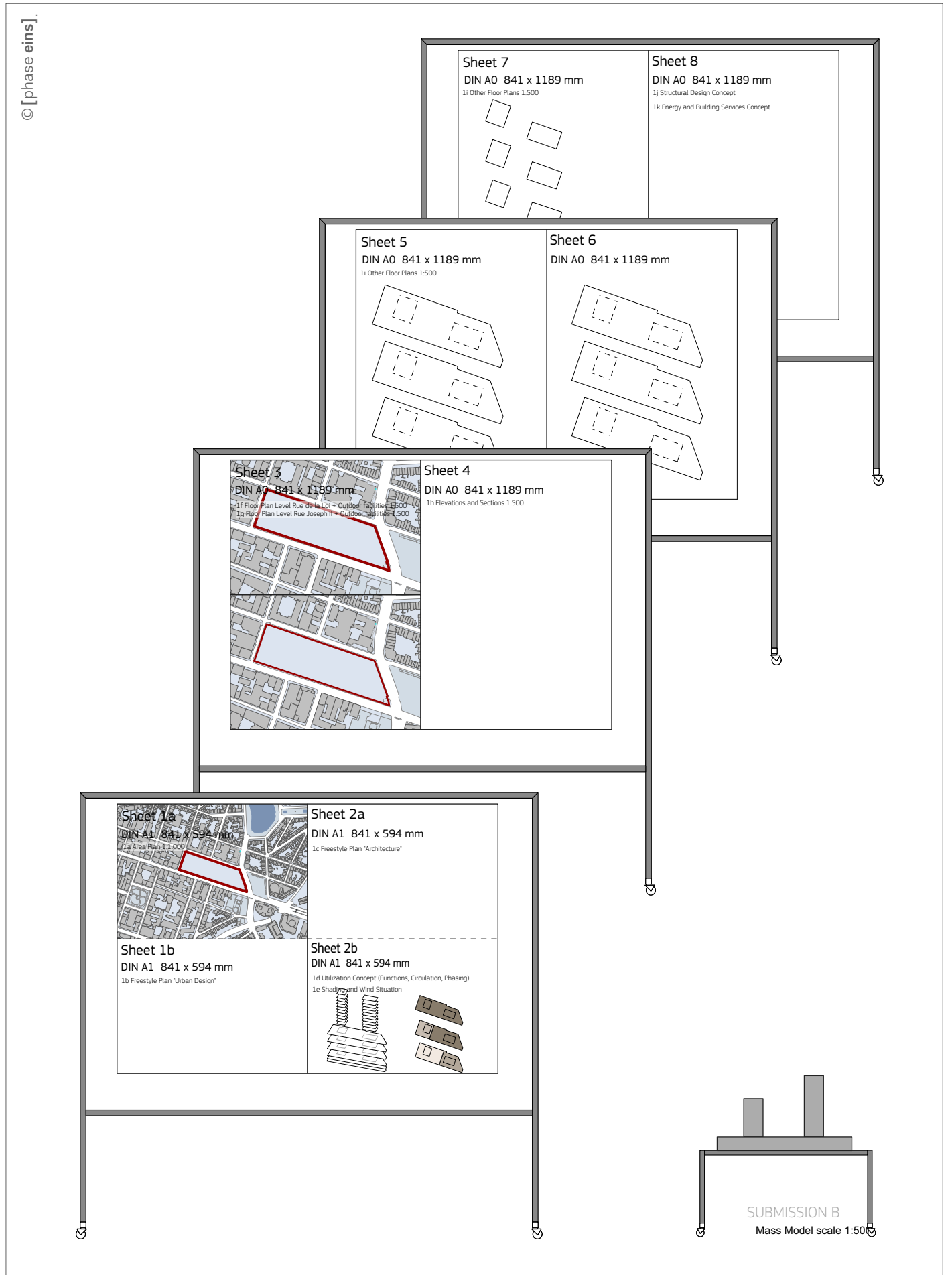
B.63 To be sent to the phase 2 candidates as base for the model making:

- Insert plate for the competition model Scale 1: 500

B.IV | Competition requirements

<p>B.64 In both phases, all plans are to be submitted in four copies:</p> <ul style="list-style-type: none"> • One set (Set 1) of presentation plans (copies on robust paper, at least 140 g/sq m, not folded, suitable for more than one presentation during the jury meeting and exhibition), • Two sets of copies (on standard paper, not folded) for examination purposes (Set 2 and 3, "examination plans," as listed in the competition requirements in par. B.97 and B.143) and • One set (Set 4) of reduced-scale reproductions (see par. B.98 and B.144). <p>B.65 In phase 1 a maximum of four stands, each 1.77 m wide by 1.375 m high and a table for the model will be provided for the presentation of every project during the jury meeting, while in phase 2 seven stands with the same dimensions and a table for the model are made available per project.</p> <p>B.66 Entries may not be submitted on boards.</p> <p>B.67 The presentation panels shown on pages 28 and 34 indicate the numbering scheme to be applied.</p> <p>B.68 It is suggested to label the sheets to be submitted with their sheet numbers (par. B.77 and B.111). Optionally, the sheets may be labelled with pictograms.</p> <p>B.69 Parts of entries that are not relevant to the competition requirements or that violate binding conditions set by the European Commission will be covered. The jury will decide on the admissibility of such representations.</p> <p>B.70 All competition materials submitted in both phases are to be labelled in the upper right-hand corner with a 1 cm high and 6 cm wide six-digit identification number in Arabic numerals. The participant chooses the number freely, which shall be the same on all plans.</p> <p>B.71 The documents to be submitted - except the declaration of authorship - must not bear the name, logo, signature of the authors or any other indication of their identity. Not permitted in any document are links to static or dynamic documents that are beyond the content of the submitted documents (e.g. Internet-content linked through QR Codes).</p>	<hr/> <p>Execution, labelling of entries</p>
<p>B.72 Attention is drawn to the necessity of safeguarding the anonymity of all digital files submitted in phase 1 and 2. This applies i.a. to the names of files and layers and to such hidden file information as file authorship. All such information is to be deleted before saving the files to be submitted. Any other pieces of information that might allow identification of the computer, author, date of file creation or programme version will either be deleted by the staff of the competition manager not involved in the preliminary examination or it will be made sure by other means that such information is withheld from the jury.</p> <p>B.73 All submitted digital files will be used exclusively for the purposes of the preliminary examination and documentation of the competition, kept confidential and not disclosed to third parties. In the case of CAD files this applies specifically to integrated file components such as libraries.</p>	<hr/> <p>Digital files</p>
<p>B.74 The sheets with the instruction to be generated from a „working plan“, have to comply with the respective working plan in terms of alignment and section. There are no specifications for the further composition of the plans (colours etc.).</p> <p>B.75 As a general rule, the metric scale shall be applied in all documents submitted. All site plans and floor plans must be orientated with north to the top of the sheets.</p> <p>B.76 The reference height of ± 0.00 m for all representations is set at 57.24 m DNG located at the average height of the portion of pavement that borders the block Loi 130 (see map of competition site, page 50).</p>	<hr/> <p>Scale, orientation</p>

© [phase eins].



Competition requirements for phase 1

- B.77** The table gives an overview regarding the required sheets to be submitted in phase 1, the required sizes and content of the sheets as well as the scale to be used, if applicable.

Sheet overview

Sheet-No.	No.	Content	Scale
Sheet 1 (A0)	1a	Area Plan	1:1,000
	1b	Freestyle Plan "Urban Design"	
Sheet 2 (A0)	1c	Freestyle Plan "Architecture"	
	1d	Utilization Concept (Functions, Circulation, Phasing)	
	1e	Shading and Wind situation	
Sheet 3 (A0)	1f	Floor Plan Level Rue de la Loi + outdoor spaces	1:500
	1g	Floor Plan Level Rue Joseph II + outdoor spaces	1:500
Sheets 4, 5, 6, 7 (all A0)	1h	Elevations and Sections	1:500
	1i	Other Floor Plans	1:500
Sheet 8 (A0)	1j	Structural Design Concept	
	1k	Energy and building services concept	

- B.78** A1 plans have a landscape-format (84.1 cm wide by 59.4 cm high).
B.79 A0 plans have a portrait-format (84.1 cm wide by 118.9 cm high).

1a. Area plan, scaled 1: 1,000

- B.80** Based on Working Plan #1, the area plan and additional diagrams should represent the following:

- Overall concept
- Integration with urban and landscaping patterns
- Top view of built volumes, with indication of number of floors
- Traffic concept (roads, vehicle approaches, location of car parks, entrances, metro entrances)
- Outdoor spaces, with indication of trees and surface material, and distinction between outdoor spaces accessible to public and private outdoor spaces.
- Distribution of functions as per task
- Indication of elevation above reference height (see par. B.76); in all areas in case of level changes

1b. Freestyle plan "Urban Design"

- B.81** 3-dimensional freestyle representation and explanation of the urban design's mission and character (distribution and dimensions of building volumes and spaces). At any rate, the plan should include one bird's-eye view of the overall complex, as well as a view at pedestrian level from Rue de la Loi.

1c. Freestyle plan "Architecture"

- B.82** 3-dimensional freestyle representation and explanation of the architectural design in regard of its exterior and interior spaces and their character. At any rate, the plan should include one view at pedestrian level towards a main entrance situation.

- B.83** Further on, it should include information in regard of the approach towards the rehabilitation of the existing structures.

- B.84** Information about materials, colours and details focusing on the integration of the historic building, as well as the innovative and sustainable character of the building complex are welcome.

1d. Utilization concept

Distribution of functions

- B.85** Schematic representation and explanation of the concept for the entire project (all levels) in regard of the distribution of functions - employing the colours used in the competition brief (room programme) allocated to the different room groups:

- | | |
|---|---|
| <ul style="list-style-type: none"> • Green A/H/O/U/X Entrance / reception areas • Blue B/K/Q Tertiary work spaces • Lavender C Meeting centres • Pink D/L/R (Mass)Catering • Orange E/M/S/Y Support • Dark green F Sports and cultural infrastructure | <ul style="list-style-type: none"> • Brown G/N/T/W Sanitary facilities • Dark red I Exhibition • Red J Event spaces • Purple P Children's spaces • Grey V Parking • Light brown Z Other functions (Retail units, metro) |
|---|---|

Presentation components

Circulation concept

- B.86 Schematic representation of the circulation concept, comprising information on routing of staff, visitors and deliveries. Connections of the new building to existing buildings on site should be included, if applicable.
- B.87 Further, the diagram(s) shall include information on circulation areas / accessibility (entrances, lifts, staircases, delivery zones, driveways, direction of ramps, etc).

Phasing concept

- B.88 Diagrammatic illustration of the concept for the buildings' realization in two construction phases. The presentation of both construction phases shall include a Site Plan with indication of the number of floors.

1e. Shading and wind situation

- B.89 Diagrams explaining shading of neighbouring buildings and concept to reduce negative wind effects on pedestrian level.

1f. Floor plan level rue de la Loi and outdoor spaces, scaled 1: 500

- B.90 Based on Working Plan #2, the floor plan (main entrance level Rue de la Loi) should represent the following for the entrance level:
- Construction elements (walls and columns)
 - Distinction between existing (rehabilitated) and new construction
 - Footprint of neighbouring buildings
 - Reference to the border between construction phases
 - Distribution of interior and exterior uses as per task
 - Indication of room codes
 - Circulation areas / accessibility (entrances, lifts, staircases, delivery zones)
 - Indication of elevation above reference height (see par. B.76); in all areas in case of level changes
 - Subdivision of facilities and design elements in outdoor spaces, with indication of altitudes

1g. Floor plan level rue Joseph II and outdoor spaces, scaled 1: 500

- B.91 Based on Working Plan #2, the floor plan (main entrance level Rue Joseph II) should represent at least similar information as required in par. B.90.

1h. Sections and elevations, scaled 1: 500

- B.92 Representation of the new building's design and subdivision as well as the integration of the planned building development with the topography and surrounding buildings. To this end, the following elements should be shown:
- At least one longitudinal and one transversal section of the entire complex.
 - At least four elevations, two of which showing the relationship to neighbouring buildings. They shall include the elevations to Rue de la Loi and Rue Joseph II.
 - Facade subdivision, window openings or glazing
 - Building heights and foot points above reference height (see par. B.76).

1i. Other floor plans, scaled 1: 500

- B.93 Representation of all floor plans on levels between Rue de la Loi and Rue Joseph II as well as underground levels and typical floor plans above street level, including at least the following information:
- Construction elements (walls and columns)
 - Distinction between existing (rehabilitated) and new construction
 - Footprint of neighbouring buildings
 - Reference to the border between construction phases
 - Distribution of functions as per task
 - Indication of room codes
 - Circulation areas / accessibility (lifts, staircases and entrances, if relevant)
 - Indication of elevation above reference height (see par. B.76); in all areas in case of level changes
 - Information as to the border between construction phases

1j. Structural design concept

- B.94 What is expected to illustrate the structural design concept are comprehensible outline sketches showing the structural system as well as a 3-dimensional visualization of the facade grid.

1k. Energy and building services concept

- B.95 Comprehensible and examinable representations of the building services concept, schematics of the principal mechanical equipment and a sketch of the energy concept for the building. What is expected are diagrams, other illustrations and texts permitting the evaluation of the general environmental concept, energy efficiency, the use of renewable energy etc. Notably, this should include informative diagrams of the various systems showing the integration of the building services equipment with the architectural and structural concept.

2. Model, scaled 1: 500

- B.96 A mass model (preferably in white, to match the model of the surroundings) representing the distribution of built structures, accessibility, design of outdoor spaces and proposed modifications of the topography. For obligatory use by the candidates, a blank insert plate will be distributed to all candidates during the candidates' colloquium.

3. Two sets of examination plans

- B.97 Full second and third sets of all plans 1-8 on standard paper are required for the preliminary examination, identical in colours and format to the presentation plans (see also par. B.64 "Execution, Labelling of Entries"). If not included in the presentation plans, these copies should include the following information:

- Adequate dimensioning of spaces
- Sections and elevations showing altitudes (with relation to reference height, defined in par. B.77 and all drawings with one indication of the relation to m DNG (Deuxieme Nivellement Général)
- Complete room codes in the floor plans

4. Reduced-scale reproductions

- B.98 A full forth set of all plans 1-8, in the form of reduced-scale reproductions (50 %) identical in content and colours to the originals, is required for the preliminary examination. AO format to be reduced to A2, A1 format to A3 (see also par. B.64 "Execution, Labelling of Entries").

5. Digital files (2 copies)

- B.99 In addition to the hard copy plans, all sheets are to be submitted as PDF, TIF or JPG files on DVD, CD-ROM or USB, as such files are needed for reproduction in the "Report of the Preliminary Examination" and the final documentation. TIF or JPG files of A3 plans should have a resolution of 200 DPI, and PDF file should be 200 DPI and correspond in size to reduced-scale plans.
- B.100 The file of the explanatory report shall be included as a DOCX or TXT file.
- B.101 In addition, all site plans, sections and floor plans must be submitted also as VWX, DXF or DWG files (up to version 2017). As during the preliminary examination designs are quantitatively checked by means of a CAD system, precision of calculation will be enhanced if candidates submit such plans in digital form. Submitted CAD files should be cleaned off any unnecessary data such as hatches, patterns, symbols (e.g. trees) and rendering elements (e.g. shades). Moreover, any 3D elements should be converted into 2D drawings.

6. Calculation of areas and volumes

- B.102 Clear, reproducible calculation of key indices such as footprint area, non-building land, green areas, building heights, gross floor area (GFA), gross volume (GV), as well as usable areas (UA).
- B.103 The results to be listed in Forms B1, C1 and E1 (cf. Appendix or Excel file).

7a. Explanatory report on urban design and architecture

- B.104 Brief outline of the design concept as related to the competition task's objective and aspirations. Ideas as to the design concept's qualitative implementation are expected.
- B.105 Text volume preferably no more than four pages (A4 or US letter), to be submitted separately from the plans. The document may be illustrated with illustration used on the presentation sheets. No additional illustrations shall be used. The texts shall have a wording that allows the use for publication.

7b. Sustainability and energy performance

- B.106 Detailed and possibly illustrated report of text and tables to explain the sustainability concept and the technical concept of the project. In addition to the presentations on the presentation plans and the table with building specifications (Form D1) a description of at least the main construction, facade specifications, climatic concept(s) and economic feasibility is expected.
- B.107 Text to be preferably no more than five pages (A4 or US letter), to be submitted separately from the plans.

7c. Building specifications

- B.108 Tabular description of the building in terms of building materials and colours, to be submitted as a supplement to the Explanatory Reports, based on Form D1 (see Appendix or Excel file).

Technical components

Calculations and reports

© [phase eins].

Sheet 5
DIN A0 841 x 1189 mm
5f Floor Plan Level Rue Joseph II and Outdoor Facilities 1:200
7f Floor Plan(s) Visitor Center and Day Nursery 1:200
1g Floor Plan(s) Plinth Levels 1:500

Sheet 6
DIN A0 841 x 1189 mm

Sheet 3
DIN A0 841 x 1189 mm
7f Floor Plan Level Rue de la Loi and Outdoor Facilities 1:200
Le FreeStyle Information on 'Open Spaces'

Sheet 4
DIN A0 841 x 1189 mm

Sheet 1a
DIN A1 841 x 594 mm
1a Freestyle Plan 'Context'

Sheet 2
DIN A0 841 x 1189 mm
1c Freestyle Plan 'Architecture'

Sheet 1b
DIN A1 841 x 594 mm
1b Freestyle Plan 'General Layout and Urban Design'

SUBMISSION B SUBMISSION B

Sheet 13
DIN A0 841 x 1189 mm
1o Structural Design Concept
1p Facade Detail 1:50
1q Energy and building Services Concept

Sheet 14
DIN A0 841 x 1189 mm

Sheet 11
DIN A0 841 x 1189 mm
1m Elevation Rue de la Loi 1:200
1n Other Elevations 1:500

Sheet 12
DIN A0 841 x 1189 mm

Sheet 9
DIN A0 841 x 1189 mm

Sheet 10
DIN A0 841 x 1189 mm

Sheet 7
DIN A0 841 x 1189 mm
3i Utilization Concept (Functions, Vehicular and Pedestrian Circulation Security, Privacy)

Sheet 8
DIN A0 841 x 1189 mm
3j Interior Spaces and Office Concept
3k Other Floor Plans 1:500
3l Sections 1:500

SUBMISSION B
Mass Model scale 1:500

8. List of Submitted materials

B.109 Informal list in the order stated herein.

Formal components

9. Declaration of authorship

B.110 The Declaration of Authorship form A1 (see Appendix or file) should be filled in, signed, sealed in an opaque envelope and attached to the competition project. The envelope must only bear the identification number and the lettering "declaration of authorship phase 1."

Competition requirements for phase 2

B.111 The table gives an overview regarding the required sheets to be submitted in phase 2 for the respective project, the size and content of the sheets as well as the scale to be used, if applicable.

Sheet overview

Sheet-No.	No.	Content	Scale
Sheet 1 (A0)	1a	Area Plan	1:1,000
	1b	Freestyle Plan "Urban Design"	
Sheet 2 (A0)	1c	Freestyle Plan "Architecture"	
Sheets 3, 4 (both A0)	1d	Floor Plan Level Rue de la Loi and Outdoor Spaces	1:200
	1e	Freestyle Information on "Outdoor Spaces"	
Sheets 5, 6 (both A0)	1f	Floor Plan Level Rue Joseph II and Outdoor Spaces	1:200
	1g	Floor Plan(s) Visitor Centre and Day Nursery	1:200
	1h	Floor Plan(s) Plinth Levels	1:500
Sheet 7 (A0)	1i	Utilization Concept (Functions, Vehicular and pedestrian Circulation, Security, Phasing)	
	1j	Shading and wind situation	
Sheet 8, 9, 10 (all A0)	1k	Interior Spaces and Office Concept	
	1l	Other Floor Plans	1:500
	1m	Sections	1:500
Sheets 11, 12 (both A0)	1n	Elevation Rue de la Loi	1:200
	1o	Other Elevations	1:500
Sheets 13, 14 (both A0)	1p	Structural Design Concept	
	1q	Facade Detail	1:50
	1r	Energy and building services concept	

B.112 A1 plans have a landscape-format (84.1 cm wide by 59.4 cm high).

B.113 A0 plans have a portrait-format (84.1 cm wide by 118.9 cm high).

1a. Area plan, scaled 1: 1,000

B.114 Based on Working Plan #1, the area plan and additional diagrams should represent the following:

- Overall concept
- Integration with urban and landscaping patterns
- Top view of built volumes, with indication of number of floors
- Traffic concept (roads, vehicle approaches, location of car parks, entrances, metro entrance)
- Outdoor spaces, with indication of trees and surface materials
- Distribution of functions as per task
- Indication of elevation above reference height (see par. B.76); in all areas in case of level changes

1b. Freestyle plan "Urban Design"

B.115 3-dimensional freestyle representation and explanation of the urban design's mission and character (distribution and dimensions of building and spaces). At any rate, the plan should include one bird's-eye view of the overall complex.

Presentation components

1c. Freestyle plan “Architecture”

- B.116 3-dimensional freestyle representation and explanation of the architectural design in regard of its exterior and interior spaces and their character. At any rate, the plan should include one view at pedestrian level towards the new main entrance situation.
- B.117 Further on, it should include information in regard of the approach towards the rehabilitation of the existing structures.
- B.118 Information about materials, colours and construction details focusing on the integration of the historic building, as well as the innovative and sustainable character of the building complex are welcome.

1d. Floor plan level rue de la Loi and outdoor spaces, scaled 1: 200

- B.119 Based on Working Plan #3, the floor plan (level Rue de la Loi) should represent the following for the main entrance level:
- Construction elements (walls and columns)
 - Distinction between existing (rehabilitated) and new construction
 - Footprint of neighbouring buildings
 - Information as to the border between construction phases
 - Distribution of interior and exterior functions as per task
 - Indication of room codes
 - Indication of the separation between private spaces and publicly accessible spaces as per security specifications
 - Indication of security levels
 - Circulation areas / accessibility (entrances, lifts, staircases, delivery zones)
 - Indication of elevation above reference height (see par. B.76); in all areas in case of level changes
 - Subdivision of facilities and design elements in outdoor spaces, with indication of altitudes
 - Reference to the border between construction phases

1e. Freestyle information on “Outdoor Space”

- B.120 Freestyle representation and explanation of the outdoor space design. Information about materials, colours and outdoor space furniture focusing is welcome.

1f. Floor plan level rue Joseph II and outdoor spaces, scaled 1: 200

- B.121 Based on Working Plan #3, the floor plan (main entrance level Rue Joseph II) should represent at least similar information as required in par. B.119..

1g. Floor plans visitor centre and day nurser, scaled y 1: 200

- B.122 Representation of all floor plans of the Visitor Centre and day nursery (if not already represented in the floor plans according item 1d or 1f.

1h. Floor plans plinth level, scaled 1: 500

- B.123 Representation of all floor plans on levels between Rue Joseph II and Rue de la Loi, including at least similar information as required in par. B.119, plus the following:

- Definition of retail units and metro entrance (if applicable)
- Parking and logistic routes
- Connection to Parking Loi and connection to metro

1i. Utilization concept

Distribution of functions

- B.124 Schematic representation and explanation of the concept for the entire project (all levels) in regard of the distribution of functions – employing the colours used in the competition brief (room programme) allocated to the different room groups:

- | | | | | | |
|--------------|-----------|------------------------------------|---------------|---------|---------------------------------------|
| • Green | A/H/O/U/X | Entrance / reception areas | • Brown | G/N/T/W | Sanitary facilities |
| • Blue | B/K/Q | Tertiary work spaces | • Dark red | I | Exhibition |
| • Lavender | C | Meeting centres | • Red | J | Event spaces |
| • Pink | D/L/R | (Mass)Catering | • Purple | P | Children's spaces |
| • Orange | E/M/S/Y | Support | • Grey | V | Parking |
| • Dark green | F | Sports and cultural infrastructure | • Light brown | Z | Other functions (Retail units, metro) |

Security concept

- B.125 Diagrammatic representation and explanation of the concept in regard of the distribution of security zones and location of entrances.

Circulation concept

- B.126 Schematic representation of the circulation concept, comprising information on routing of staff, visitors, and deliveries. Connections of the new building to existing buildings on site should be included, if applicable.
- B.127 Further, the diagram(s) shall include information on circulation areas / accessibility (entrances, lifts, staircases, delivery zones, driveways, direction of ramps, etc.

Phasing concept

- B.128 Diagrammatic illustration of the concept for the buildings' realization in two construction phases. The presentation of both construction phases shall include site Plan, number of floors, main access.

Fire compartments

- B.129 Diagrammatic illustration of the subdivision of the complex into fire compartments.

1j. Shading and wind situation

- B.130 Diagrams explaining shading of neighbouring buildings and concept to reduce negative wind effects on pedestrian level.
- B.131 The diagram on wind effects shall represent the pedestrian zones on accessible areas of roofs, plinth and surrounding streets, with indication of their intended use according to the activity classes defined by NEN 8100:
- Class I: Rapid walking (streets, pedestrian ways)
 - Class II: Slow walking, strolling (paths in gardens, plazas, esplanades)
 - Class III: Long-term sitting (terraces of pubs, restaurants, etc.)

1k. Interior spaces and office concept

- B.132 Representation, in the form of furnished floor plans at an appropriate scale, for the office area as per the competition task, including exemplary illustrations for 40 workstations on minimum 5 different typical floors, each time once with as full open plan offices and once with a full individual closed office layout (minimum 10 plans in total).
- B.133 This sheet should also represent and explain the interior space concept and show at least one perspective of both an entrance lobby and an office situation.
- B.134 Further, the three different natural lighting zones (L1 direct, L2 indirect and zero light zone) must be identified graphically.

1l. Other floor plans, scaled 1: 500

- B.135 Representation of all typical floor plans, as well as their allocation to the corresponding floor, including at least the following information:
- Construction elements (walls and columns)
 - Distinction between existing (rehabilitated) and new construction, if applicable
 - Footprint of neighbouring buildings
 - Information as to the border between construction phases
 - Distribution of uses as per task
 - Indication of room codes
 - Circulation areas / accessibility (lifts, staircases and entrances, if relevant)
 - Indication of elevation above reference height (see par. B.76); in all areas in case of level changes

1m. Sections, scaled 1: 500

- B.136 Representation of the new building's design and subdivision as well as the integration of the planned building development with the topography and surrounding buildings. To this end, the following elements should be shown:
- At least one longitudinal and one transversal section of the entire new complex.
 - At least one longitudinal and one transversal section of every high-rise part in the complex.
 - Building heights and foot points above reference height (see par. B.76).

1n. Elevations rue de la Loi, scaled 1: 200

- B.137 Based on Working Plan #4, representation of the new building's design and subdivision as well as the integration of the planned building development and outdoor space design with the topography and surrounding buildings. The information should include:
- Facade subdivisions, and differentiation between window openings and glazing.
 - Building heights and foot points above reference height (see par. B.76).

1o. Further elevations, scaled 1: 500

B.138 Based on Information Plans #2 and #3, the design and subdivision of the new building as well as the integration of the planned building development and landscape design with the existing buildings should be represented.

- At least four further elevations, two of which showing the relationship to neighbouring buildings
- Facade subdivision, window openings or glazing
- Building heights and foot points above reference height (see par. B.76).

1p. Structural design concept

B.139 What is expected to illustrate the structural design concept are comprehensible outline sketches showing the structural system (bracing system) as well as a 3-dimensional visualization of the facade grid.

1q. Facade detail, scaled 1: 50

B.140 A detailed section of the facade and part of the floor plan as well as facade-to-office space relation should be represented at an appropriate scale, including the respective section of the floor plan and elevation.

1r. Energy and building services concept

B.141 Comprehensible and examinable representations of the building services concept, schematics of the principal mechanical equipment and a sketch of the energy concept for the building. What is expected are diagrams, other illustrations and texts permitting the evaluation of the general environmental concept, energy efficiency, the use of renewable energy etc. Notably, this should include informative parts of the various systems showing the integration of the building services equipment with the architectural and structural concept.

2. Model, scaled 1: 500

B.142 A mass model (preferably in white, to match the model of the surroundings) representing the distribution of built structures, accessibility, design of outdoor spaces and proposed modifications of the topography. For obligatory use by the candidates, a blank insert plate will be sent to all candidates.

3. Two sets of examination plans

B.143 Two full sets (Set 2 and 3) of all plans 1-14 on standard paper is required for the preliminary examination, identical in colours and format to the presentation plans (see also par. B.64 "Execution, Labelling of Entries"). If not included in the presentation plans, these copies should include the following information:

- Adequate dimensioning of spaces
- Sections and elevations showing altitudes (with relation to reference height, defined in par. B.76 and all drawings with one indication of the relation to m ASL)
- Complete room codes in the floor plans

4. Reduced-scale reproductions

B.144 A full set (Set 4) of all plans 1-14, in the form of reduced-scale reproductions (50 %) identical in content and colours to the originals, is required for the preliminary examination. A0 format to be reduced to A2, A1 format to A3 (see also par. B.64 "Execution, Labelling of Entries").

5. Digital files (2 copies)

B.145 In addition to the hard copy plans, all sheets are to be submitted as PDF, TIF or JPG files on DVD, CD-ROM or USB, as such files are needed for reproduction in the "Report of the Preliminary Examination" and the final documentation. TIF or JPG files of A3 plans should have a resolution of 200 DPI, and PDF file should be 200 DPI and correspond in size to reduced-scale plans.

B.146 The file of the explanatory report shall be included as a DOCX or TXT file.

B.147 In addition, all site plans, sections and floor plans, of every single level, must be submitted also as vwx (up to version 2017), DXF or DWG files (up to version 2017). As during the preliminary examination designs are quantitatively checked by means of a CAD system, precision of calculation will be enhanced if candidates submit such plans in digital form. Submitted CAD files should be cleaned off any unnecessary data such as hatches, patterns, symbols (e.g. trees) and rendering elements (e.g. shades). Moreover, any 3D elements should be converted into 2D drawings.

6. Calculation of areas and volumes

B.148 Clear, reproducible calculation of key indices such as footprint area, non-building land, green areas, building heights, gross floor area (GFA), gross volume (GV), as well as usable areas (UA).

B.149 The results to be listed in Forms B2, C2 and E2 (cf. Appendix or Excel file).

7a. Explanatory report on urban design and architecture

B.150 Brief outline of the design concept as related to the competition task's objective and aspirations. Ideas as to the design concept's qualitative implementation are expected.

B.151 Text volume preferably no more than four pages (A4 or US letter), to be submitted separately from the plans. The document may be illustrated with illustration used on the presentation sheets. No additional illustrations shall be used. The texts shall have a wording that allows the use for publication.

7b. Sustainability and energy performance

B.152 Detailed and possibly illustrated report of text and tables to explain the sustainability concept and the technical concept of the project. In addition to the presentations on the presentation plans (in particular referring to par. B.141) and the table with building specifications (Form D2) a description of at least the main construction, facade specifications, climatic concept(s) and economic feasibility is expected.

B.153 Text to be preferably no more than five pages (A4 or US letter), to be submitted separately from the plans.

7c. Building specifications

B.154 Tabular description of the building in terms of structural components, building materials and colours, to be submitted as a supplement to the Explanatory Reports, based on Form D2 (see Appendix or Excel file). The proposed foundation system should be described (including groundwater levels and peripheral walls), according to the assumptions made on the basis of the data available in Appendix 3 for the soil quality.

B.155 The references which have been used as basis should be mentioned, particularly referring to comfort criteria under horizontal loads, earthquake safety, fire resistance and non-progressive collapse analysis. A non-exhaustive list is given in par. F.161.

8. List of submitted materials

B.156 Informal list in the order stated herein.

9. Declaration of authorship

B.157 The Declaration of Authorship form A2 (see Appendix or file) should be filled in, signed, sealed in an opaque envelope and attached to the competition project. The envelope must only bear the identification number and the lettering "declaration of authorship phase 2."

Calculations and reports

Formal components

B.V | Order of events and deadlines

B.158	On 27 March 2018 , the design contest notice was published in the Official Journal of the European Union (date of dispatch 14 March 2018)	Announcement and pre-qualification procedure
B.159	The deadline for application was 4 May 2018 .	
B.160	The jury was invited to consult the European Commission in the preparation of the competition. In their colloquium on 25 June 2018 , the jurors agreed to the wording of the competition brief. The UIA endorsed the goal and the objectives of the project, as well as the competition procedures and regulations.	Jury colloquium
B.161	After the selection, the competition materials of phase 1 are dispatched to the selected candidates as a hard copy of the brochure with the included DVD. In addition, on the same day until the date of submission, the competition brief and other materials were made available as digital files for download at the platform of the European Commission (https://e-tendering.ted.europa.eu/cft/cft-display.html?cftId=3021)	Distribution of competition materials phase 1
B.162	The candidates' colloquium of phase 1 will be held on 18 September 2018 , currently scheduled to be from XX.00 to approx. XX.00 pm at Brussels. Before the beginning of the colloquium, candidates may join a guided tour to the premises, currently scheduled to start at XX.00 am . The precise schedule and information on the venue and meeting point will be attached to a separate invitation letter to the candidates.	Candidates' colloquium phase 1
B.163	The answers provided by the European Commission to the eventual questions received during the colloquium will be published on the e-Tendering website in accordance with par. B.161 above. Only the answers provided in writing shall constitute an integral part of the competition documents.	
B.164	Contact between the European Commission and the candidate is not authorized during the procedure, save in in the following circumstances only:	Contacts and additional information
	(a) Before the final date for submission of projects in phases 1 and 2:	
B.165	Upon request, the European Commission may provide additional information solely for the purpose of clarifying the competition documents.	
B.166	Requests for additional information must be addressed in writing via the e-Tendering website by clicking 'Create a question' in the 'Questions and Answers' tab (for phase 1 the internet link is the following: https://etendering.ted.europa.eu/cft/cft-display.html?cftId=3021 ; for phase 2 the relevant e-Tendering internet link shall be provided to the 10 selected candidates). IMPORTANT: You must be registered on the site to create a question.	
B.167	On its own initiative, the European Commission may inform interested parties of any error, inaccuracy, omission or other clerical error in the text of the competition documents.	
B.168	Any additional information, including the information referred to above, will be published on the e-Tendering website communicated to the selected candidates as detailed under par. B.166 above. This website will be updated regularly and it is the responsibility of the candidates to check the updates and modifications made during the period for the submission of projects.	
	(b) After the projects have been submitted:	
B.169	Candidates may be asked by the jury to answer the questions in order to clarify a project.	
B.170	No other information relating to the projects will be communicated.	

B.171 The deadlines for submission of the entries to phase 1 of the competition is **7 November 2018** at the latest. The precise deadline for submission of projects for phase 2 of the competition shall be notified in writing to the 10 selected candidates to the phase 2 of the competition.

Submission of
competition entries

B.172 The projects must be submitted for both phases 1 and 2 of the present competition in accordance with the terms and conditions set out below.

- a) either by post or by courier, in which case the evidence of the date of dispatch shall be constituted by the postmark or the date of the deposit slip, to the following address:

EUROPEAN COMMISSION
OIB – Office for Infrastructure and Logistics in Brussels
Unit OIB.02 – Budget, public procurement, internal control and programming
CSM1, Office 5/P001
B-1049 BRUSSELS

Please note that the projects cannot be submitted by hand to this address.

- b) or delivered by hand no later than 5.30 pm local to the central mail department of the European Commission, either in person or by an authorized representative. In this case a dated receipt must be obtained as proof of submission, signed by the official in the mail department who took delivery at the following address:

European Commission Central Mail Department
Avenue du Bourget 1
B-1140 BRUSSELS (Evere)

The department is open from 8.00 am to 5.30 pm local time from Monday to Friday. It is closed on Saturdays, Sundays and Commission holidays.

B.173 Whatever the means of delivery, the outer envelope must bear the address given in point a) above and be marked as follows:

Architectural competition No OIB.02/CO/2017/062/783
A NE PAS OUVRIR PAR LE SERVICE COURRIER/
NOT TO BE OPENED BY THE INTERNAL MAIL DEPARTMENT'

B.174 The following will serve as proof of submission:

the postmark or the date of the deposit slip; or the receipt, dated and signed by the official in the Central Mail Department of the European Commission who took delivery.

B.175 It is requested to comply strictly with the administrative instructions given in paragraphs B.176, B.177 and B.178 below. In case of non-compliance, the European Commission reserves the right to reject the project.

B.176 The projects must be submitted as detailed under paragraphs B.77 ff. for phase 1 and B.111 for phase 2.

B.177 In order to secure anonymity, all projects must be sealed without reference to the origin of the project in any way. If international courier service regulations do not allow anonymous transport, the sender's address shall only be applied to the relevant shipping documents. The model should be packed in a stable and reusable box in order to allow for further shipping.

B.178 Projects, including models, must be shipped with postage prepaid. If customs duties arise, they must be paid by the candidate.

B.179 The candidate is responsible for the timely and proper dispatch of all parts of the project. Candidates must see to it that all submitted documents are received by the date of the submission deadline or shortly thereafter.

B.180 There is no obligation that projects posted prior to the deadline described above, but received later than fourteen calendar days after the deadline, are reviewed in the preliminary examination. The jury reserves the right to accept or reject such projects.

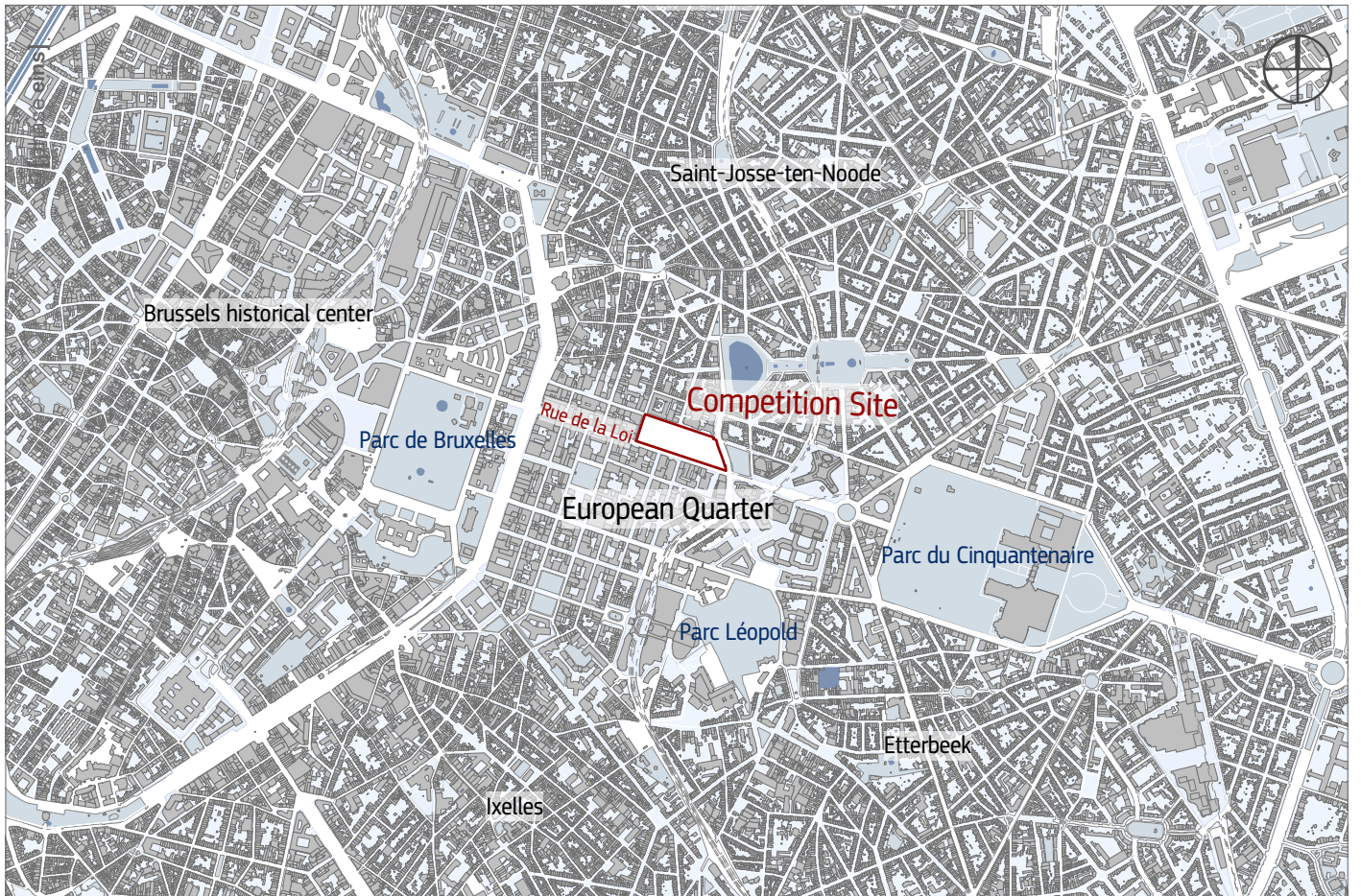
B.181 In order to prevent any damage or loss of the documents submitted by candidates, the European Commission agrees to exercise, in the handling of the received competition projects, the same care that it usually employs in its own affairs. In case of damage to or loss of competition projects the European Commission is liable for indemnity as to the repair or recovery of the damaged or lost materials only in case of wilful misconduct and gross negligence.

B.182 The return shipment of the plans, documents and models as mentioned under paragraph B.181 above will be prepared with the utmost care and using the original packaging provided by the candidates wherever possible. The European Commission, however, declines any liability for damages arising during shipment such as those occasioned by insufficient strength of adhesive bonds.

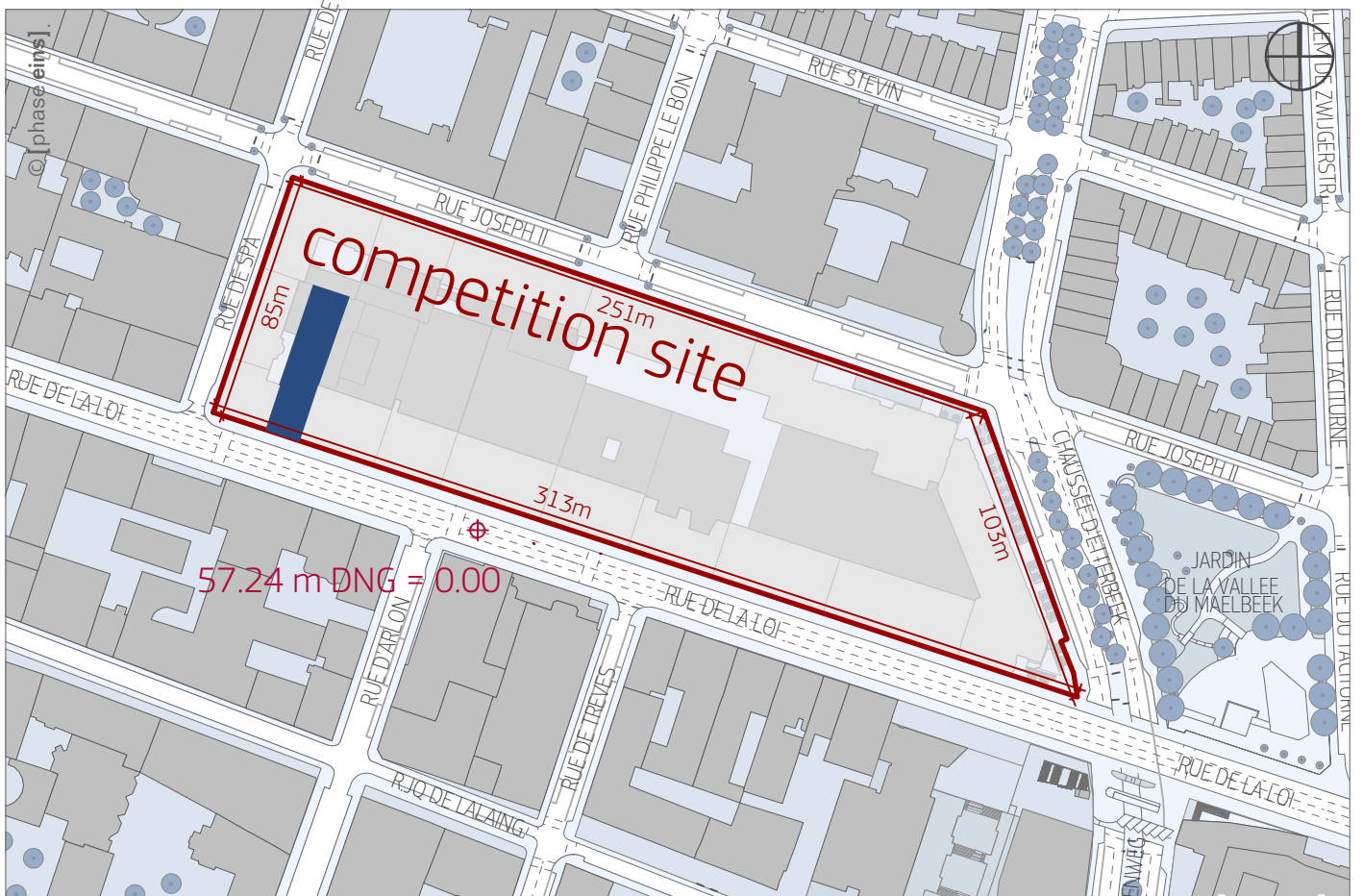
Return of the projects

B.183	In January 2019, the jury will meet for two days in Brussels to decide on the outcome of phase 1.	Jury meeting phase 1
B.184	In June 2019, the jury will meet for one day at Brussels to decide on the outcome of phase 2 and the competition.	Jury meeting phase 2
B.185	The minutes of the jury meetings phase 1 and 2 shall be signed by the chairperson of the jury after authorization by all jury members during the meeting. The minutes of the jury meetings shall document any decision taken in form of resolution minutes. They shall be accessible to all candidates involved upon completion of the competition.	
B.186	Candidates will be notified of the outcome of the competition for each of the two phases by e-mail only. It is their responsibility to check the e-mail address provided in the Annex 4 - Form A – Applicant's identification of the request to participate.	Announcement of results
B.187	A copy of the brochure regarding all projects and the outcome of the competition will be delivered to all candidates involved as quickly as possible.	
B.188	On termination of the competition procedure, the projects will be put on public display, where the authors and their collaborators will be acknowledged. The exact exhibition date(s) and venue(s) will be announced to the candidates and the public as they are finalized.	Exhibition of projects
B.189	If processing a project involves the recording and processing of personal data (such as name, address and CV), this data will be processed pursuant to Regulation (EC) No 45/2001 of the European Parliament and the Council of 18 December 2000 on the protection of individuals with regard to the processing of personal data by the European Union and bodies and on the free movement of such data. Unless indicated otherwise, any personal data will be processed solely for evaluation purposes under the procedure (data controller: unit OIB.02). Details concerning the processing of personal data are available in the privacy statement at: https://ec.europa.eu/info/funding-tenders/rules-public-procurement/data-protection-public-procurement-procedures_en .	Data protection.
B.190	The candidate's personal data may be registered in the Early Detection and Exclusion System (EDES) if the candidate is in one of the situations mentioned in Article 106 of the Financial Regulation ¹ . For more information, see the privacy statement: http://ec.europa.eu/budget/explained/management/protecting/protect_en.cfm .	
B.191	The European Commission may cancel this procedure without the candidates being entitled to claim any compensation, except for the cases detailed under par. B.33. This decision must be substantiated and the candidates notified.	Disclaimer
B.192	Candidates may submit any observations concerning the procurement procedure to the European Commission using the contact details under Heading I.1 of the design contest notice. If candidates believe that there is maladministration, they may lodge a complaint to the European Ombudsman within two years of the date from which they become aware of the facts which form the basis for the complaint (see https://www.ombudsman.europa.eu).	Means of redress.
B.193	Within two months of notification of the outcome of the competition for each of the two phases, candidates may launch an action for its annulment. Any request candidates may make and any reply from the European Commission, or any complaint for maladministration, will have neither the purpose nor the effect of suspending the time-limit for launching an action for annulment nor open a new period for launching an action for annulment. The body responsible for hearing annulment procedures is indicated under Heading VI.4.1 of the design contest notice.	
B.194	Below, all relevant dates of the competition procedure are listed for quick information:	Competition schedule
	Jury colloquium _____ 25 June 2018	
	Distribution of competition materials phase 1 _____ 20 August 2018	
	Candidates' Colloquium phase 1 _____ 18 September 2018	
	Submission of projects phase 1 _____ 7 November 2018	
	Jury meeting phase 1 _____ week 14 January 2019	
	Submission of projects phase 2 _____ 30 April 2019	
	Jury meeting phase 2 (envisaged date) _____ week 24 June 2019	
	Exhibition (envisaged date) _____ July 2019	

¹ Regulation (EU, Euratom) No 966/2012 of the European Parliament and of the Council of 25 October 2012 on the financial rules applicable to the general budget of the Union and repealing Council Regulation (EC, Euratom) No 1605/2002 (OJ L 298 of 26.10.2012, p. 1) as amended.



Overview Brussels

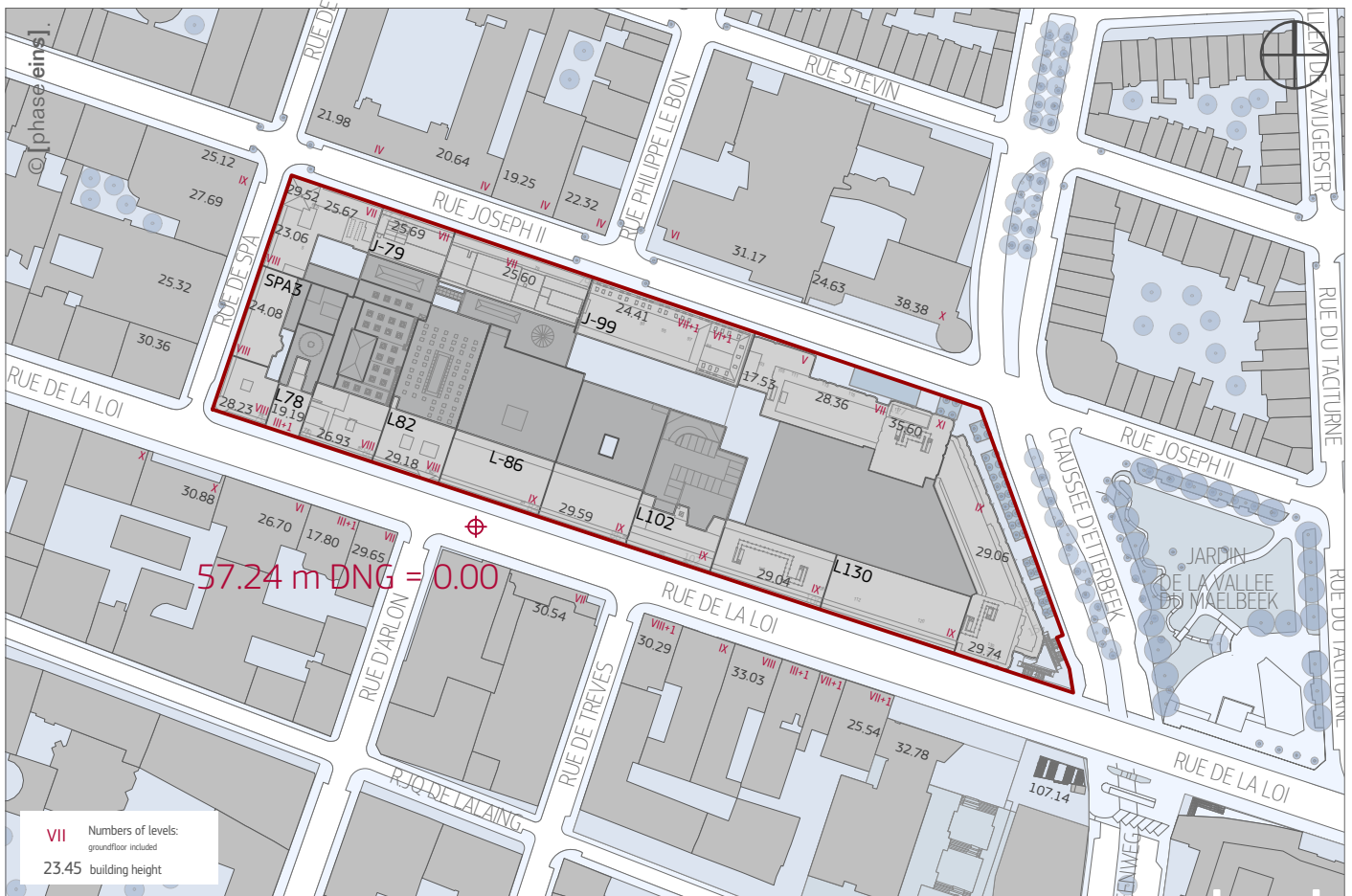


Competition site

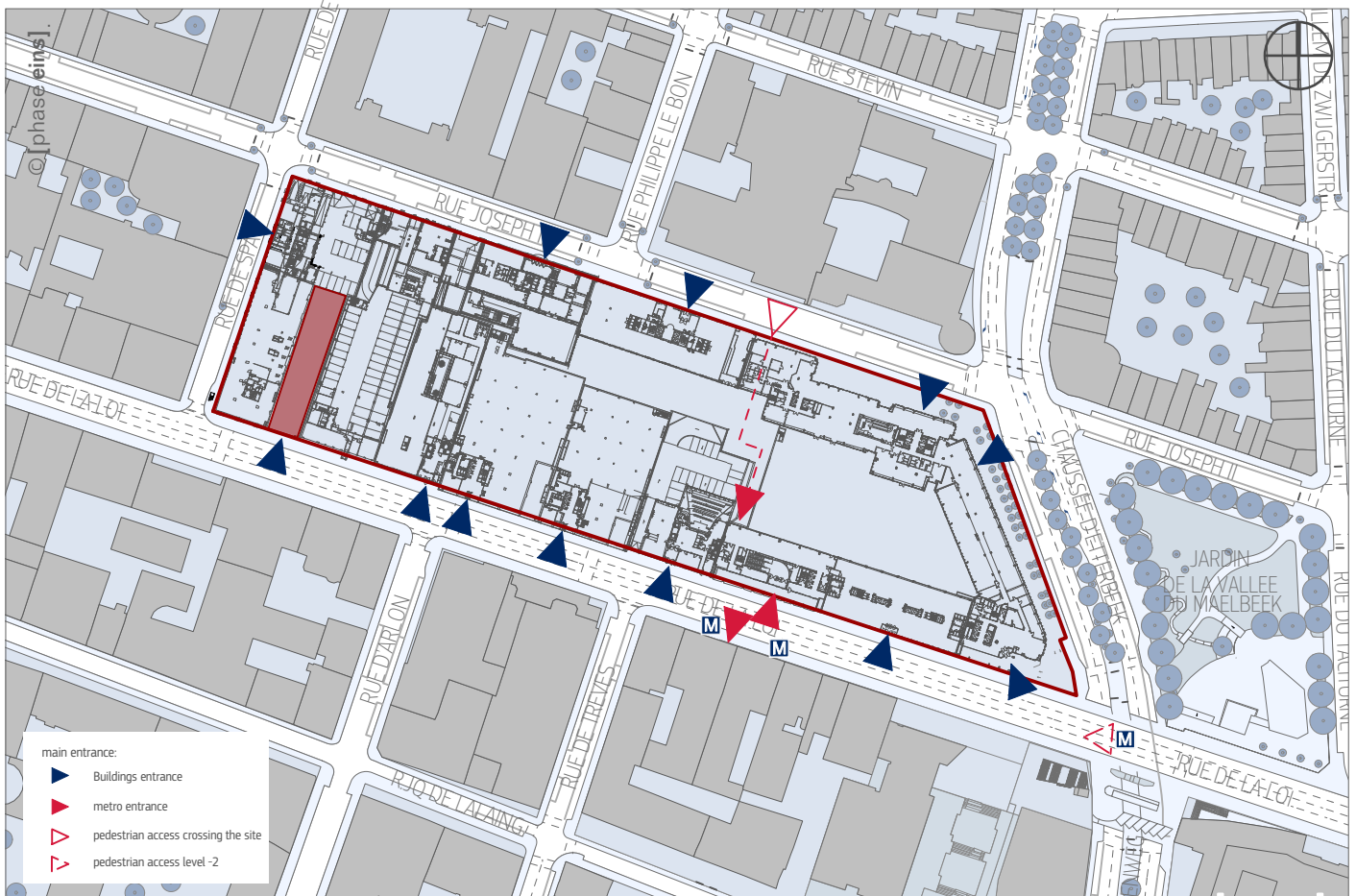
C Existing Situation and Planning Guidelines

C.I | Location and size of the project site

C.01	The site of the Loi 130 project – the "Loi 130 site" – is in the heart of Brussels' European Quarter, in the City of Brussels (one of the 19 municipalities that make up the Brussels-Capital Region), Belgium.	Location within Brussels
C.01	It is located between Brussels' small inner ring road ("the pentagon") and the outer ring of the Brussels (see the map on the opposite page, map 1 of Brussels region and the information plans). It is close to the E40 motorway (Liège-Leuven) and directly connected to Brussels airport by train and road.	
C.02	The Loi 130 site measures 23,906 sq m.	Size
C.02	The Loi 130 site is close to major EU institutional buildings, and walking distance from the Schuman roundabout, which serves as the core of the European Quarter. The major EU buildings around the Schuman roundabout include the Berlaymont building (primary seat of the European Commission), the Justus Lipsius and Residence Palace (current seats of the European Council and the Council) and the Charlemagne building (currently hosting the European Commission Visitor Centre).	Location within the European Quarter
C.03	The European Parliament, and its Visitor Centre (the Parliamentarium and the Museum of European History) are located one kilometre south of the Loi 130 site.	
C.04	The site lies along Rue de la Loi, one of the main metropolitan axes of the Brussels-Capital Region and a major access road into the city centre, running one-way from the Schuman roundabout to Rue Royale. Rue de la Loi, with its four lanes, is counterbalanced by a parallel axis, Rue Belliard, which channels a corresponding flow of traffic leaving the city centre. Underneath Rue de la Loi runs one of Brussels' metro lines, and a three-level underground car park.	
C.05	Two large green spaces – the Parc du Cinquanteaire and the Parc de Bruxelles (also known as Parc Royal) – stand at both ends of Rue de la Loi. The area includes other green spaces, such as the nearby Squares (squares Marie-Louise, Ambiorix and Marguerite), and the Parc Leopold, as well as the Jardin du Maelbeek, which is opposite the site.	
C.06	The rest of the European Quarter is mostly administrative, largely occupied by offices serving the institutions, as well as a wide range of international offices and embassies. The European Commission and its agencies occupy around 1 million sq m (gross floor area – GFA, above ground), spread over some 65 buildings.	



Building heights



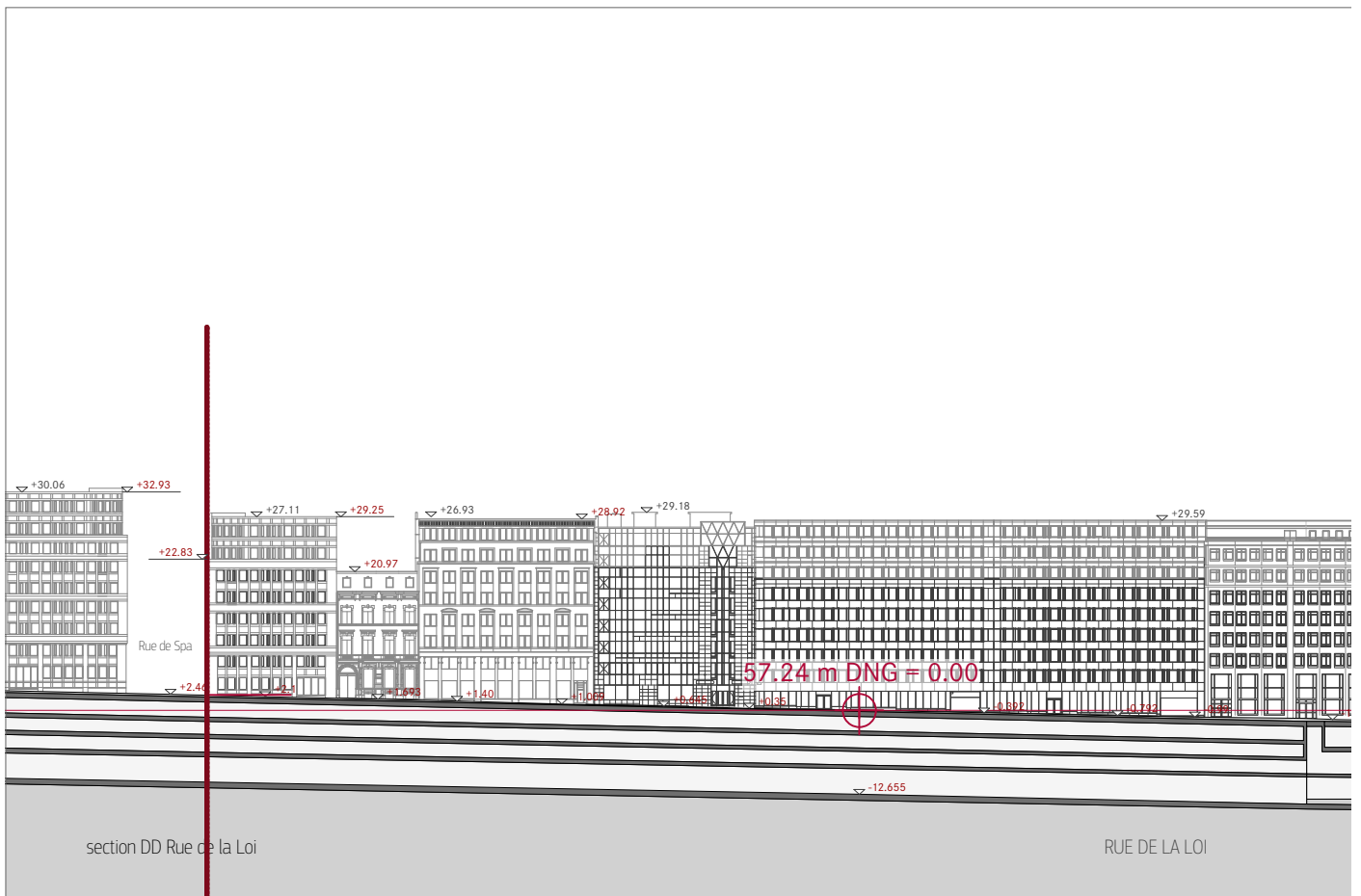
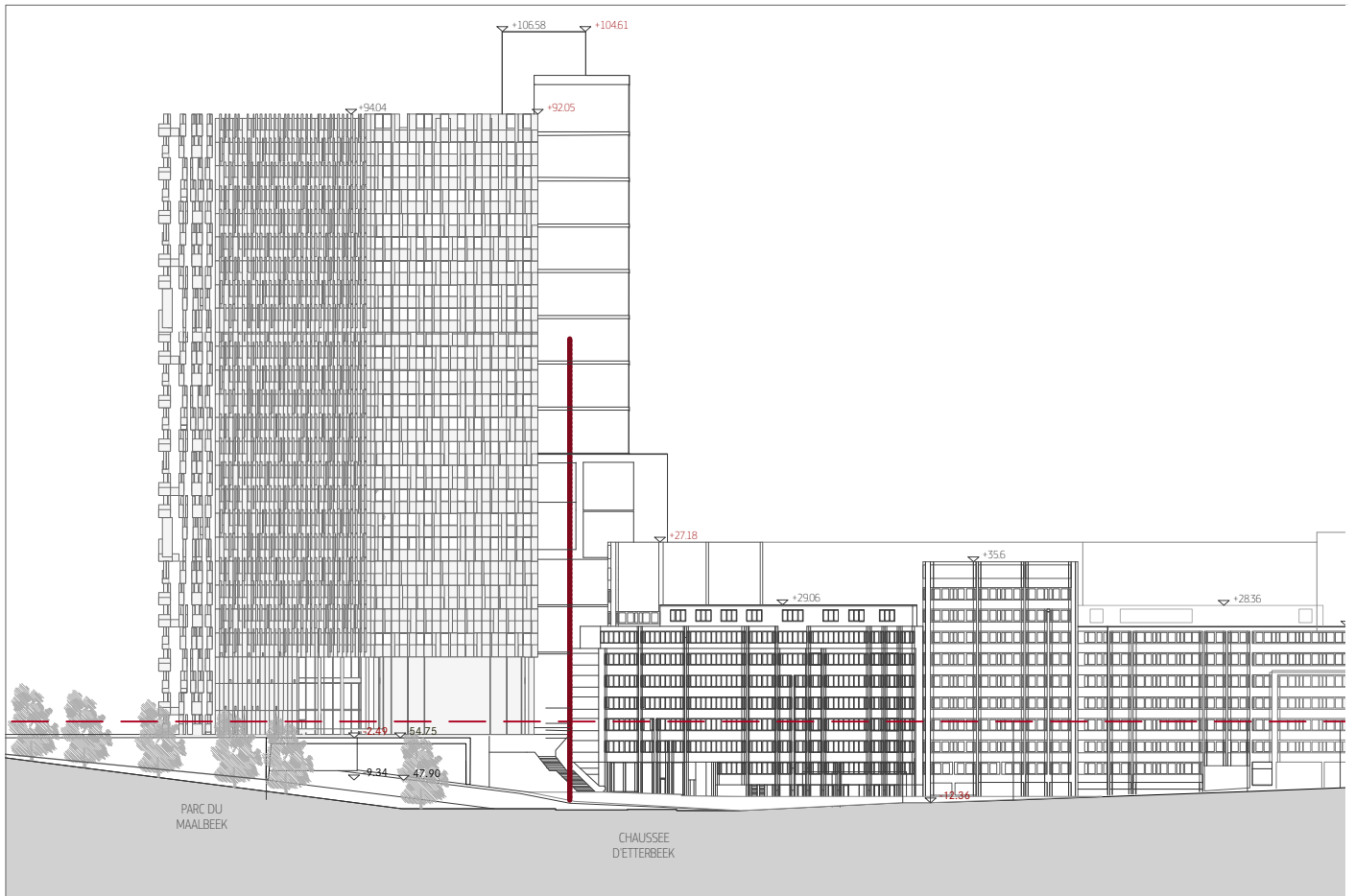
Main entrances

Existing buildings

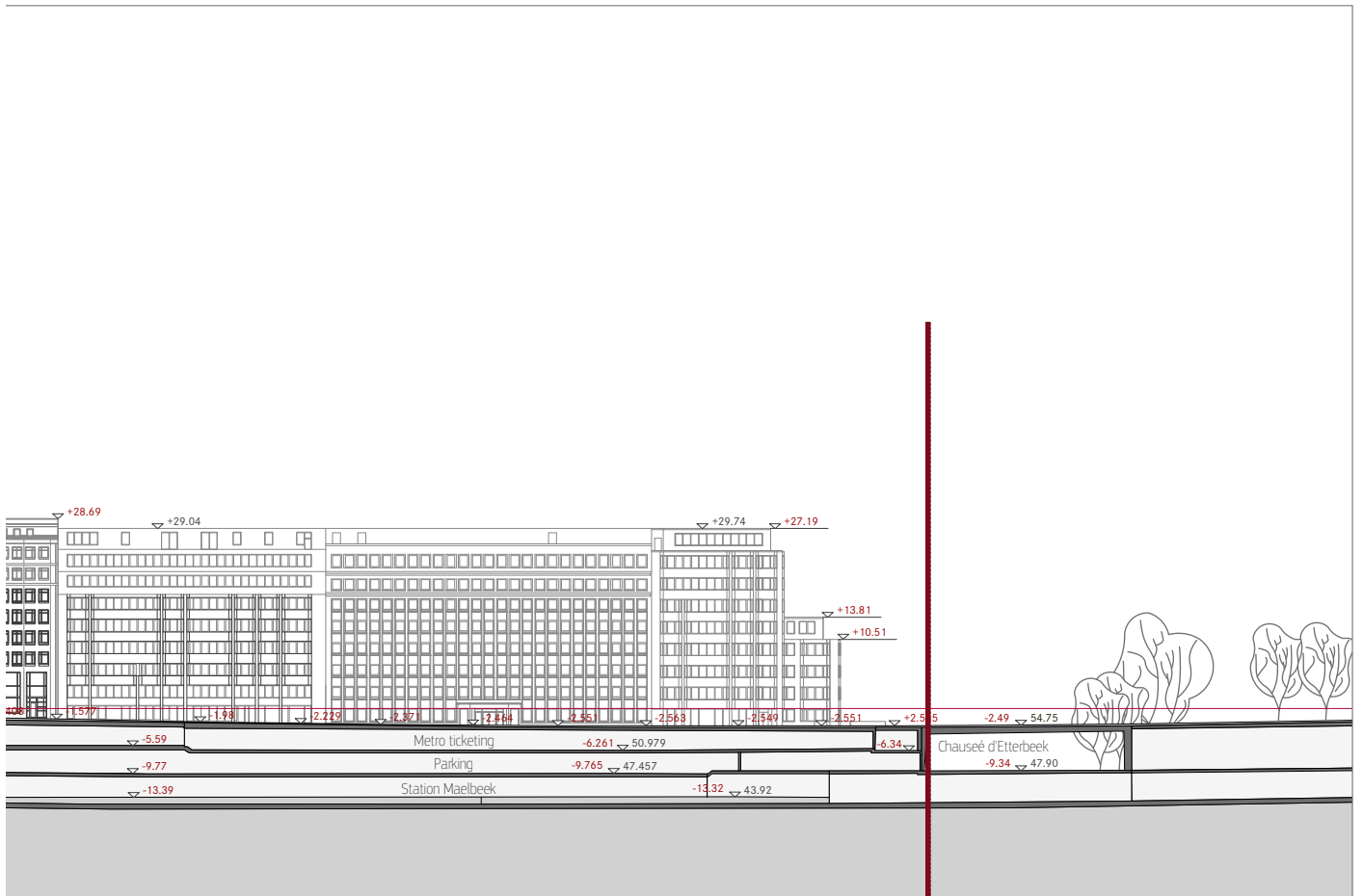
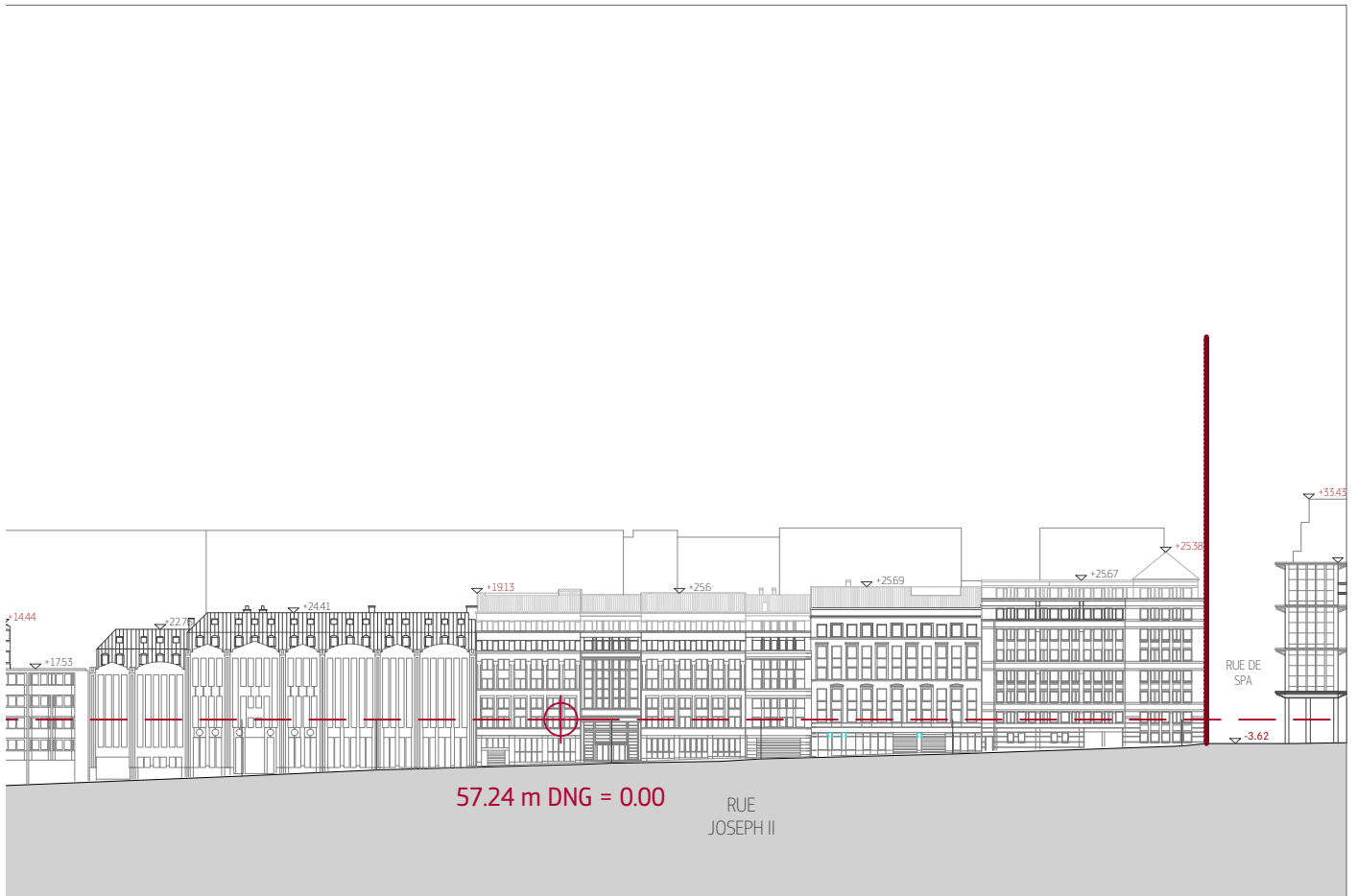
- C.07** The site is currently occupied entirely by eight buildings of different types, with direct access from the surrounding streets. They are named after the first letter of the street name, followed by the street number (L130, L102, L86, L82, L78, SPA3, J79 and J99). All except L78 and L82 are owned by the European Commission. At present, the site hosts approximately 2,500 staff in total, working in seven of the European Commission's Directorate-Generals (DGs): DG AGRI (Agriculture and Rural Development), DG ECHO (European Civil Protection and Humanitarian Aid Operations), DG EMPL (Employment, Social Affairs and Inclusion), DG MARE (Maritime Affairs and Fisheries), DG SCIC (Interpretation) and DG TAXUD (Taxation and Customs Union).
- C.08** The current total built surface area is approximately 140,000 sq m GFA, of which 95,000 sq m GFA are above ground.
- C.09** Each of the current buildings has different construction years, ranging from 1973 to 2003, with the exception of L78, a listed building from 1860.
- C.10** Different degrees of obsolescence have motivated the redevelopment of the site in two construction phases. For instance, the age of European Commission owned buildings on the East-side range between 28 and 43 years, and will be redeveloped in a first construction phase. European Commission buildings on the West side are more recent and will be redeveloped at a later stage.
- C.11** The Loi 130 site consists of mid-height buildings (five to eleven floors above ground), except for the L78 which has a ground floor, two upper floors and a gabled roof. Likewise, each of the buildings has an independent car park of between 1 and 3 levels, with its own parking entrance.
- C.03** The inner part of the Loi 130 site is mostly a hard-covered surface: a large floor slab covers the underground car park. Some spaces are terraces and gardens.
- C.12** Under Rue de la Loi, immediately adjacent to the project site, there is a three/four-level tunnel, used for the metro and a two/three-level underground car park, "Parking Loi". Within the section of the project site is Maelbeek metro station. One of its entrances is located within the project site (see par. C.59).

Tunnel under
rue de la Loi

Buildings		above ground	below ground	TOTAL
construction phase 1	L86	13,642.00	6,853.15	20,495.15
	L102	4,350.00	1,384.11	5,734.11
	L130	34,915.00	16,523.58	51,438.58
	J99	8,450.00	5,103.76	13,553.76
	total	61,357.00	29,864.60	91,221.60
construction phase 2	SPA3	11,500.00	3,536.16	15,036.16
	J79	16,540.00	7,181.87	23,721.87
	L78	1,500.00	0.00	1,500.00
	L82	4,738.00	2,982.00	7,720.00
	total	34,278.00	13,700.03	47,978.03
TOTAL	total	95,635.00	43,564.63	139,199.63

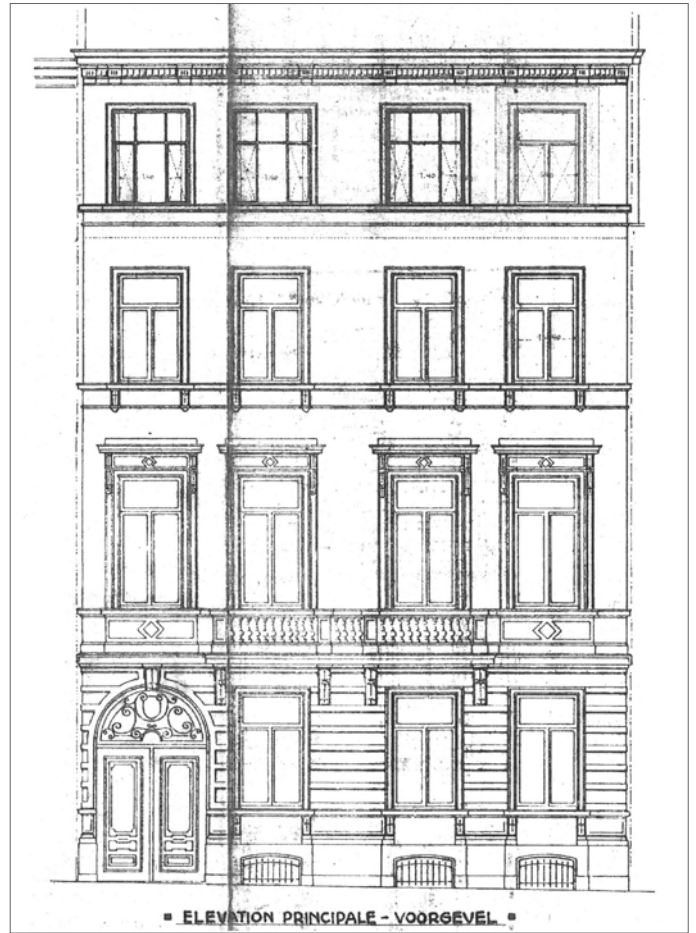


Section competitionsite

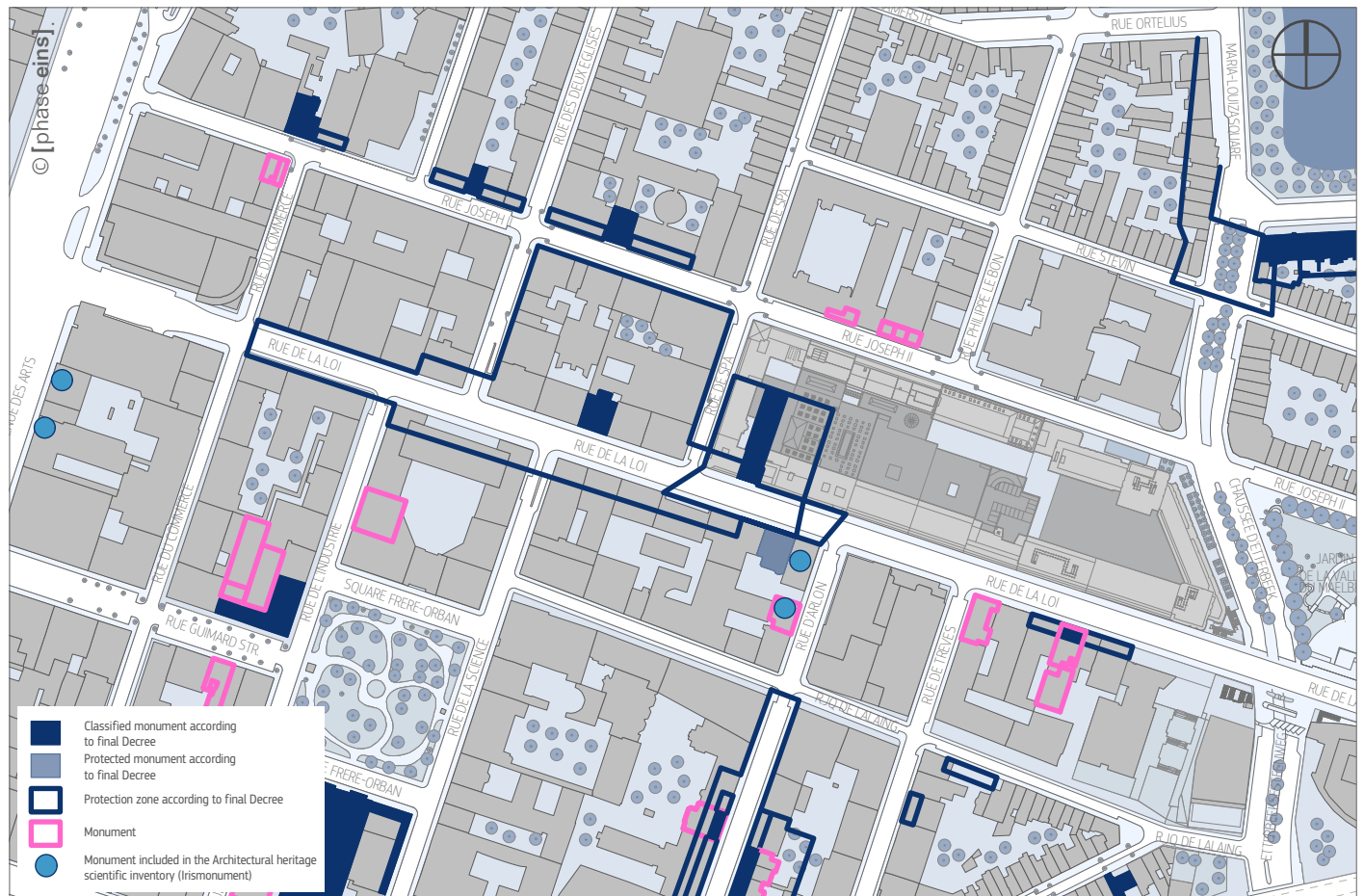




Rue de la Loi 78



Rue de la Loi 78



Monument protection

- C.13 L78 is a townhouse (“Hôtel de Maître”) facing Rue de la Loi, with a large banking office at the back, previously occupied by the Brunner bank. It is not owned by the European Commission and should remain in its state, as a protected building (see Regional zoned planning regulation RRUZ part A.3).
- C.14 As a listed building, the L78 is registered on the Brussels-Capital Region built heritage list, classified under AG2 protection type. The AG2 classification is related to the protection of the “Hôtel de Maître”. The building was listed in 1993 and 1995 by royal decree.
- C.15 The house was built around 1860 and combines classic and eclectic styles, a lasting example of the sumptuous townhouses built for the Belgian aristocracy and bourgeoisie of the 19th century.
- C.16 The following elements of the building were classified due to their historic and artistic interests: the totality of the town house, the counter hall situated in the back of the town house, including the entrance, the grand staircase with its landing, and the adjoining office.
- C.17 To preserve and guarantee the quality of the environment for the classified property, a protection zone was established around the listed building. This zone includes the streets, parts of roads, as well as the whole lot or parts of lots on which the Hôtel de maître has been erected.
- C.18 Any requests for planning permission for properties or new projects located in this protection zone are scrutinised by the Royal listed heritage commission, which considers whether the proposed projects do or do not affect the classified property and do not degrade its surroundings.

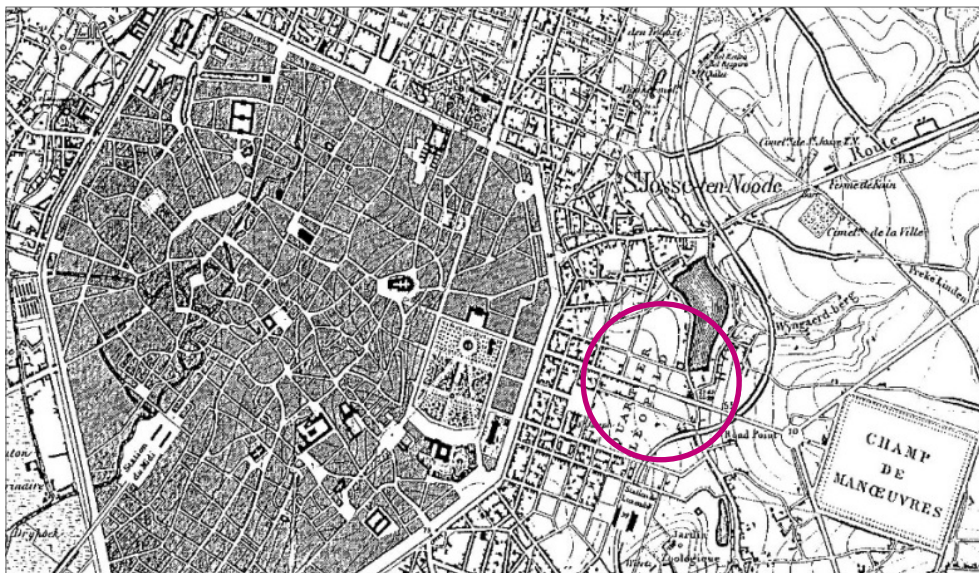
Building L78



Rue du Trone 1900, Belfius Collection



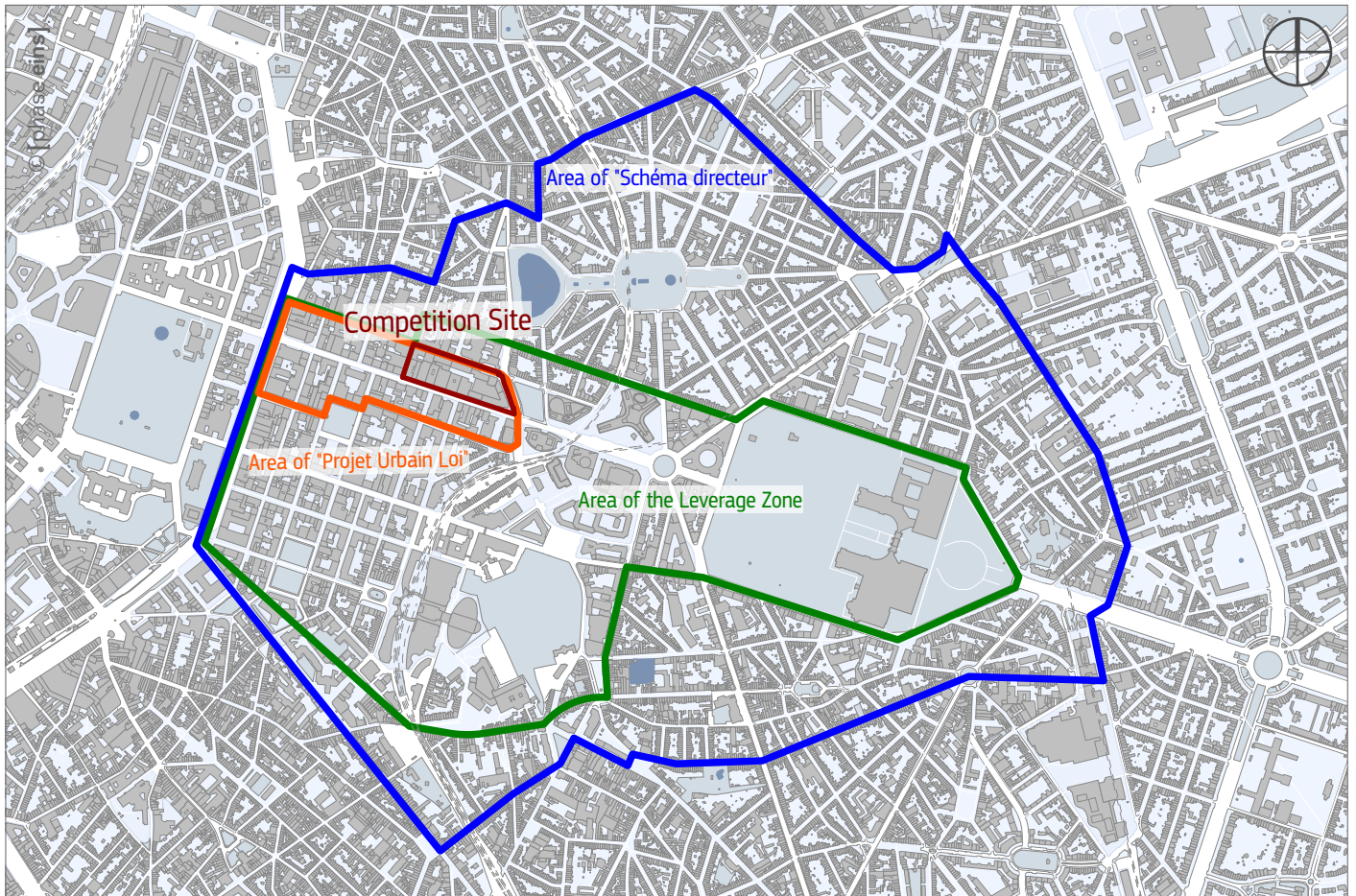
Square Ambiorix, Belfius Collection



Topographic map of Brussels and surroundings 1858 J. Huvenne and J. Ongers, published by Ph. Vandermalen - IGN Brussels

C.II | Brussels

- C.20** Brussels is the capital of the Kingdom of Belgium, a small European country of over 30,000 sq km and a population of some 11 million. It is a federal state divided into three regions: the Dutch-speaking Flemish Region in the north, the bilingual French and Dutch-speaking Brussels-Capital Region in the centre and the French-speaking Walloon Region in the south. Belgium has three official languages, Dutch (often referred to as "Flemish"), French and German, and is organised in three linguistic communities. In the Brussels-Capital Region speakers of both French and Dutch (Flemish) live together, alongside nationals of many other countries.
- C.21** The Brussels-Capital Region has about 1,175,000 inhabitants and comprises the City of Brussels as well as 18 other municipalities, on a surface of 161 sq km. Brussels is very well connected with other European capitals and bigger cities: hourly high-speed trains to London, Paris, Amsterdam and Cologne, daily flight connections from Brussels National Airport as well as from Brussels-South Airport, and a comfortable, but busy motorway network. Accessibility from other European cities is one of its strongest assets: it is connected by high-speed train to London (2h), Paris (1h 15), Amsterdam (1h 50) and Cologne (1h 50).
- C.22** As it hosts most of the EU Institutions, Brussels is often referred to as the capital of Europe. The Brussels-Capital Region also hosts the headquarters of NATO and numerous international organisations, NGOs, industry associations, lobbies and diplomatic missions.
- C.23** Brussels is also a very multicultural city with one of the highest rates of foreign-born population in the world (62 % according to the World Migration Report 2015) and a correspondingly lively cultural scene. Brussels' multiculturalism is also reflected in its diverse neighbourhoods where atmospheres vary from one street to another. In that sense, Brussels reflects perfectly the EU's complex nature and the diversity of cultures, religions, languages, present in the European Union. It is smaller than London and Paris and, therefore, often acknowledged to offer exceptional quality of life, especially due to its green spaces, affordable housing, reasonable transport time and relaxed attitude.



Perimeters of the European Quarter

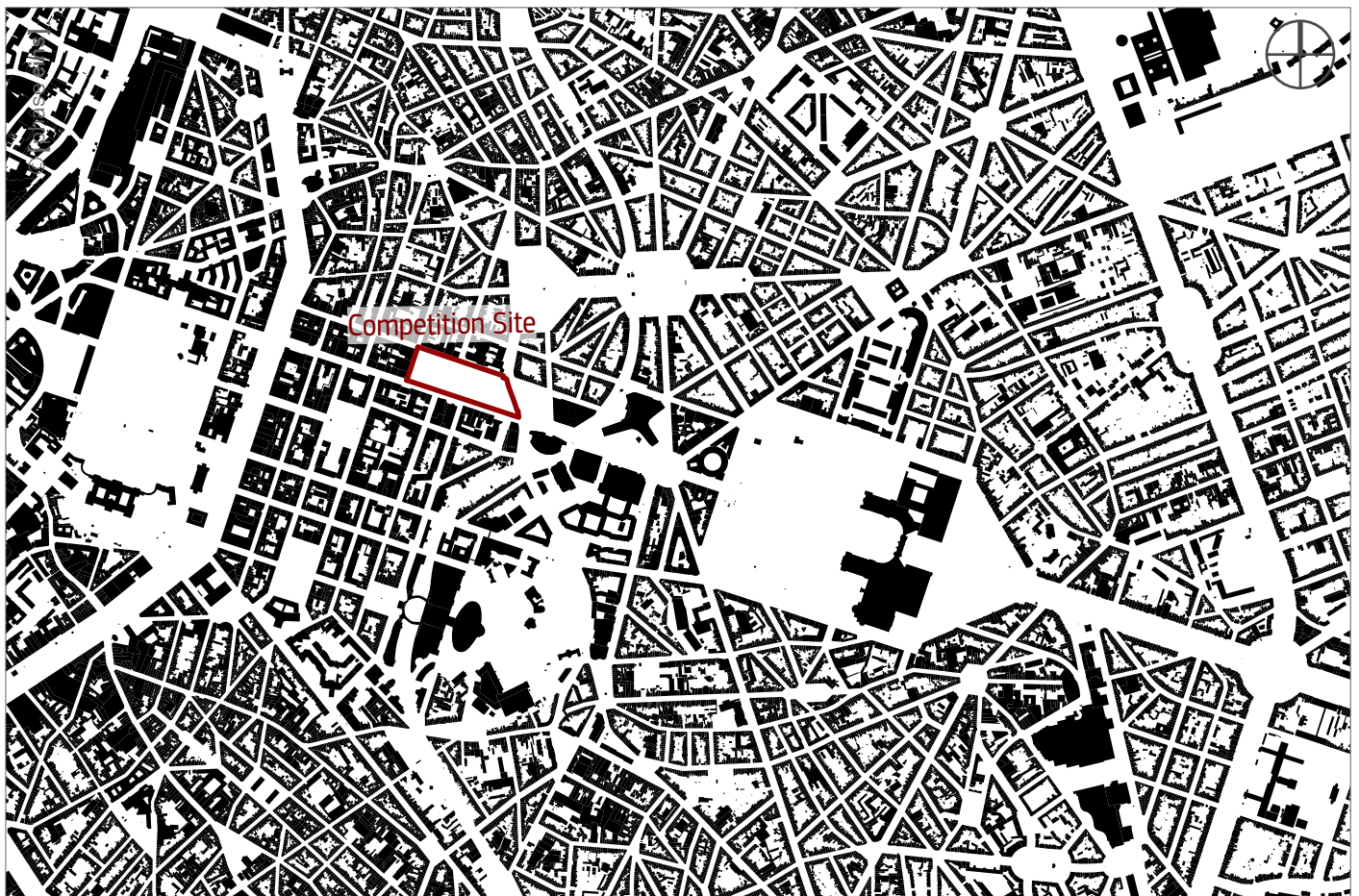


Figure ground plan

Historical development of the European Quarter

- C.24 Located east of Brussel's historic city centre, the European Quarter is the largest international employment hub in the Brussels-Capital Region. Surrounded by residential neighbourhoods, the area includes several public spaces such as the Schuman roundabout and the Solidarnosc 1980 Esplanade of the European Parliament, and two listed metropolitan parks: the Parc du Cinquanteaire and the Parc Léopold.
- C.25 The district was first developed in 1837 and named Quartier Léopold, after the Belgian King Léopold I, who supported the initiative. Rue de la Loi, the main transport axis in the Quarter, represents this historical period, being the former route linking the Royal Palace to the Cinquanteaire arch, one of Brussels' most famous buildings, constructed in 1880 to mark 50 years of Belgian independence.
- C.26 The development plan for the area, by architect Tilman François Suys, was based on an orthogonal grid from the Avenue des Arts to the current Chaussée d'Etterbeek, which followed the Maelbeek river valley. Around the Cinquanteaire, a large military exercise ground, adjacent to the Royal Military Academy, was transformed into the iconic Parc du Cinquanteaire.
- C.27 In the 19th century, the neighbourhood became a high-class residential neighbourhood, valued by the wealthy elites of the times, who moved in from the city centre. The Maelbeek River was built over, and several neighbouring swamps and ponds were dried out. In the 20th century, the Rue de la Loi went from being a traditional two-lane road with tramway tracks to a busy five lane road, with the tramway replaced by a metro line.
- C.28 While the upper part of the neighbourhood remains a high-quality residential area with many listed houses and lush gardens, the lower side morphed gradually into an administrative district.
- C.29 In 1958, following the Treaty of Rome, Brussels became a temporary seat of the European Commission. The Belgian government thus proposed a site across from the Parc du Cinquanteaire, the future European Quarter, to host the Council of European ministers. However, due the provisional status of the European Institutions, no overall urban planning was implemented because of the provisional status of the European Institutions, so the European Quarter evolved organically, as property became available. From 1958 onwards, residential buildings were progressively transformed into modern administrative offices, and the area turned into a mono-functional neighbourhood.
- C.30 Finally, in 1992, during the European Council summit in Edinburgh, it was agreed that most European Commission departments would remain in Brussels permanently. And the city's official status of the "capital of Europe" was consolidated in 2001, when the Treaty of Nice confirmed it as the meeting place for the European Council.
- C.31 Over the years, the European Commission has become one of the most important real estate actors in the European Quarter where a significant proportion of its Brussels offices are located.
- C.32 Today, the neighbourhood is mainly an administrative area, busy on peak hours and quiet outside office hours, generally lacking multi-use, smaller green spaces and dynamism.

Town planning competition

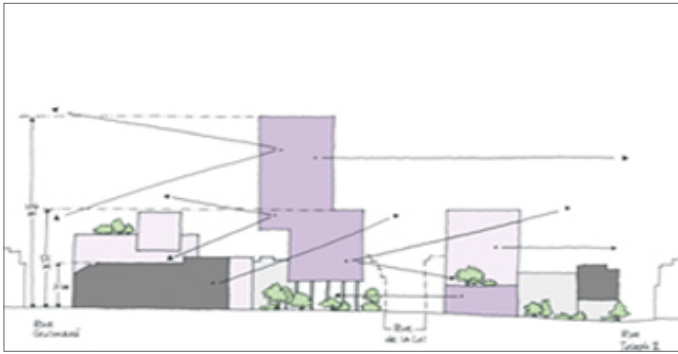
- C.04 In recent years, the Brussels-Capital Region, together with the European Commission, has been driving a transformation for the neighbourhood. A strategic plan was drafted in 2008 by the Region to revamp the European Quarter, with twelve specific projects.
- C.33 In 2008, the Brussels-Capital Region, in association with the European Commission and the City of Brussels, organized a town planning competition for a perimeter around the Rue de la Loi, the so-called "Projet urbain Loi" (PUL). The PUL is one of the twelve projects and considered to be a flagship project in the Region.
- C.34 The winning project, designed by a consortium led by the Atelier Christian de Portzamparc, aims to transform the district into an eco-friendly mixed office/housing neighbourhood with more public spaces at ground floor level, breaking the monotonous character of the office district. The new neighbourhood will become a more pleasant working environment, properly integrated into the town where housing, retail and public spaces coexist harmoniously.
- C.35 Atelier Christian de Portzamparc's project is based on an open blocks concept, which will essentially release space at ground level by building higher. This will expand street-level space around Rue de la Loi and improve the area's visual and physical openness.
- C.36 Siim Kallas, Commissioner for Administrative Affairs in 2008, stated that the PUL would create a symbolic area for the EU Institutions and, as well as furnishing the European Commission with additional office space, give a body and soul to the European political project.

PUL
"Projet urbain Loi"

Planning regulations

- C.37 In 2013, the main directives of the PUL were translated into an urban regulation, the Règlement Régional d'Urbanisme Zoné (RRUZ), specifying heights, volumes, public spaces, and building setback.
- C.38 The main underlying goals are the following:
- Transform the area into a mixed, dense, urban neighbourhood, reinforcing the Brussels-Capital Region's primary international employment hub while creating at the same time a diversified residential area with shops and public spaces nearby.
 - Create a symbolic urban form around the major Rue de la Loi axis, by promoting dynamic heights and volumes to favour light penetration into building blocks and secondary streets. To do this, the buildings will be installed in three alignments and adopt "staggered" forms, and the whole complex will enjoy architectural freedom while ensuring overall consistency inside the PUL perimeter.
 - Transform Rue de la Loi from a "corridor street" into an open and animated street, broken up by outdoor spaces ("pocket-parks") used for both commercial and public purposes; ensure high environmental quality and promote pedestrian and bicycle connections through the neighbourhood.
- C.39 The current urban planning framework for the Loi 130 site is laid down in the RRUZ document, as well as in the note "Urban planning framework for block B of the 'Projet Urbain Loi' urban redevelopment project" (Appendix 2 and 5).

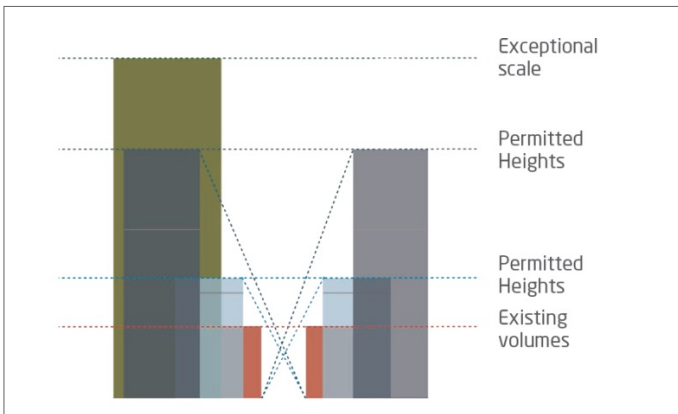
RRUZ
Règlement régional
d'urbanisme zoné



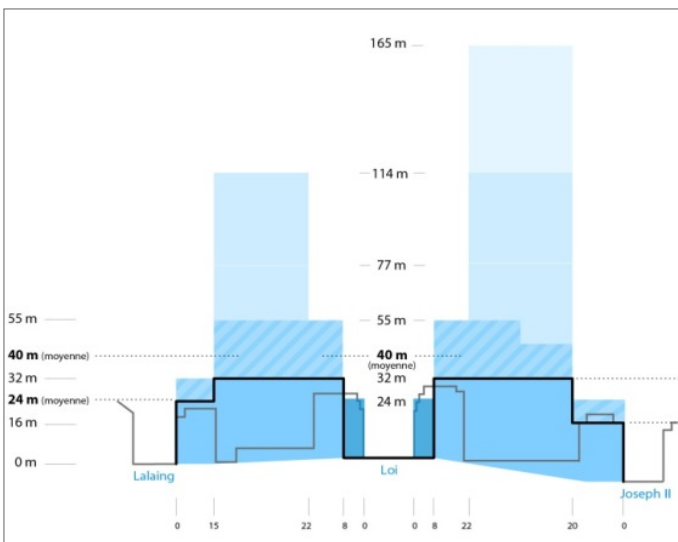
Densification of Rue de la Loi with open blocks



Visual and functional permeability



Building Template along rue de la Loi



Height of construction on rue de la Loi

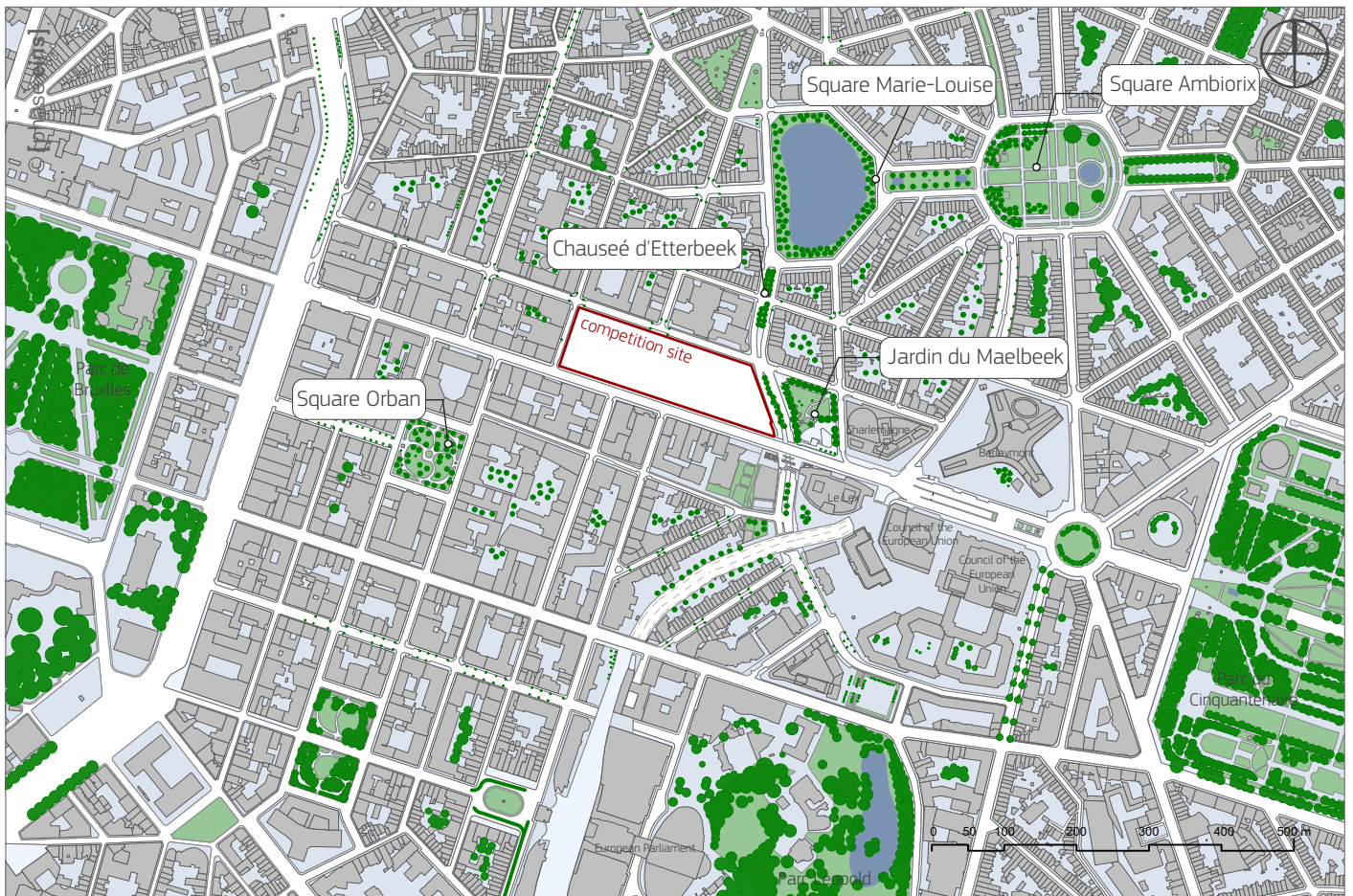
- C.40 The attention is drawn to specific rules for lots larger than 15.000 sq m, which apply to the Loi 130 site or block B:
- On the site, maximum two high rise buildings are allowed with maximum heights of 114 m on the West side of the lot and 165 m on the East side of the lot.
 - The maximum footprint of buildings shall be reduced to 55 % of the site area while outdoor spaces overhung by buildings may be treated as non-building land on condition that they do not exceed 25 % of the non-building land.
- C.41 A new regulatory framework for the Loi 130 site, the “Plan d'aménagement directeur” (PAD), will be published by the Brussels-Capital Region to lay down detailed rules for the site.

C.III | Urban setting and open spaces

Immediate surroundings

- C.42 The Loi 130 site is located between two distinct urban areas (Leopold Quarter to the south and the historic commune of Saint-Josse-Ten-Noode to the north). It is centrally located in the public transport network, between the core of international institutions and "the pentagon".
- C.43 With an area of 23,906 sq m, the site has a street frontage of some 300 m on its longer side and extends back from the street by some 85 m.
- C.44 Loi 130 is an urban site, surrounded by four streets: main streets Rue de la Loi and Chaussée d'Etterbeek, and secondary streets Rue de Spa and Rue Joseph II. The latter have an accentuated downhill topography, which creates a middle height difference of 6.2 m between Rue Joseph II and Rue de la Loi, or a maximum of 10 m along the Chaussée d'Etterbeek.
- C.45 Chaussée d'Etterbeek runs along the east side of the site, through the former valley of the Maelbeek river, passing underneath Rue de la Loi. This street enjoys a quieter and greener atmosphere and is sided mostly by existing houses and housing developments from recent years. The Chaussée d'Etterbeek connects to residential areas with lush gardens to the north (the "Squares" quarter), and to mixed institutional and residential areas to the south.
- C.46 On the other side of Chaussée d'Etterbeek there is the Jardin du Maelbeek, a small municipal park which connects Chaussée d'Etterbeek with Rue de la Loi through platforms at different levels. While Chaussée d'Etterbeek and Rue de la Loi are important thoroughfares, the other surrounding streets Rue Joseph II and Rue de Spa are used largely by local traffic.
- C.47 With its pivotal location between busy office areas and green residential neighbourhoods, the Loi 130 project must take into account existing traffic and outdoor spaces in its surroundings, in order to enhance connections around the neighbourhood.

Loi 130 site



Vegetation



Parc du Cinquantenaire



Parc Leopold



Jardin du Maelbeek



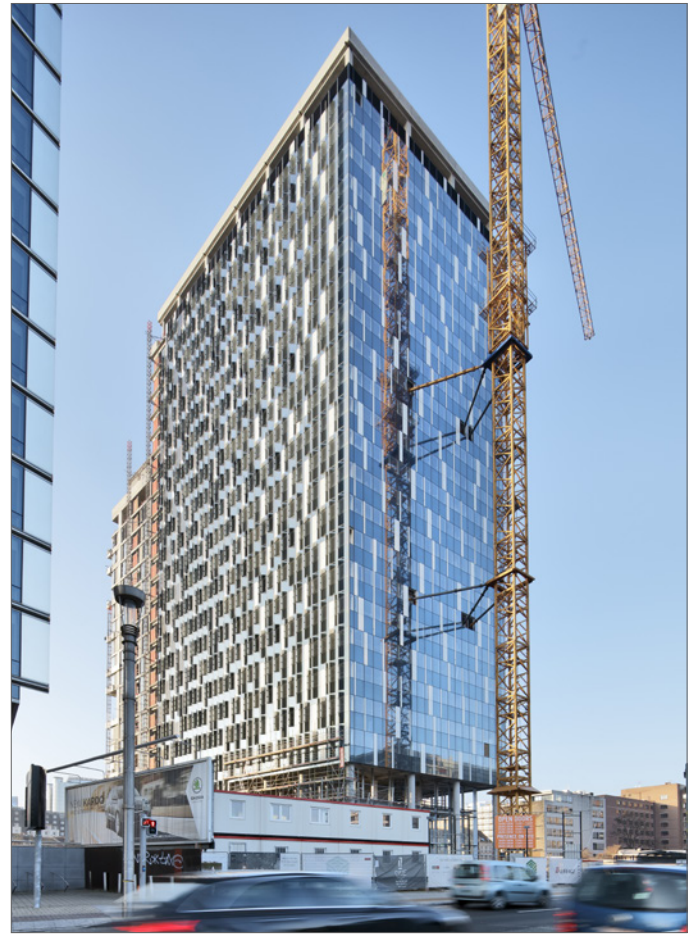
Square Marie-Louise

Existing vegetation

- C.48 Besides the few terraces placed inside the Loi 130 site, the following green spaces are located close to the site and in walking distance:
- Jardin du Maelbeek – across from Chaussée d'Etterbeek, composed of a series of platforms at different levels which mix playground and relaxing areas. A small river symbolizing the Maelbeek recalls the former presence of the stream that used to flow in the open air, which is now channelled through an underground collector.
 - Square Marie-Louise and Square Ambiorix – inter-connected gardens, north of Chaussée d'Etterbeek. Square Marie-Louise contains a large pond surrounded by vegetation that shields this natural space from its urban surroundings.
 - Square Orban – located across the Rue de la Loi in the heart of the European Quarter, it contains a park with large trees and recreational areas.
 - Chaussée d'Etterbeek itself – serves as an urban "boulevard", with a range of large trees in its centre, and smaller trees on each side of the road. These trees are not listed in the Capital Region's inventory of noteworthy trees.
 - Parc du Cinquanteaire – covering an area of 30 ha, these large public urban park borders the European Quarter in the East. Especially in summer the park is famous for its recreational quality.
 - Parc Léopold – is located in the European Quarter in the Maelbeek valley and adjacent to the European Parliament and the Museum of Natural Science in Brussels. The Museum of European History is located in the former Eastman building in-side the park. This public park was once designed in the style of English gardens.
 - Parc de Bruxelles – once called the "Royal Park", was the first public park and is today an important recreational area in the centre of Brussels. It is characterized by its wide avenues and its symmetrical design.



The ONE, current situation, copyright: Atenor; architects B2Ai



The ONE, current situation, copyright: Atenor; architects B2Ai



The ONE, view from Maelbeek park, copyright: Atenor; architects B2Ai

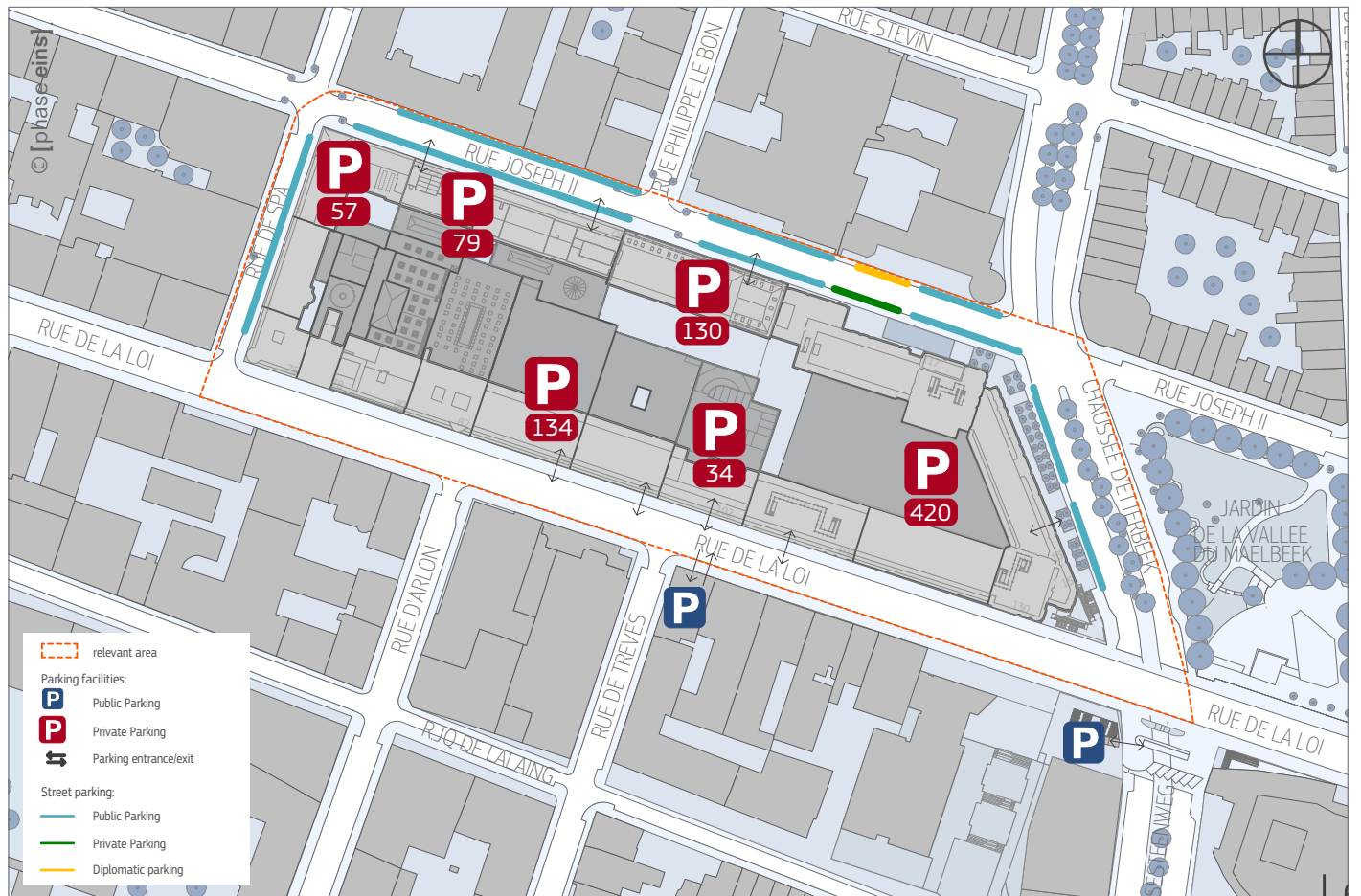


The Realex, copyright: Assar architects

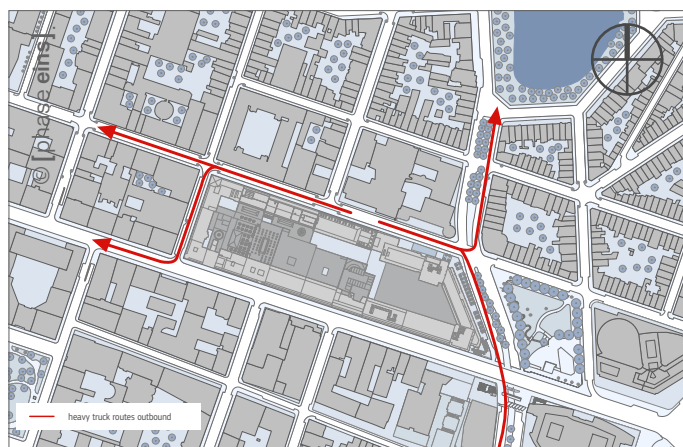
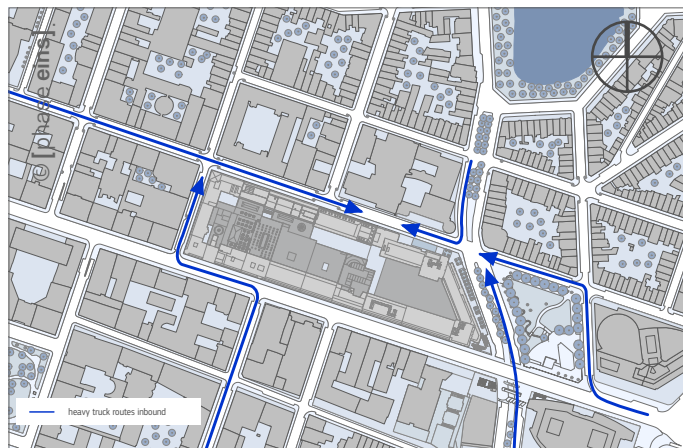
C.IV | Buildings and development projects in the surroundings

- C.49 Two high-rise buildings are under construction opposite Rue de la Loi, south of the site: "the One Brussels" (Brussels Europa, height 93 m) and "Realex" buildings (114 m). Both towers apply RRUZ requirements, in terms of density and mixed-use: "One Brussels" includes office, residential and retail areas, and "the Realex" tower building includes offices, retail and public spaces. In between both buildings there will be a public space, which will serve as a connection between Rue de la Loi and Rue Jacques de Lalaing at a lower level.
- C.50 In front of the project "the One Brussels" a new vertical circulation is foreseen to link the levels of the Rue de la Loi and Chaussée d'Etterbeek.

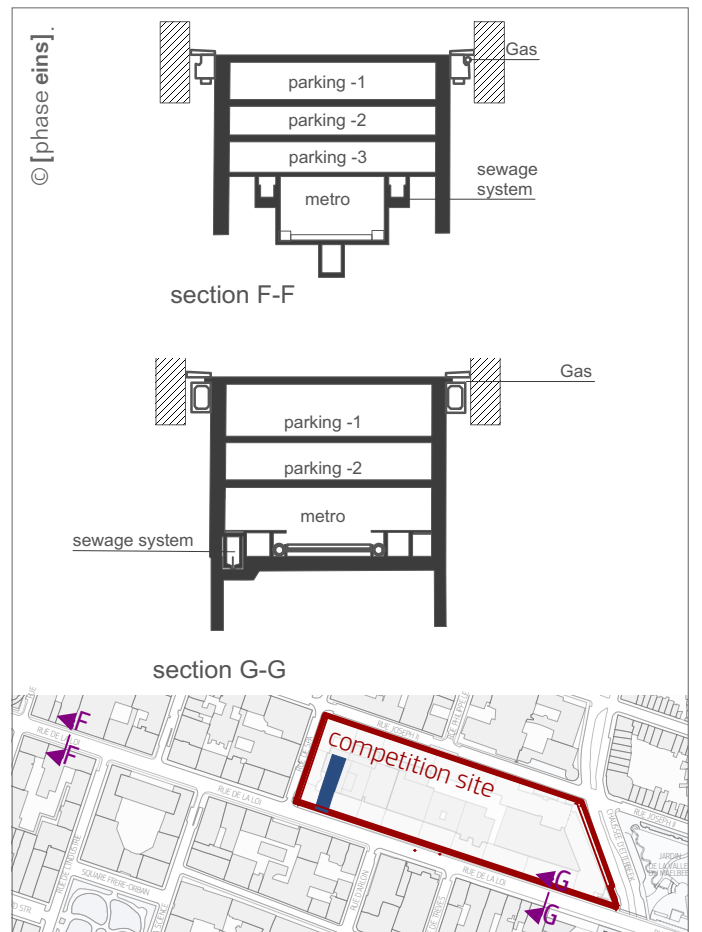
The One
The Realex



Parking



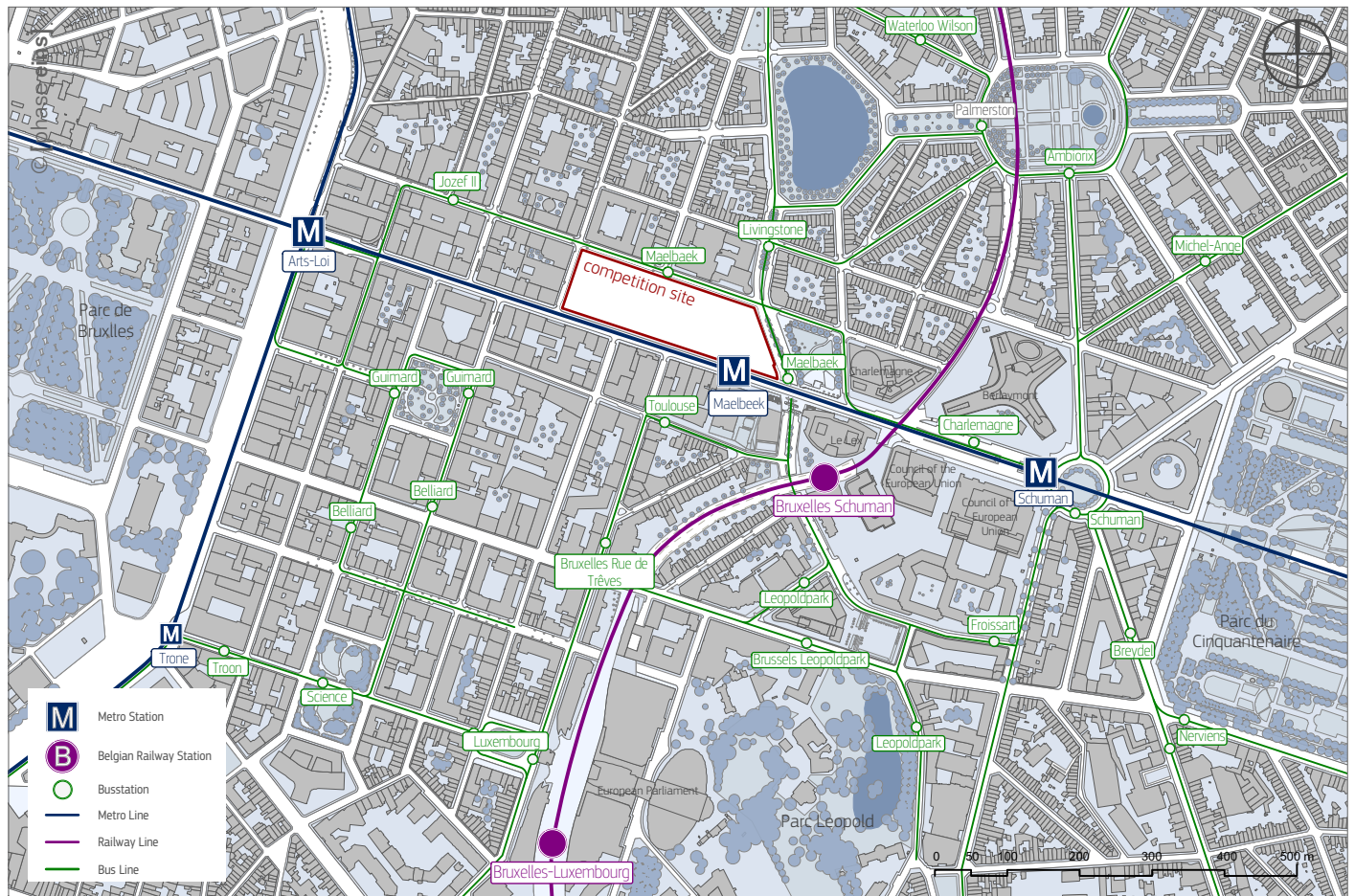
Heavy load traffic inbound and outbound



Public car park under Rue de la Loi

C.V | Transport and Accessibility

<p>C.51 The Loi 130 site is located at an important node, both in terms of traffic and public transport, as it is connected to metro stations and close to two railway stations (Schuman and Luxembourg stations).</p>	<p>C.05 The Brussels code for air, climate and energy (COBRACE) grades this area a red zone/zone A area, because of its location within the zones most connected to public transport.</p>	<p>C.52 Rue de la Loi is a major transport axis with heavy traffic entering Brussels, as it has easy access from Brussels National Airport (situated 15 km away) and the E40 highway through the "Cortenbergh" tunnel.</p>	<p>C.53 Traffic on Rue de la Loi is heavy between the exit from the tunnel and the "Arts-Loi" crossroad, at the entrance of the historic quarter. This road is very busy at peak hours, particularly on the two left lanes which have a notable lack of capacity. The effect carries over into several crossroads upstream on Rue de la Loi.</p>	<p>C.54 Traffic in the area may be disrupted in the event of European Summits. During these periods, the Schuman metro station is often closed and vehicular traffic is interrupted around the Schuman roundabout. As a result, the routes for some public buses are deviated and an increase in the intensity of traffic is observed in the area.</p>	<p>C.55 Chaussée d'Etterbeek is also an important roadway for the mobility in the European Quarter. It is a north-south axis that connects the densely inhabited districts of Schaerbeek and Ixelles; it is also a busy roadway, used by several bus lines. Furthermore, Chaussée d'Etterbeek intersects the underground railway lines 1 and 5 right next to the Loi 130 site, resulting in an important connection node which currently consists on a low-quality space.</p>	<p>C.06 Furthermore, the intensity at the Etterbeek-Loi connection node is intensified during the European Summits, since the Schuman metro station is closed and therefore Maelbeek metro station, and mostly its access from Chaussée d'Etterbeek, ensures the accessibility to the European Quarter.</p>	<p>C.56 "Parking Loi" is an underground public car park beneath Rue de la Loi, which contains 1,115 spaces on two (sometimes three) levels. The car park is 630 m long and runs from Chaussée d'Etterbeek to the "Arts-Loi" junction. Access to the car park by car is either from Rue de la Loi, Chaussée d'Etterbeek or Rue de la Science.</p>	<p>C.57 Pedestrian access from street level is from n°19 and n°85 Rue de la Loi, as well as from the junction between Rue de la Loi and Chaussée d'Etterbeek at a lower level. The car park is directly connected to Maelbeek metro station but is independent of adjacent buildings. It is currently managed by the firm "Interparking" until end of 2019.</p>	<p>C.07 On Rue de la Loi itself, most buildings own a private car park, and each of the buildings on the Loi 130 site (except L78) has its own car park reserved for its staff.</p>	<p>C.58 Parking is not allowed on Rue de la Loi itself. It is allowed on both sides of Rue Joseph II and on the odd-numbered side of Chaussée d'Etterbeek. Several of these spots are reserved (diplomatic missions, deliveries, disabled people). Delivery areas are reserved between 7.00 am to 5.00 pm; outside these hours, these spots are available for parking. Road Access and Traffic. Parking around the Loi 130 site is limited and subject to payment.</p>	<hr style="width: 100%;"/> <p>Position in the transport network</p> <hr style="width: 100%;"/> <p>Road Access and Traffic</p> <hr style="width: 100%;"/> <p>Underground public and private parking</p> <hr style="width: 100%;"/> <p>On-street parking</p>
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Public transportation



Metro access Maelbaek, Rue de la Loi, level 0



Metro access Maelbaek, Chaussee D'Etterbeek, level -2



Metro access Maelbaek, Rue Joseph II



Passage Rue Joseph II

Public Transport

C.59 Maelbeek metro station is on the competition site. Located between Arts-Loi and Schuman stations, it serves lines 1 and 5 of the Brussels metro. The station was built in 1965, renovated in 1999 and re-inaugurated in 2000. The walls of the station are covered with white tiles and are decorated with portraits by the artist Benoit van Innis. In 2013, it was equipped with lifts to make it accessible to people with reduced mobility.

Metro Station
Maelbeek

C.60 The metro station currently has three entrances:

- One entrance inside the Loi 85 building, across the street to the site
- One entrance is located in the Loi 130 building. This entrance is accessible from Rue Joseph II, via a public passageway crossing the Loi 130 site from Rue Joseph II to Rue the la Loi.
- One entrance onto Chaussée d' Etterbeek

C.61 One new entrance for people with reduced mobility (PRM) is planned in the near future inside the Loi 95 building, which will access the quay directly.

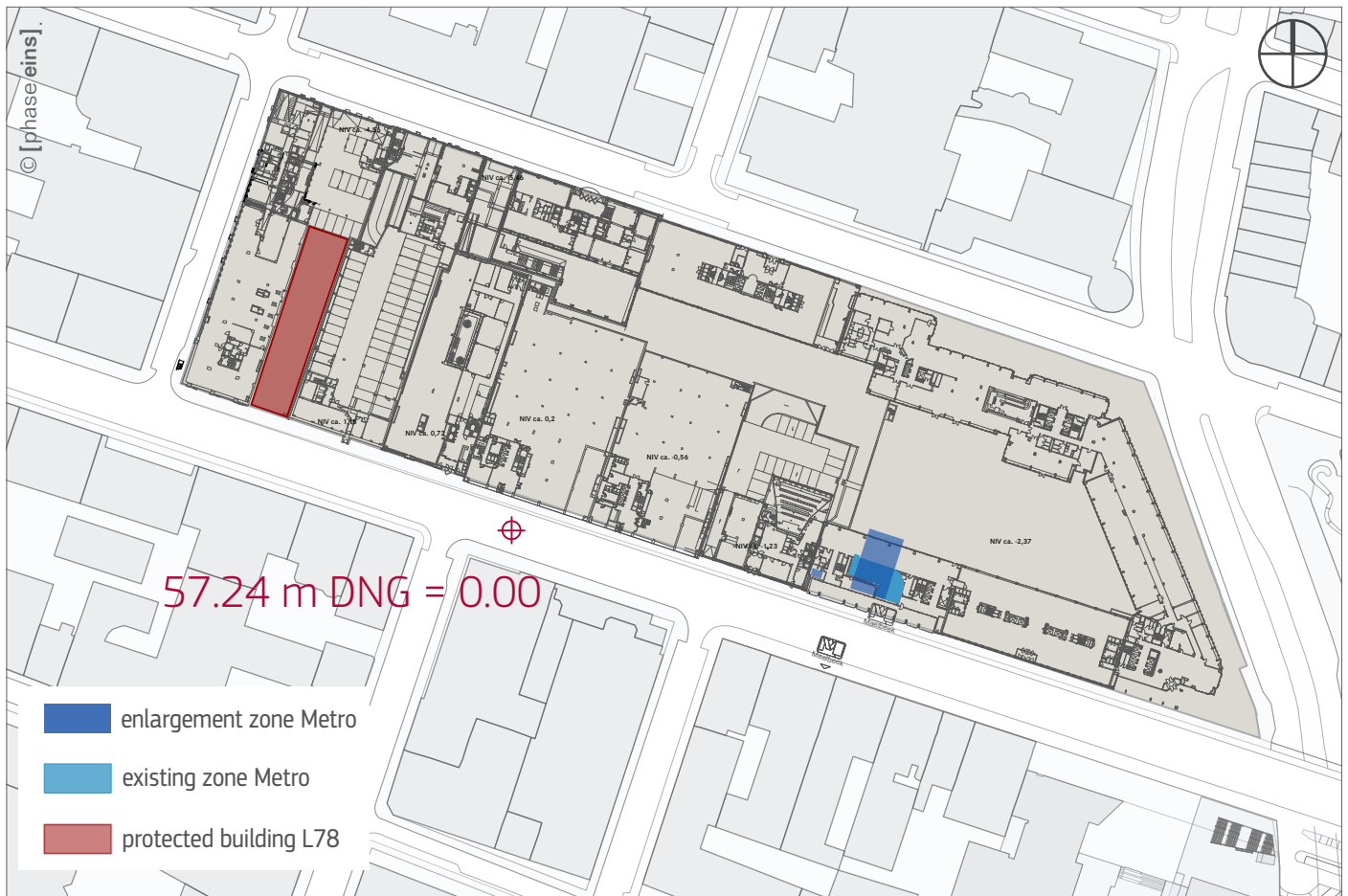
C.08 The estimated peak flow at the exit situated within the Loi 130 site is 3,000 people per hour.

C.09 As shown in the plan in the opposite page, the site is served by several local bus lines: 21, 27, 64, 22, 59 and 64.

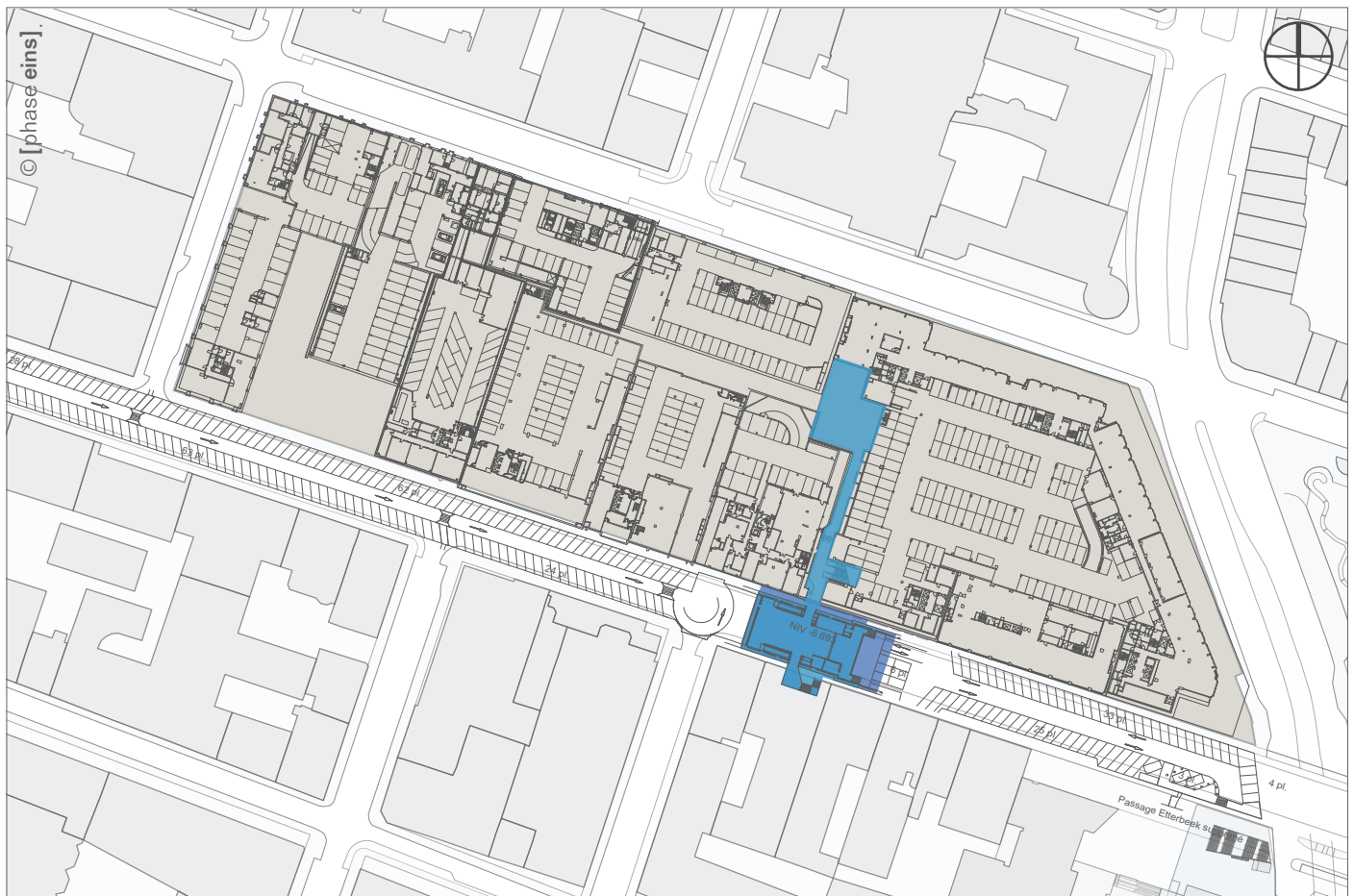
Bus and Tram

C.62 Schuman station, one metro stop east of Maelbeek, is an intermodal station that combines two railway stations and a metro station in the heart of the European district. From Schuman station, trains to Brussels national airport take 15 minutes.

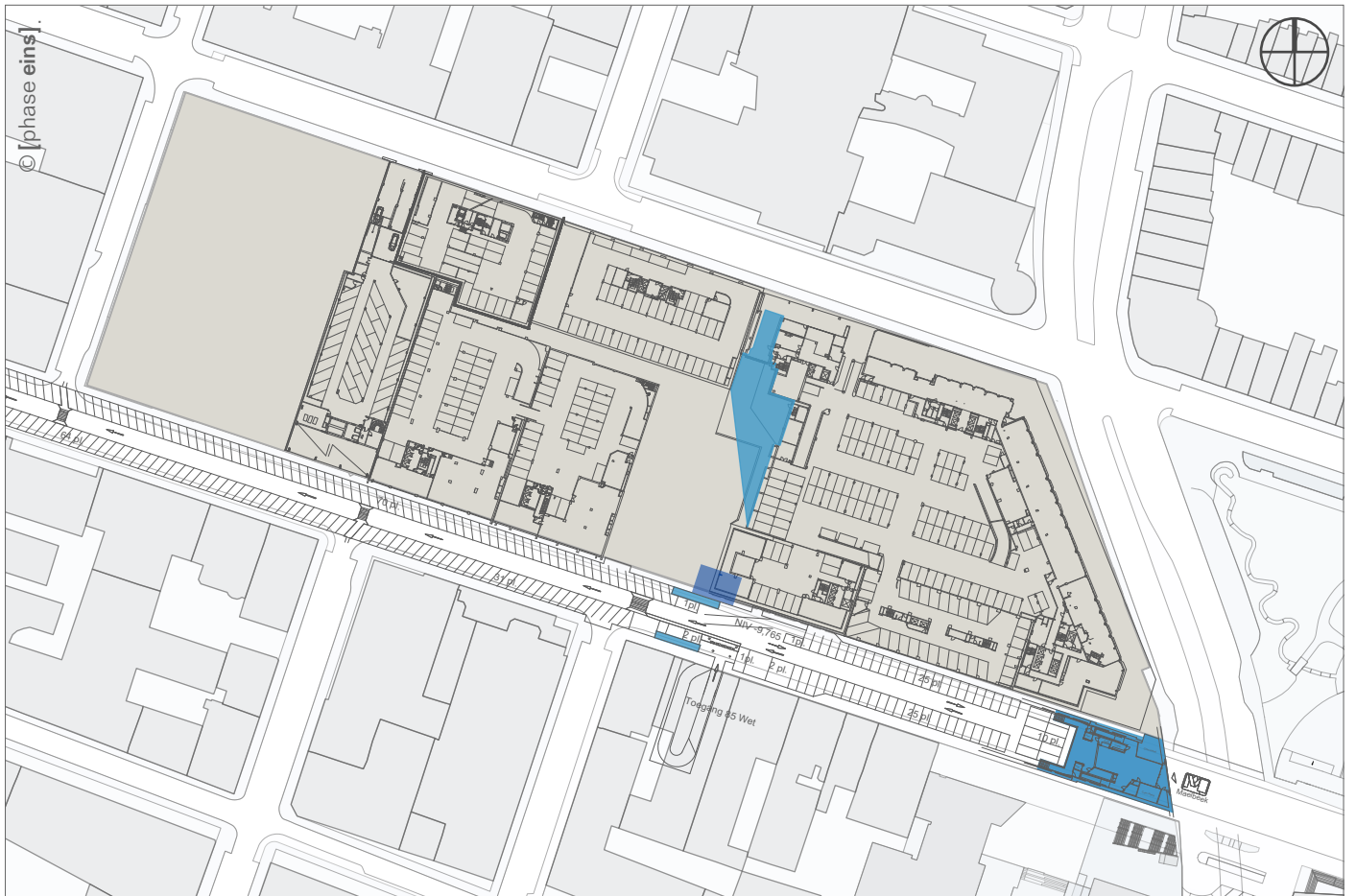
Railway



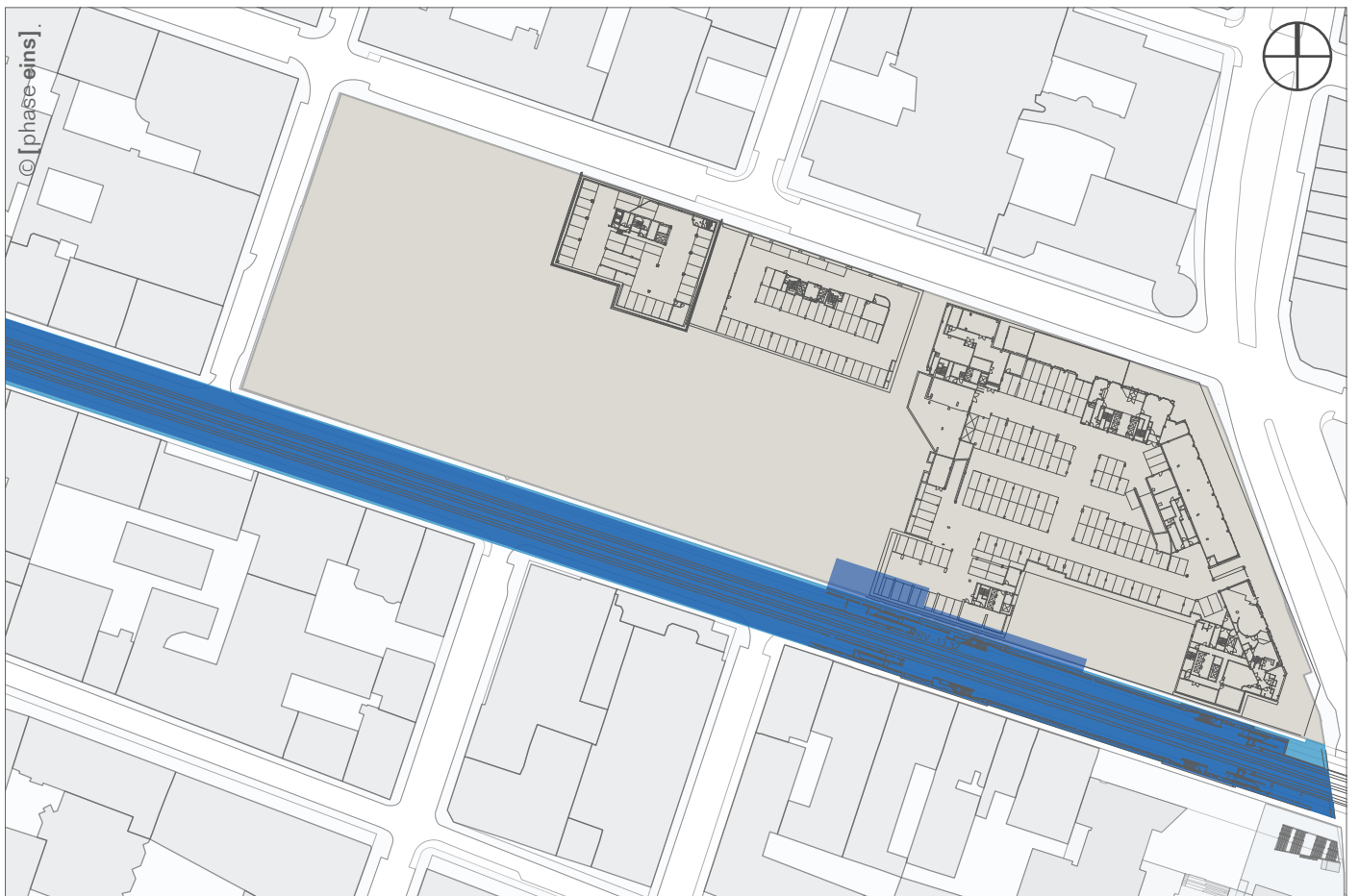
Metrostation „Maelbeek“, level 0



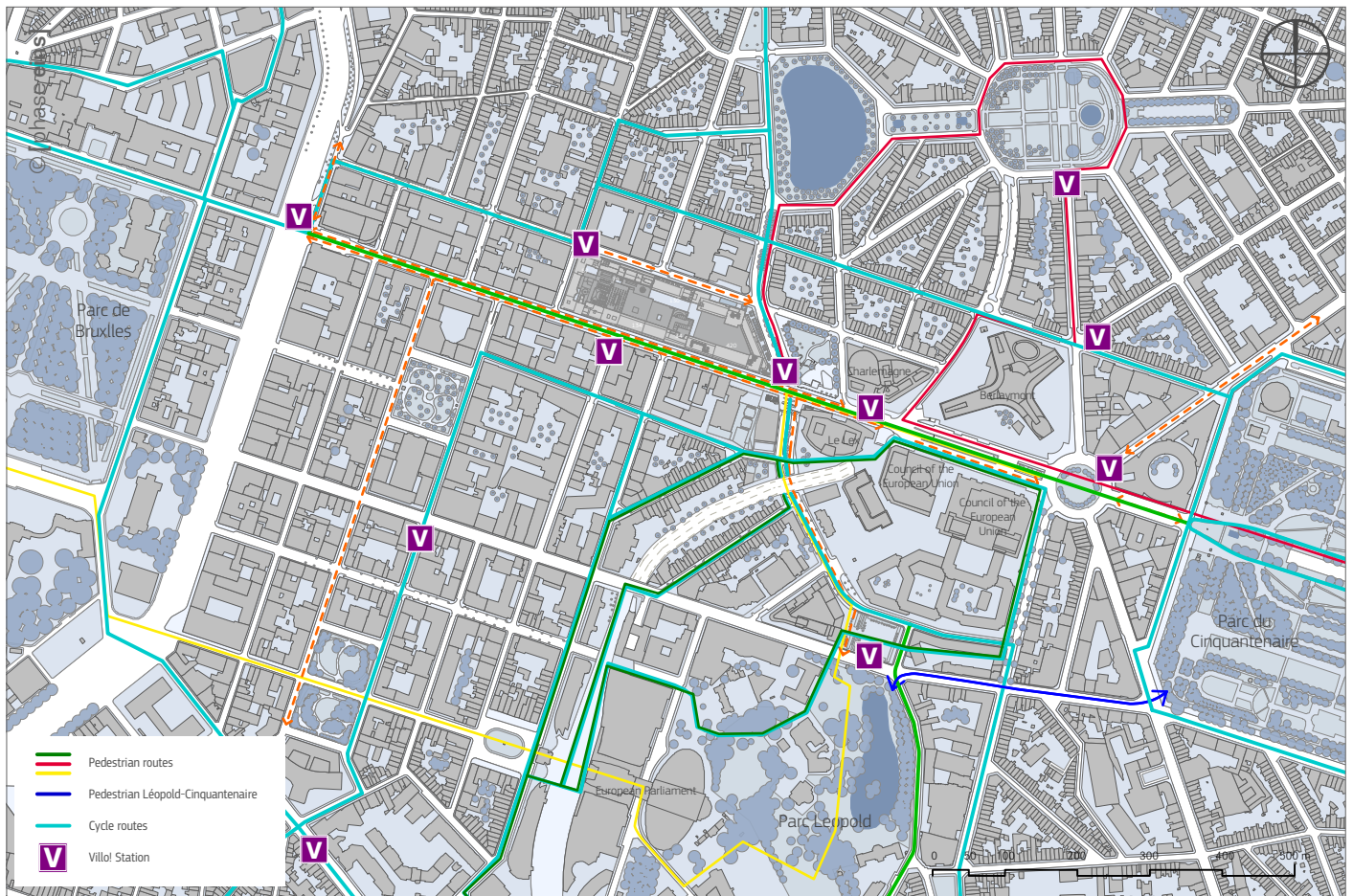
Metrostation „Maelbeek“, level -1



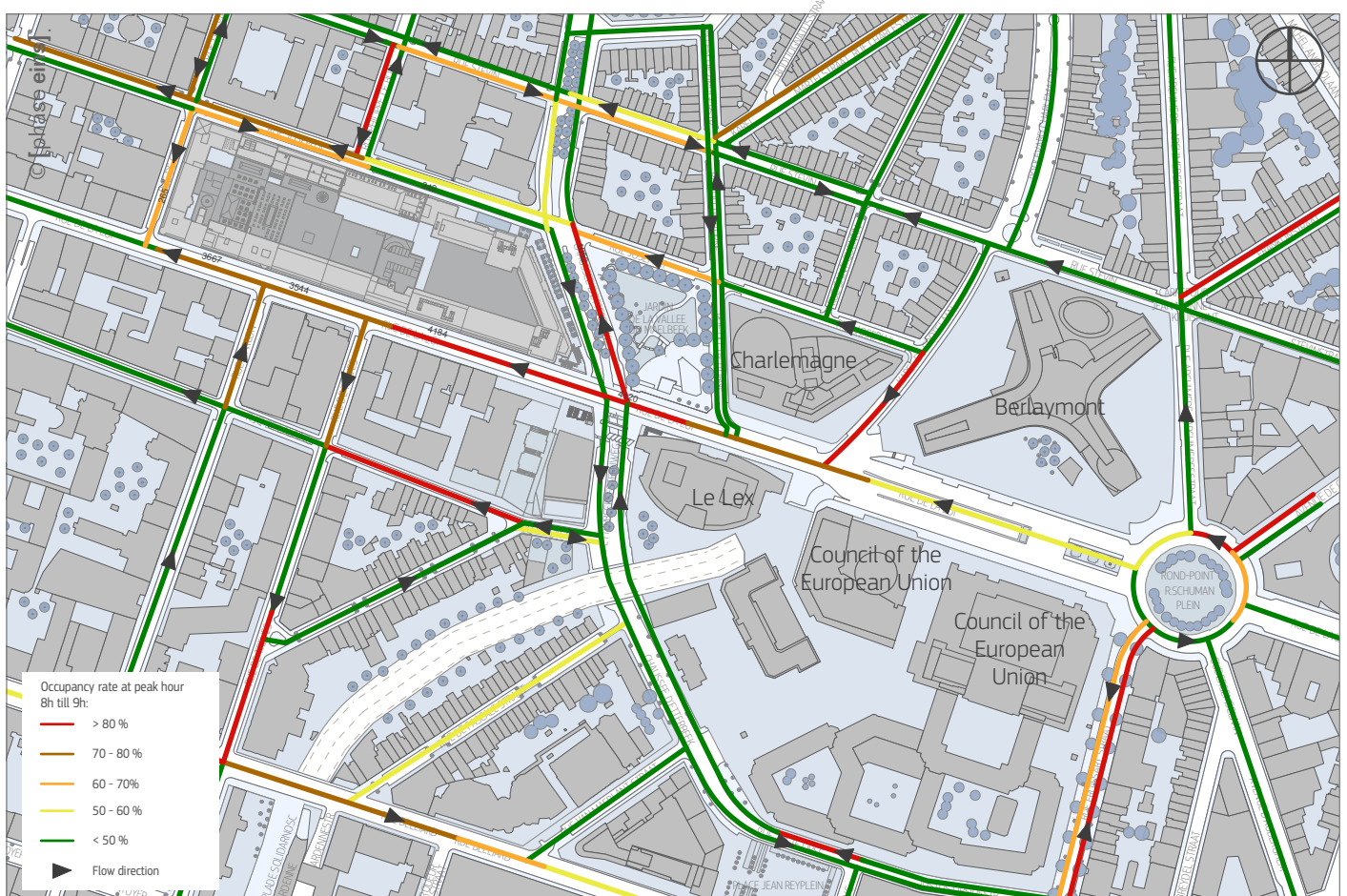
Metrostation „Maelbeek“, level -2



Metrostation „Maelbeek“, level -3



Bicycle itineraries



Rate of road occupancy

Pedestrian Traffic

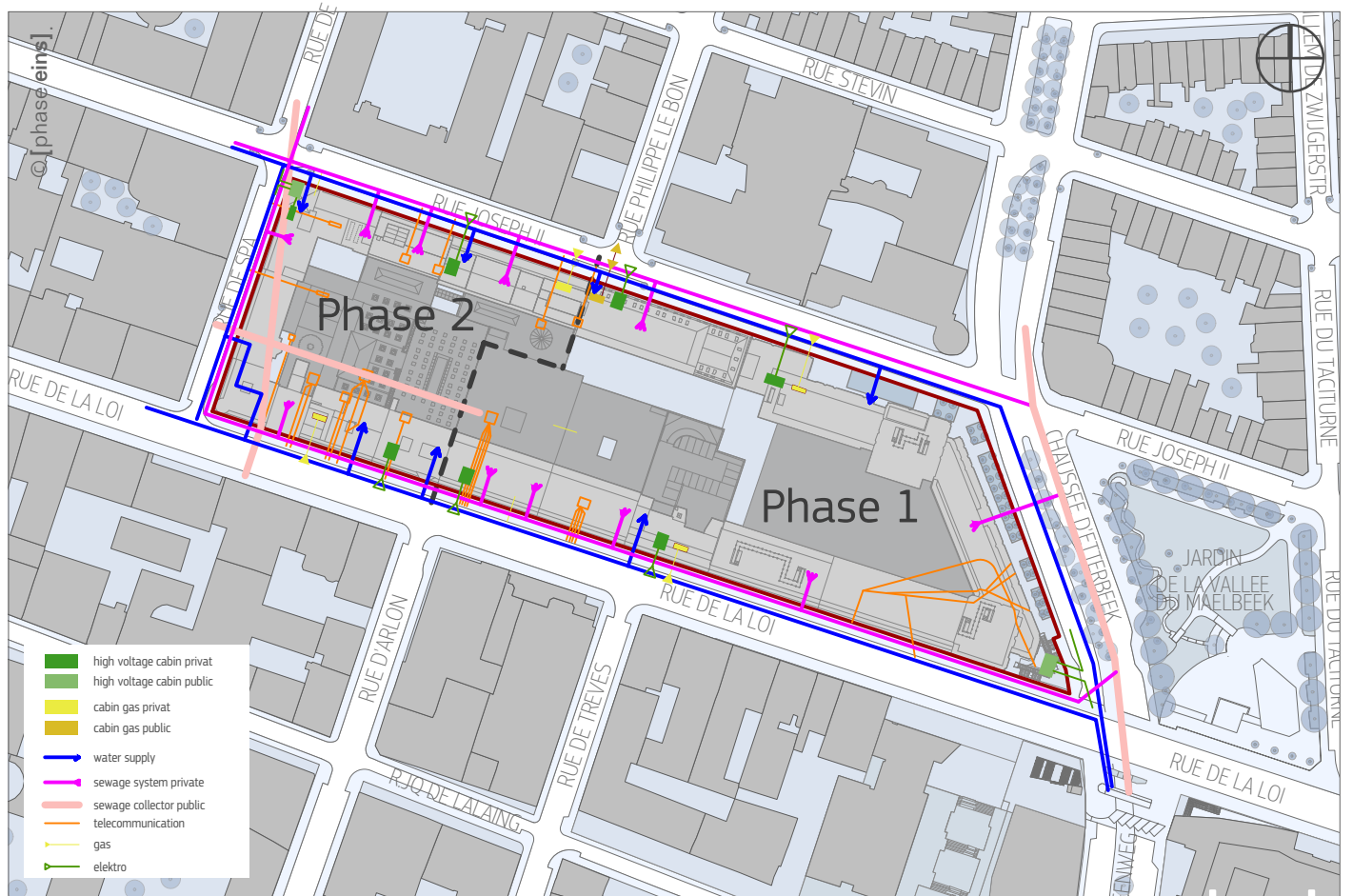
- C.63 There are several pedestrian routes in the neighbourhood (see diagram on the opposite page):
- The "European" promenade (in yellow)
 - The connection between European institutions (in green)
 - The "Art Nouveau" promenade (in red).
- C.64 Pedestrians can move between Chaussée d'Etterbeek and Rue de la Loi using escalators located at the side of European Commission's buildings. The first escalator leads to an intermediate landing. From there, you can access Parking Loi, walk under Rue de la Loi, or take the second escalator leading directly to Rue de la Loi.
- C.65 It will also be possible to connect from Chaussée d'Etterbeek to Rue de la Loi through the stairs which will be located in front of the "One Brussels" building.
- C.66 Also, Rue de la Loi was renovated in 2003, and the pavements on either side were widened to 4 m, of which one meter is reserved for a one-way bike lane. Part of the Chaussée d'Etterbeek was also renovated in 2013 and the pavements widened from 1.7 m to 3.8 m on the west side and to 4.8 m on the east side.
- C.67 Currently there are 12 adapted entrances for PRM from the street to the buildings on site.

Bicycle Traffic

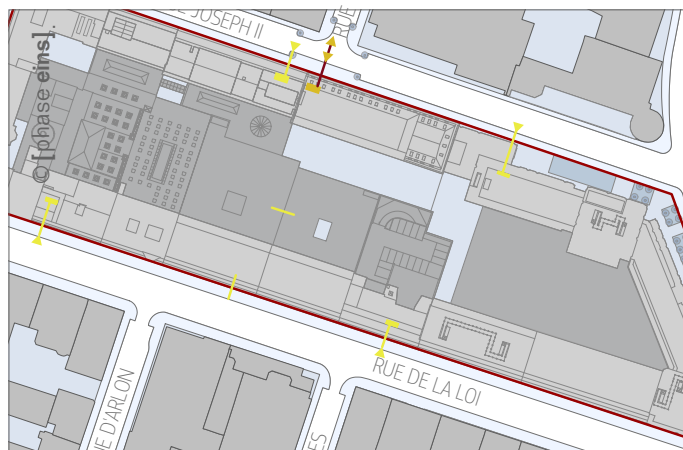
- C.68 The European Quarter is crossed by numerous regional cycle paths (Itinéraires Cyclables Régionaux, or ICR).
- C.69 Rue de la Loi has one-way cycle paths on each side, located on the sidewalks and differentiated from the pedestrian path only by their red colour and bicycle icons printed along.
- C.70 Currently, it is estimated that an average of 900 cyclists per hour circulate on Rue de la Loi. Peak hours are between 8.00 and 9.00 am.
- C.71 The City of Brussels has a bike sharing system, "Villo", which has numerous bike stations close to the Loi 130 site.

C.VI | Commerce and Social Infrastructure

- C.72 The surroundings on the Loi 130 site reflect the low functional diversity of the neighbourhood, as the retail infrastructure mostly serves surrounding offices.
- C.73 Accordingly, shops operate like extensions of the offices and close after 5.00 to 6.00 pm, as demand drops. Also, the Quarter has few pedestrians at weekends and shops are not encouraged to open outside office hours. Besides snack bars and small restaurants, retail options in the neighbourhood are repetitive and limited, being fleshed out only with banks, hairdressers and pharmacies.
- C.74 The few shops along Rue de la Loi do not manage to animate the street, nor do they attract people into the neighbourhood to make it a commercial destination rather than a professional and tourist destination.



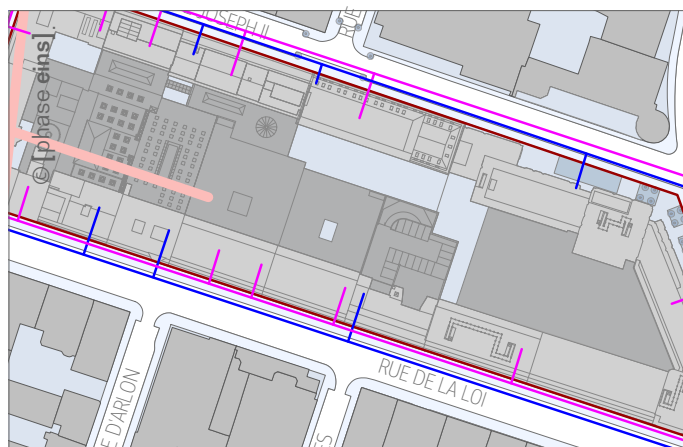
Utilities



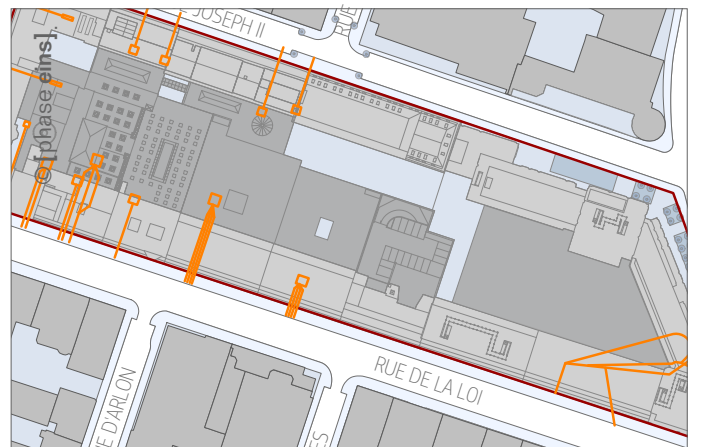
Gas



Electricity



Water and sewage



Telecommunication

C.VII | Technical Facts

Technical Supplies and Sewerage

- C.75** The road profiles of the adjacent streets carry the supply and disposal conduits of all required utilities. The principal known lines crossing the premises are represented, together with their outlets, in the information plan 1 and on diagrams.
- C.10** The following supply and disposal media are therefore available: Brussels Mobility (cables, rainwater gutters, street lighting, road signs, metro), SIBELGA (electricity and gas networks), Vivaqua (water supply and sewerage systems) and Proximus (telecommunications networks).
- C.11** There is no district heating available in the neighbourhood.
- C.76** The capacity of the electricity production network should bear the electricity supply needs to the site by 2025.
- C.12** There are currently two electrical high voltage cabins, owned by SIBELGA on the site, Joseph II-67A and Etterbeek-Loi, (see Information plan 1 and diagram on the opposite page) which are used as supply points for the low-voltage public grid. These stations will have to be maintained or reproduced for the Loi 130 project, in agreement with SIBELGA.
- C.77** The capacity of the gas production network should bear the gas supply needs to the site by 2025.
- C.78** There is currently one main gas station, owned by SIBELGA on the site, CEE Joseph II, which is used as supply point for the gas public grid. This station will have to be maintained or reproduced for the Loi 130 project, in agreement with SIBELGA.

 District Heating

 Electricity

 Gas

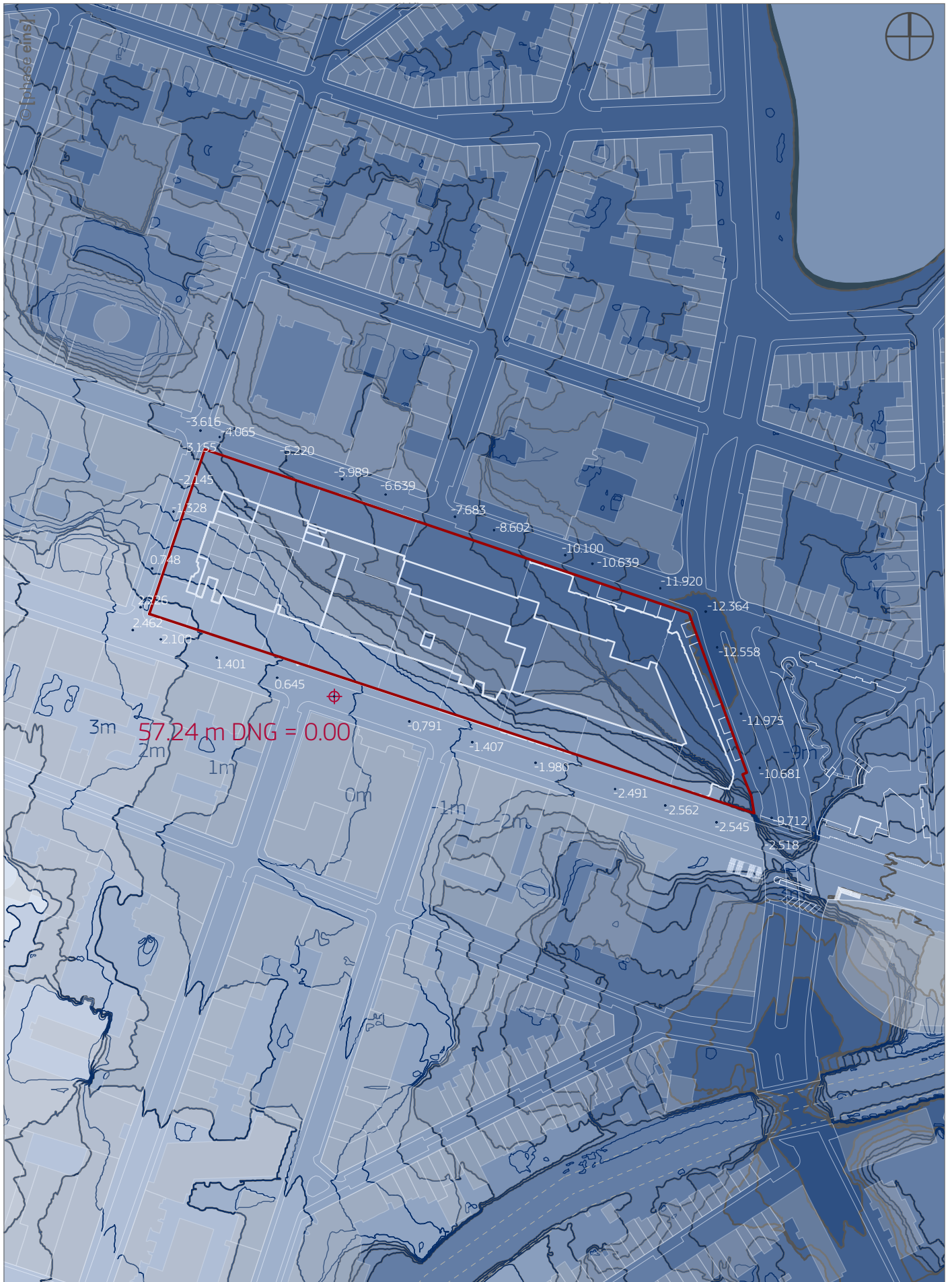
Construction Pollution

- C.79** Asbestos inventories are regularly drawn up for all of the buildings in the Loi 130 site. No danger was reported and no degree of urgency was found.

Topography and Subsoil

- C.80** The site is situated at latitude 50°90' North and longitude 4.53° East.
- C.81** The topography of the site is quite specific. The gradient at Chaussée d'Etterbeek results of the former Maelbeek valley at the beginning of the Park. The terrain has a slope in two directions – one from Rue de la Loi down to Chaussée d'Etterbeek, the other from Rue de la Loi down towards Rue Joseph II. Along Rue de la Loi there is a difference of 11 m between the Boulevard du Regent and the Park du Maelbeek. Chaussée d'Etterbeek is located approximately 8 m below Rue de la Loi. The difference in height along Rue de la Loi between Rue de Spa and the bridge over Chaussée d'Etterbeek is 5 m. The difference between Rue de la Loi and Rue Joseph II along Chaussée d'Etterbeek is approximately 10 m.
- C.82** There is a high variability of facies and thickness on the project site. This variability is due to the topography and the proximity of the Maelbeek valley which modified the existing layers through erosion and which generated the deposit of other materials (alluvium) of various types. Human activity has also modified the surface layer by generating cuttings / embankments that vary in thickness according to the existing topography at the time and the one prevailing today.

 Topography



Topography

- C.83 The site is comprised primarily of the following facies:
- Surface backfill, man-made, heterogeneous and of variable thickness
 - Silt and alluvium (sometimes clay and/or peat)
 - Alluvial sand and gravel (valley bottom)
 - Brussels sands (on the western side of the valley, to the west of the project site)
 - Ypresian clayey sand and then clay complex
 - Landenian sand and sandy clay complex
 - Chalk and primary basement. Ledian facies are not present
- C.84 Further details can be found in Appendix 3, the “Report on the Geotechnical and geological situation”.
- C.13 It has been noticed that the structure of the existing buildings has been by far over dimensioned structurally. This has to be taken into account when planning demolition of the existing site.
- C.85 As a matter of fact, is it impossible to enter with bore drilling machinery within the existing building. It is assumed that the foundations of existing buildings are done using piles and mud walls, due to water level in the Maelbeek valley. The situation is not known currently and it is complicated to gather more detailed information with regards to the underground levels. Candidates must bear in mind that they might encounter unexpected problems when developing the future foundations.
- C.14 Special attention must be taken to the presence of the metro tunnel along the existing building under Rue de la Loi.
- C.86 According to available information around the project site, levels of groundwater table are mentioned around +60.00 m in upper part (towards Rue de Spa) and almost on the surface at the Chaussée d’Etterbeek. The groundwater table follows a natural gradient through the most permeable layers.
- C.87 It is possible to find a groundwater table in the Brussels layers, and to have some connections between draining layers of sand alluvial gravels and the summit of Ypresian sandy-clay layer.
- C.15 Depending on the depths attained for the foundations, artesian water table may be encountered beneath the Ypresian clay layer (in the Landenian sands) or locally higher in the Ypresian sandy-clay layer. It will be necessary to place piezometers in different layers in order to highlight these phenomena as well as along the West-East axes in the same horizon in order to determine the hydraulic gradient probably existing because of the proximity of the Maelbeek valley.
- C.16 There is no other major pollution known on site.
- C.88 There remains no archaeological trace under the site. They have all been cleared prior to the construction of the Loi 130 Building.
- C.89 All the information about the remains including the water mill have been recorded in the atlas n° 45-46 of Brussels - Quartier Nord- Est n ° 841 for an area of 6,663 sq m.

 Subsoil

 Ground Water

 Soil Contamination

 Archaeology

Climate and Environmental Influences

- C.90 Belgium has a temperate maritime climate, characteristic of European Atlantic coasts and influenced by the Gulf Stream and proximity to the ocean. This type of climate is generally characterised by mild, rainy winters and cool, humid summers.
- C.17 City microclimates influence local conditions, as the numerous concrete constructions absorb a significant amount of heat, which they release at night, making temperatures in the city higher than in the countryside.
- C.91 The following data are derived from observations by a weather station near the site (in Uccle, one of the 19 municipalities of Brussels).
-
- Mean annual temperature: +11.93 °C
 - January temperatures: mean +3.5 °C
 - July temperatures: mean +18.4 °C, maximum +23 °C
 - Mean annual hours of sunshine: approx. 1,734 h/an
 - Mean annual precipitation: approx. 750 mm
-
- C.92 The prevailing wind direction in Brussels is from South-West direction (250 °), the East-South-East direction is the less windy.
- Mean wind velocity: approx. 3.3 m/s
 - 2 to 4 m/s within the valley
 - 6 to 7 m/s at the shore
-
- C.18 As wind is a particularly sensitive item in the area, a wind impact study will be necessary during the project, taking into account the urban context and the existence of several high buildings on and around the site.
- C.93 The methodologies (analyses, configuration of the network, etc.) and interpretations (statistics, physicochemical, according to sources, etc.) of the measurement results of the external air monitoring network are the subject of technical reports accessible via the State of the Environment section of the Brussels Environment website and the Documentation Centre.
-
- C.94 The level of air pollution around the site depend of the traffic, the medium value of CO₂ is about 450 ppm.
- C.95 The internal air quality is defined in the standard EN 16798-3:2017 which describes four categories, namely INT 1, INT 2, INT 3 and INT 4. It is compulsory to respect the category INT 2

Acoustics

- C.96 The noise sources composing the sound environment for the project are:
- Road traffic on Rue de la Loi (including the exit of the Cinquanteenaire road tunnel) and further south, road traffic on Rue Belliard (including the entrance to the Cinquanteenaire / Reyers road tunnel)
 - Road traffic on local roads (Chaussée d'Etterbeek and Boulevard Charlemagne)
 - Road traffic at access points to the car parks (Chaussée d'Etterbeek and its side road)
 - Rail traffic on train tracks and in Schuman station,
 - Other urban noise sources, including overflying planes.
- C.97 Among these noise sources, traffic on Rue de la Loi is the most significant for the project (noise level 75 dBA), as well as traffic on Chaussée d'Etterbeek and Rue Belliard (70 dBA).
- C.98 Regarding the vibratory impact, the two main sources are:
- Road traffic, mainly from the Loi tunnel
 - Rail traffic, from metro and railway lines
 - Measurements carried out as part of the impact studies for the new Watermael-Josaphat link (passing under the Residence Palace building) show that current vibrations generated by rail traffic are well contained and do not cause any discomfort.
 - It is at Boulevard Charlemagne, and more particularly the vibrations caused by railway line L 161, that the sensitivity threshold is reached.
 - At a later stage, an impact study will have to be carried out to evaluate the acoustic and vibratory impacts on the site itself, and particularly the impact of the metro line along the Rue de la Loi.

Seismic Risk

- C.99 Belgium is located in an intra-plate domain characterized by low rates of tectonic deformation. Seismic activity is considered to be low and moderate.
- C.100 The Loi 130 site of the future project is located in a seismic zone O1 where the seismic acceleration is of 0.4 m/s^2 or 0.04 g . This is considered as a very low seismicity zone where it is not necessary to carry out seismic checks. Therefore, there is no specific instruction regarding seismic risk for this project.

Geothermal Potential

- C.101 Geothermal capacity must be confirmed by tests of specific thermal response to be carried out on the site. The phasing of the project should also be taken into account in order to determine the optimum field power of the geothermal probes

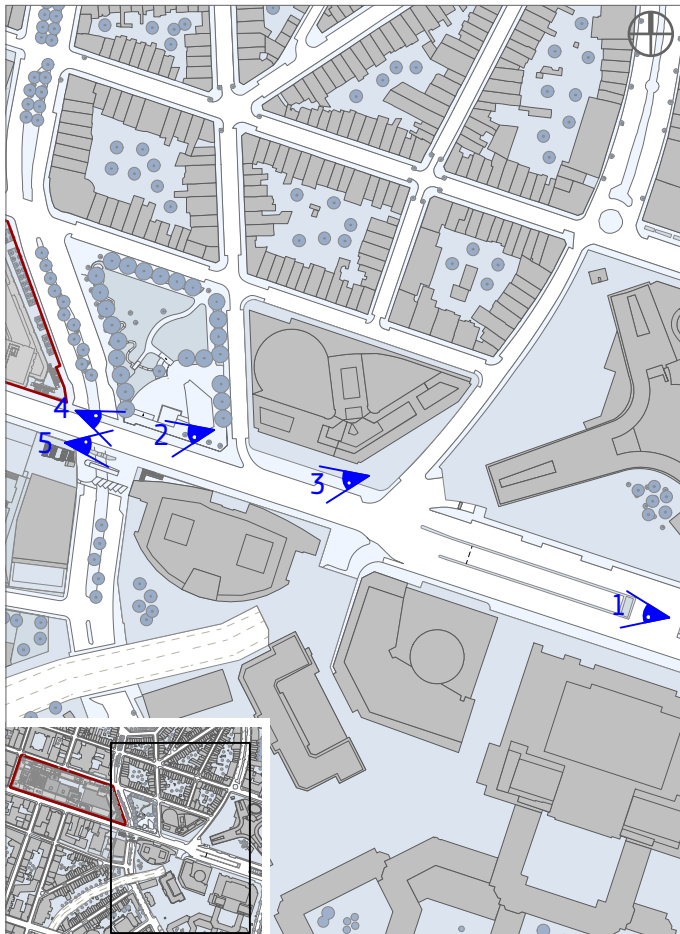


Photo viewpoints 1



Image 1



Image 2



Image 3



Image 4



Image 5

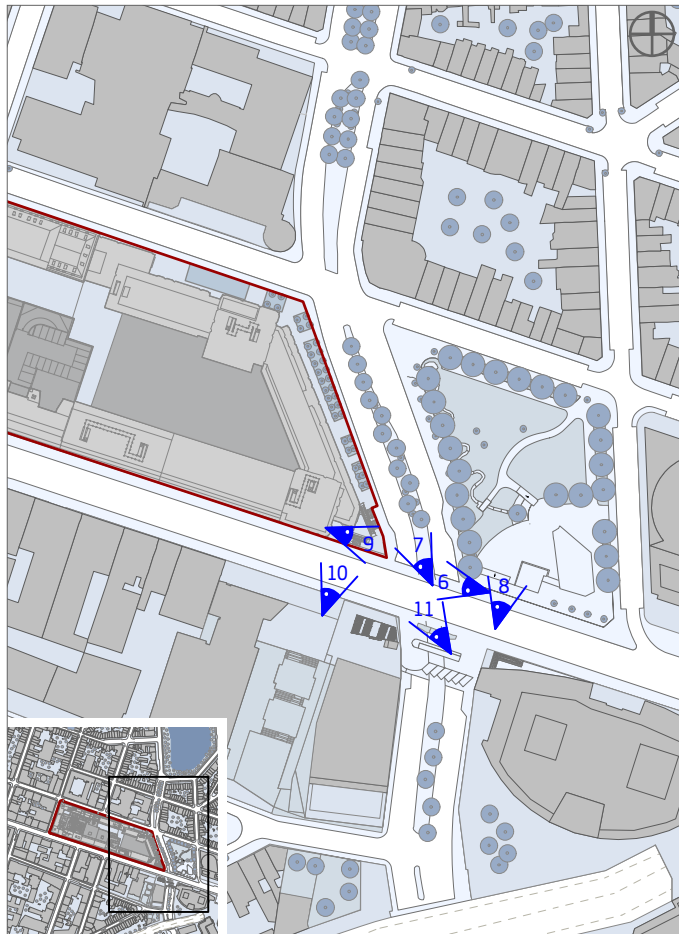


Photo viewpoints 2



Image 6



Image 7



Image 8



Image 9



Image 10



Image 11

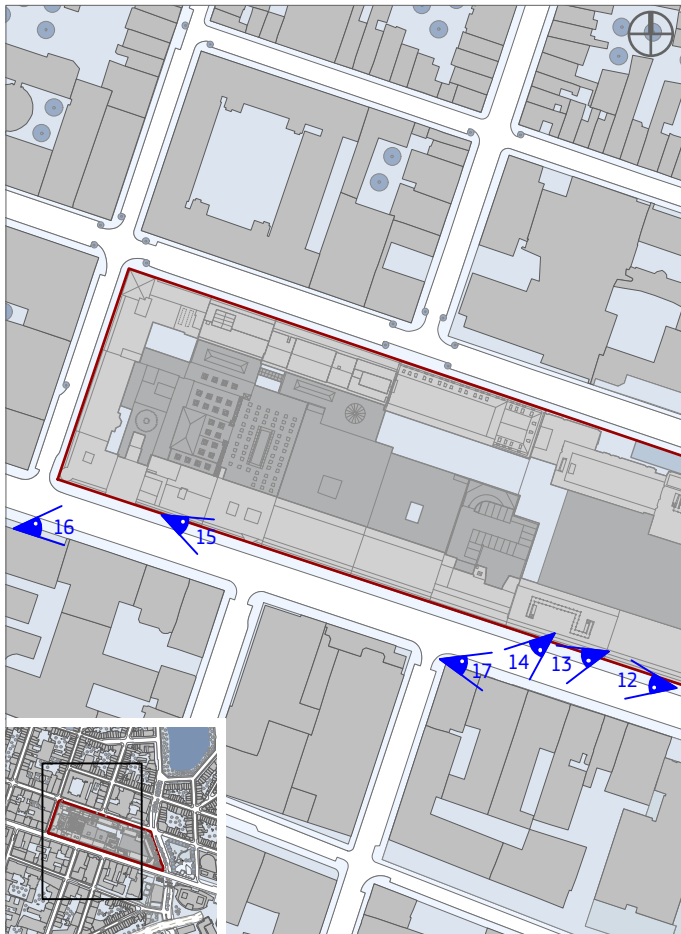


Photo viewpoints 3



Image 12



Image 13



Image 14



Image 15



Image 16



Image 17

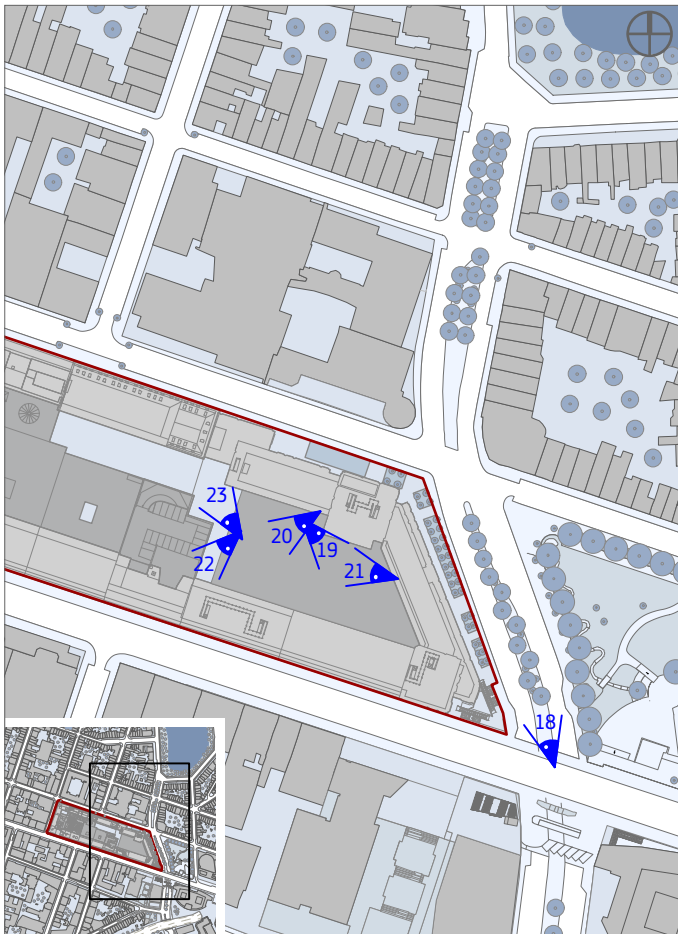


Photo viewpoints 4



Image 18



Image 19



Image 20



Image 21



Image 22



Image 23

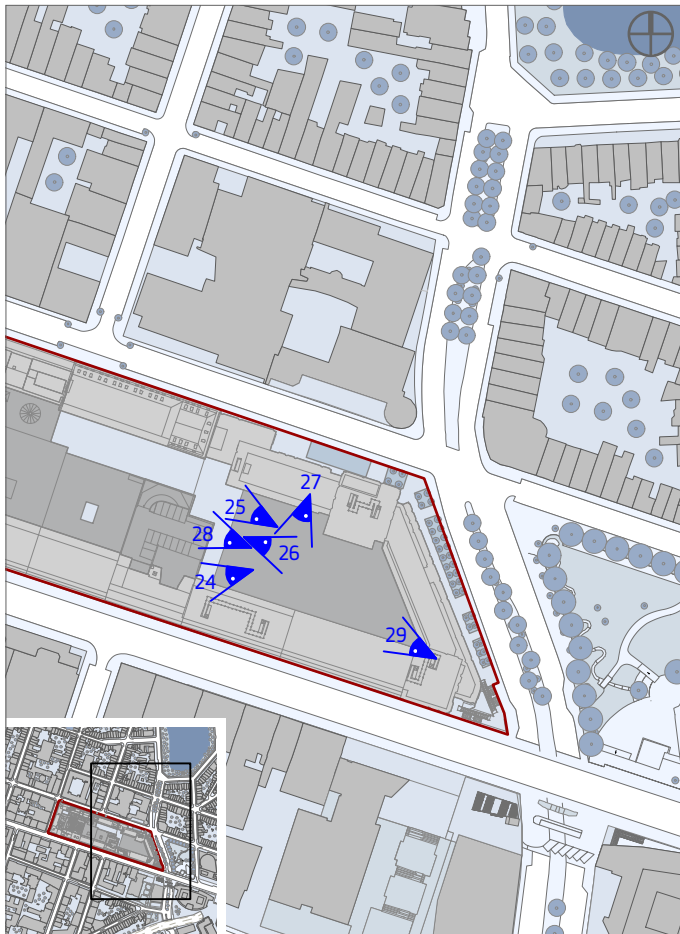


Photo viewpoints 5



Image 24



Image 25



Image 26



Image 27



Image 28



Image 29

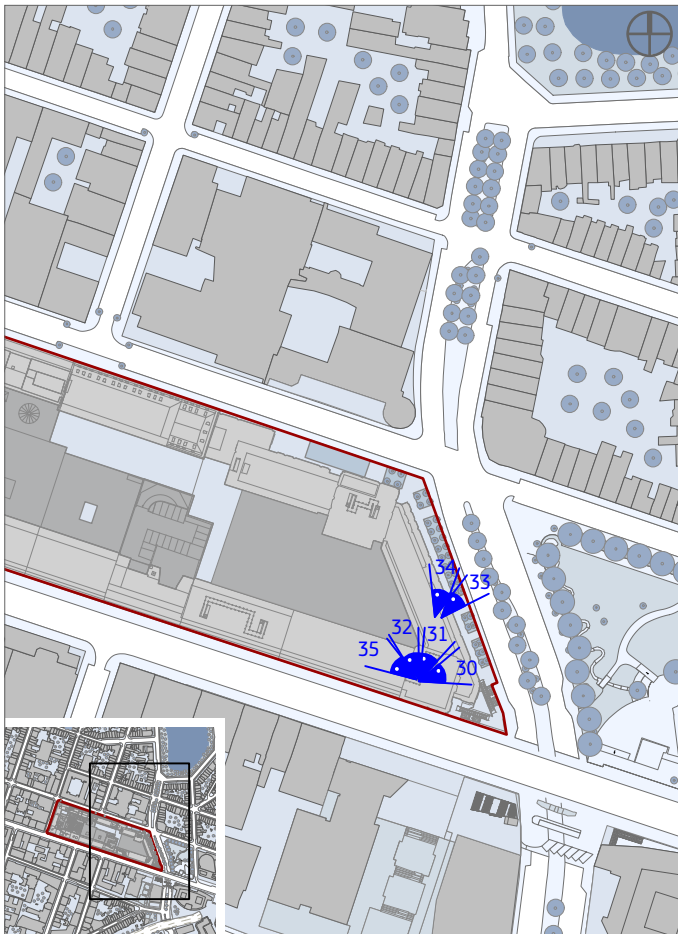


Photo viewpoints 6



Image 30



Image 31



Image 32



Image 33



Image 34



Image 35

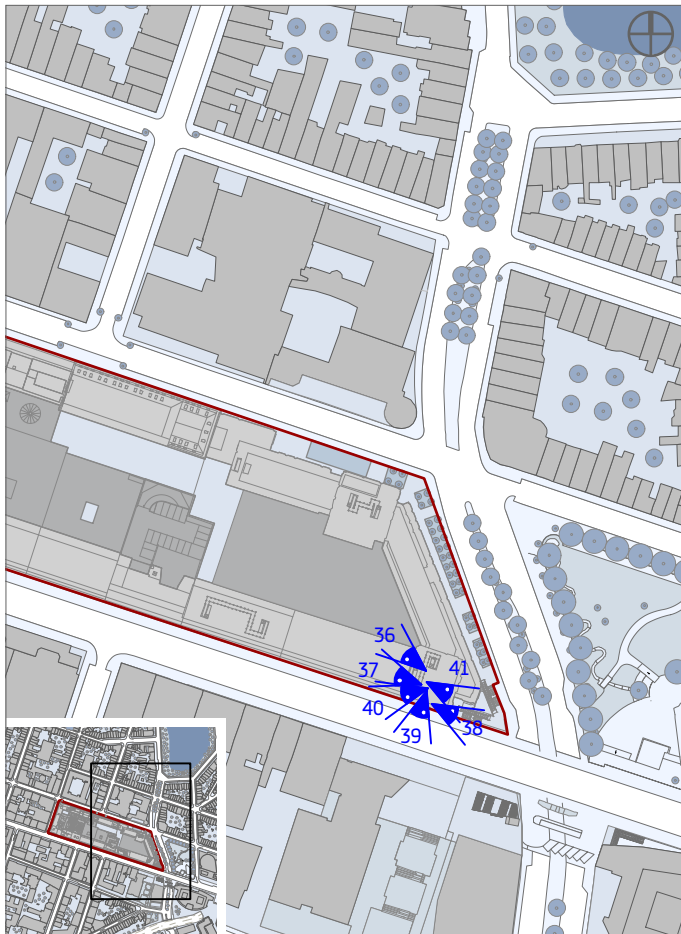


Photo viewpoints 7



Image 36



Image 37



Image 38



Image 39



Image 40



Image 41

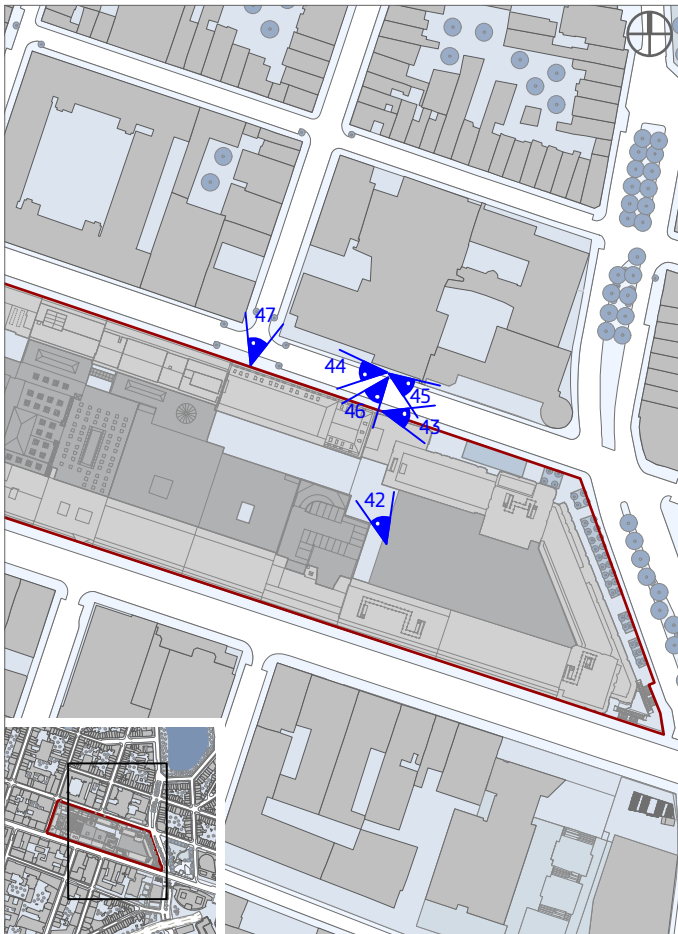


Photo viewpoints 8



Image 42



Image 43



Image 44



Image 45



Image 46



Image 47

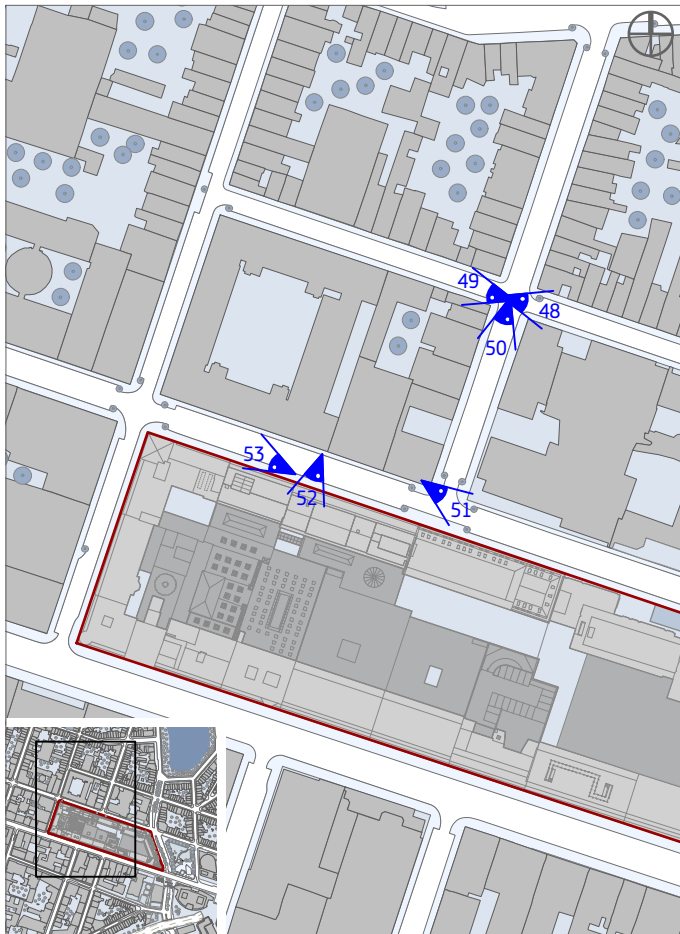


Photo viewpoints 9



Image 48



Image 49



Image 50



Image 51



Image 52



Image 53

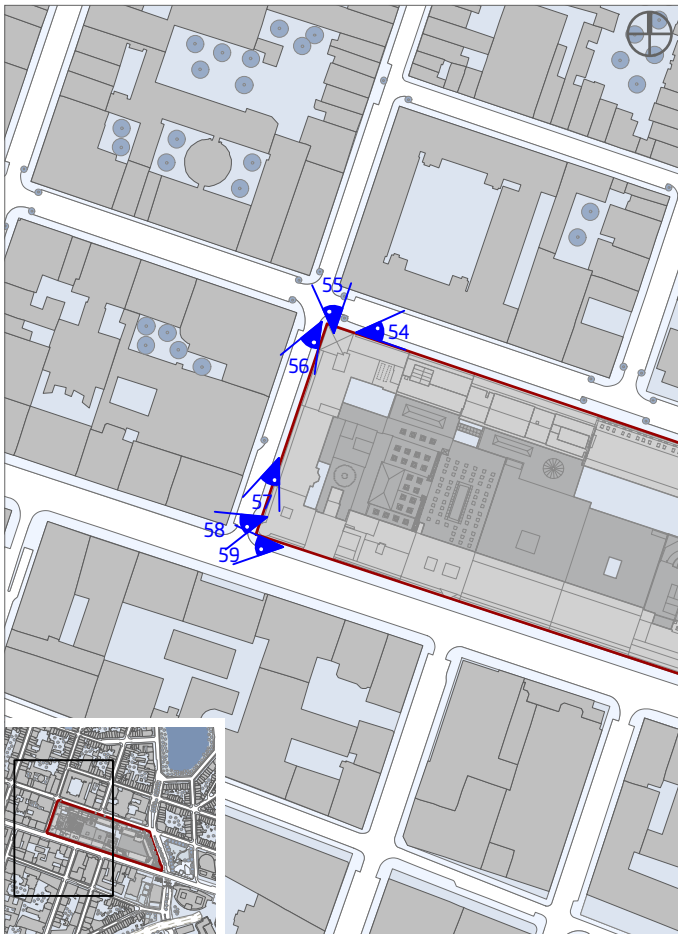


Photo viewpoints 10



Image 54



Image 55



Image 56



Image 57



Image 58



Image 59

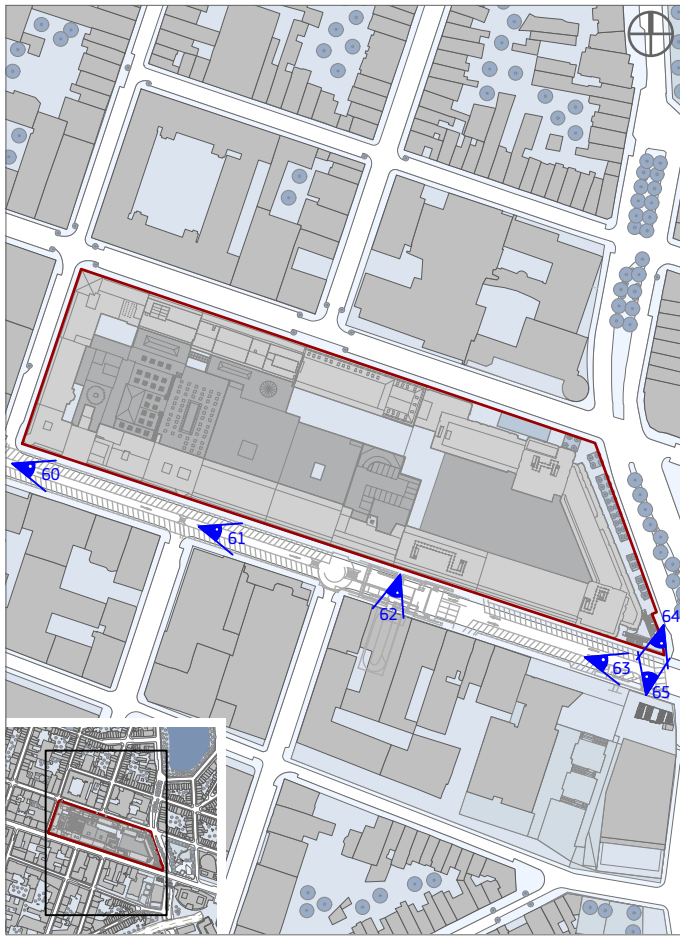


Photo viewpoints 11



Image 60



Image 61



Image 62



Image 63



Image 64



Image 65



Photo viewpoints 12



Image 66



Image 67



Image 68



Image 69



Image 70



Image 71



Aerial view

D

Objectives

- D.01** The task set for the competition is the interdisciplinary design for the construction of a "real estate complex for the European Commission - Project Loi 130" in Brussels, Belgium. The design must consider the programme listed in chapters E and F, and the objectives mentioned in the following chapter, and balance them appropriately.

D.I | General Objectives

- D.02** The European Commission is aiming for a prestigious ensemble of buildings, complying with the strategic targets (see par. A.07) as well as functional, technical and economical requirements listed in the following chapters. Thus, the design of an exemplary new administrative complex is a challenging task that will trigger architectural creativity as well as engineering mastery.
- D.03** As part of the larger scope of the district transformation, the redevelopment of the site aims to improve the attractiveness of the European Quarter, for European Commission staff, locals and visitors.

Financial sustainability

- D.04** As a publicly financed institution, the European Commission feels accountable to the citizens of Europe to manage responsibly its resources. The Loi 130 project provides the opportunity to redevelop in a cost-effective way obsolete aging European Commission property that would otherwise need thorough renovation, by using additional construction capacity allowed by the zoning regulations.
- D.05** Connecting 5,250 employees in a single site, the project is fitting with the European Commission's real estate policy, as it will enable the creation of synergies and efficiencies, i.e. transport, mail distribution, printing services, office supplies and catering.
- D.06** A fundamental guiding principle of the project is to provide highly efficient and sustainable buildings, bearing at least 2 x 30 years lifecycle. Competition candidates will be encouraged to develop the highest ratio of usable office space.
- D.07** The capacity of at least 5,250 workstations as defined in the functional programme sets a strict minimum for the Loi 130 compound. Candidates are required to improve this ratio and to prove maximum building efficiency in compliance of urban and functional requirements.
- D.08** The budget for the construction costs of the new complex has been estimated at 436 million EUR excluding all taxes, duties and other levies. This budget includes cost groups 300/400 and 500 as of DIN 276 standard and has been established at current values (i.e. May 2018) for a size of 190,000 sq m GFA above ground.

Budget

Staff Care

- D.09 Security of staff and visitors is a high priority for the European Commission. The building complex shall provide a secure environment for the European Commission's staff and visitors, in the least disruptive way.
- D.10 The new site should give staff an attractive and secure working environment that facilitates connection, communication, collaboration and a feeling of belonging. The horizontal and vertical circulation will intelligently connect social functions, formal and informal meeting spaces to stimulate social interaction and positive collaboration.
- D.11 The new buildings should host high-quality workspaces that meet the European Commission's comfort standards in terms of spatial quality, ventilation, heating, and sustainability. On-site facilities like childcare facilities, multi-purpose sports rooms and canteens will increase well-being and work-life-balance.
- D.12 As a signatory of the Convention on the Rights of Persons with Disabilities (CRPD), the European Commission is committed to an equal treatment for disabled people. All products, equipment, programmes, and services and accessibility to indoor and outdoor spaces must comply with "design for all" principles.
- D.13 Health and safety for staff will be guaranteed by complying with European Commission guidelines and local building codes (technical, fire and structural regulations).

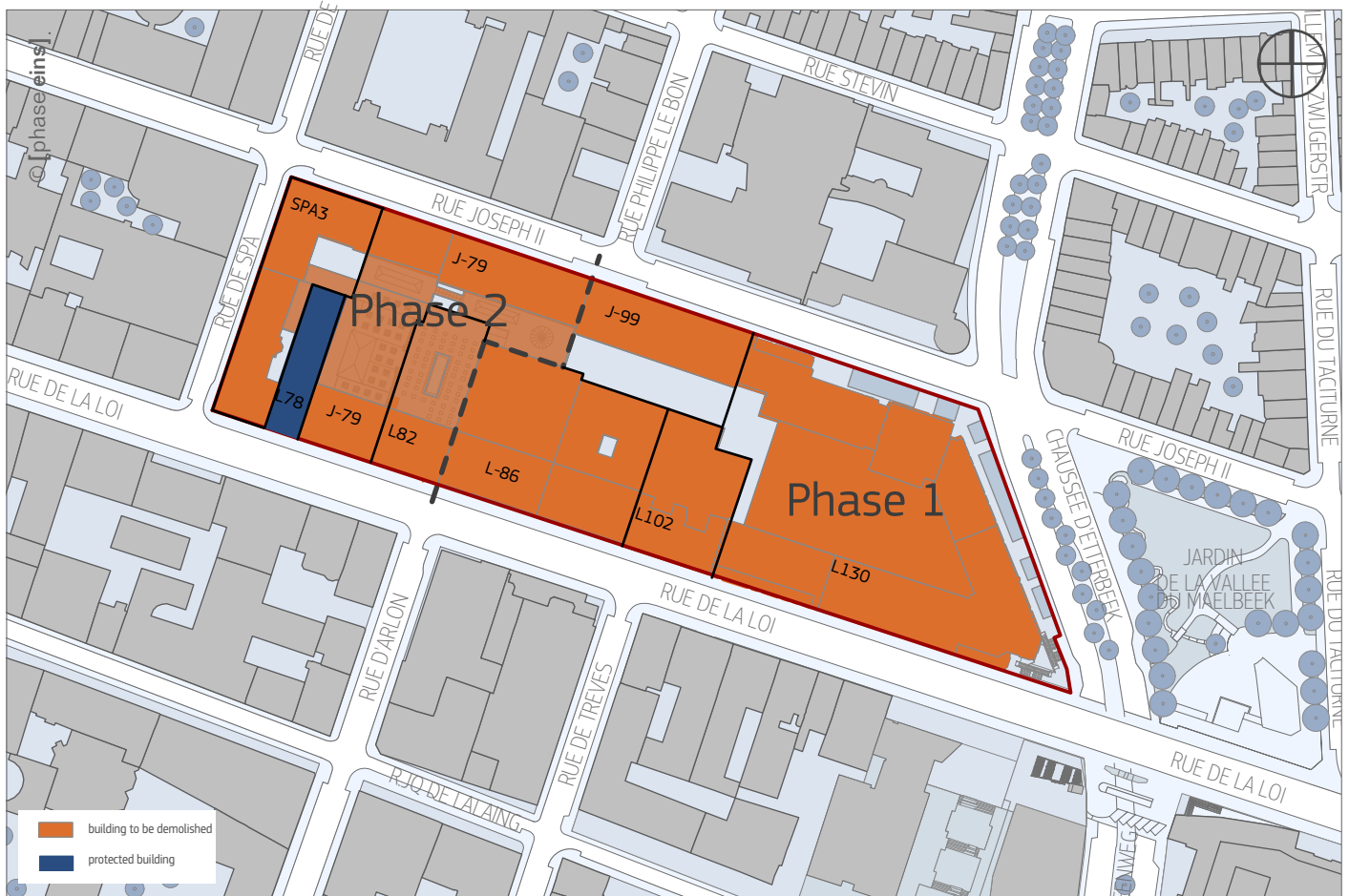
Environmental Quality

- D.14 The Loi 130 compound must set an example in terms of environmental sustainability and durability. The new buildings must take into consideration the high environmental standards already in place at the Commission and Belgian legislation will be a minimum requirement.
- D.15 In line with framework of the European Parliament and Council directives on the energy efficiency and performance of buildings, the Commission aims for nearly zero-energy buildings (NZEB)², by minimizing energy consumption and producing on-site renewable energy.
- D.16 The project must also be in line with the EU criteria for green public procurement (GPP) for Office Building Design, Construction and Management³.
- D.17 The project must guarantee a high level of environmental performance by achieving "Excellent" level in the BREEAM method – ensuring low-impact design and emissions reduction, design durability and resilience, adaptation to climate change, ecological value and biodiversity protection.
- D.18 Detailed objectives are described in section F.II.
- D.19 Proposals must consider carefully wind comfort conditions in outdoor spaces, especially the effect of high-rise buildings. Extending streets in the direction of prevailing winds, such as Rue Philippe le Bon, is also bound to have an impact on local wind conditions. The project will have to carry out an impact analysis of wind conditions in the outdoor spaces near high-rise buildings, in its conception phase.

Outdoor spaces

² <https://ec.europa.eu/energy/en/topics/energy-efficiency/buildings/nearly-zero-energy-buildings>

³ http://ec.europa.eu/environment/gpp/pdf/swd_2016_180.pdf



Construction phases



Current situation Rue de la Loi

D.II | Design Objectives

- D.20 On a total above ground gross floor area between a minimum of 175,000 and maximum 190,000 sq m, the project will house at least 5,250 employees. It is part of the task to identify the most appropriate solution for the project within this size-range, balancing the requirements on urban integration, environmental quality and economic performance.
- D.21 The project must be developed in two construction phases, each fully independent of the other. Buildings created in each construction phase must be fully operational while the contiguous construction phase is being developed, so special care must be given to minimising the nuisance of construction works.
- D.22 The diagram on the opposite page shows how the site will be divided into two construction phases, and the buildings involved in each.
- D.23 The expected timeframe for construction is:

Construction phase 1	Construction phase 2
2025 - 2030	2030 - 2035
Rue de la Loi, 86 (L-86)	Rue de la Loi, 78 (L-78)
Rue de la Loi, 102 (L 102)	Rue Joseph II, 79 (J-79)
Rue de la Loi, 130 (L 130)	Rue de la Loi, 82 (L-82)
Rue Joseph II, 99 (J-99)	Rue de Spa, 3 (S-3)

Sizes and Phasing

Urban quality and planning requirements

- D.24 The Loi 130 project will become part of the Brussel skyline. Further, as the largest building project of the European Commission, the new complex must have an appropriate conceptual and potentially symbolic strength. At this, the project must take into account its present and future urban environment, including redevelopment projects across Rue de la Loi, neighbouring residential areas and surrounding green spaces, such as the Jardin du Maelbeek.
- D.25 The project must add outdoor spaces accessible at ground level that improve the urban and working environment and add value for existing and future local residents, including by making the neighbourhood livelier outside office hours.
- D.26 Additionally, the project shall comply with the urban planning regulations (as described in section C.37) and with the spirit of the PUL.
- D.27 In terms of visual quality, the project must focus on:
- Views in the Rue de la Loi axis: from Arts-Loi junction towards the Parc du Cinquanteenaire, and from the Schuman roundabout towards Rue de la Loi.
 - Perception of the new buildings from surrounding streets, taking into account the site's sloped topography: from Chaussée d'Etterbeek, from low-rise residential areas and neighbouring gardens to the north, and from streets perpendicular to the site such as Philippe le Bon, Arlon and Trèves.
 - Visual impact caused by high-rise buildings in the neighbourhood.

Urban Integration

Views

 Architecture

- D.28 A design is to be formulated that, while showing respect vis-à-vis the immediate neighbourhood and one listed building within the competition site, constitutes an unmistakable urban-design and architectural focal point. Harmonizing its various uses, the project is to transform an up to now inconspicuous place within the urban fabric into an inviting and pleasant location.
- D.29 The architecture should create added value – not only in space and time but also aesthetically, for staff, customers, neighbours etc. It must propose creative solutions, while being consistent with the principles and values of the European Commission, in line with the Communication of the Commission on its architectural policy guide (see website listed in the glossary).
- D.30 Special care shall be given to pedestrians' point of view, including the design of building facades at ground floor level, which must incorporate both high architectural and security standards for public spaces.
- D.31 Further, the roofs of the envisaged buildings play a major role as the “fifth facades”, as they can be clearly seen from the higher buildings within and surrounding the complex. For aesthetic reasons, keep technical installations on the roofs to a minimum.
- D.32 Because the European Commission is a constantly evolving body, the office areas must be highly flexible. They must adapt to changes (e.g. different office layouts) with little effort or cost, and respond to new working methods and environments.
- D.33 This flexibility must be achieved through the modularity of the main architectural and technical elements, guaranteeing an easy adaptability to evolving needs of the European Commission and to different office layouts without excessive costs.
- D.34 The site must incorporate security measures both in the compound and the buildings, designed to:
- Dissuade anyone from committing a malicious act.
 - Prevent any action by such persons.
 - Detect any intrusion as quickly as possible and immediately raise the alarm.
 - Delay the malicious act or progress of the intrusion, to enable a timely response.
 - Respond as quickly as possible to prevent the malicious act, certainly before it is carried out.
 - Minimise the impact of a malicious act on persons and buildings.
 - Facilitate and guide the necessary response to a malicious act.
- D.35 Security must be organised differently in different areas of the site, according to the relevant security levels, as detailed in section F.IV.
- D.36 The general policy of the European Commission is not to visibly prevent access. The site, its outdoor spaces accessible to public and retail units must be easily accessible at all. Security measures must not detract from the site's welcoming nature – opt where possible for architecturally integrated peripheral measures instead of devices such as fences, barriers and bollards.

 Efficiency and Flexibility

 Security

 Outdoor spaces

- D.37** The PUL promotes the creation of a network of high-quality public spaces across the neighbourhood, the “pocket parks”. As part of this network, outdoor spaces within the Loi 130 site must contribute to urban and visual quality in the area, providing permeability and views towards the centre of the site and integrating changes in topography between surrounding streets. It is part of the task to provide a concept for the outdoor spaces within the competition site that supports the connection and interaction with the surroundings, such as with the adjacent Maelbeek Garden and improves comfort and capacity of outdoor spaces within the neighbourhood.
- D.38** While not all outdoor spaces on the site will be open to the public, those that are should meet the following goals:
- Provide inviting urban areas at human scale.
 - Offer lively spaces accessible to the general public 24/7 and designed for maximizing use throughout the 4 seasons.
 - Enhance urban quality in the area.
 - Allow significant pedestrian traffic across the Loi 130 site.
 - Allow pedestrians to cross the Loi 130 site, in particular between Rue Joseph II with Rue de la Loi, to ensure optimum accessibility of Maelbeek metro station for residents in the quarters situated to the north of the Loi 130 site.
 - Provide the retail units with areas for the creation of terraces, helping to make them more appealing.
 - Consider the integration of art interventions.
 - Consider measures to support a rational water use and provide the installation of a storm water basin (see par. F.28).
 - Ensure security conditions
- D.39** Expected is an outdoor space concept for the non-public areas with flexible and usable outdoors meeting-/communications- and working spaces (with campus character: green courtyards, outdoor terraces, roof gardens etc.), preferably positioned at spots where footpaths are crossing and other uses are available which promote communication (seating of catering areas etc.).
- D.40** Both for nursery and kindergarten units an outdoor play space (room programme P.2.8, see par. 7) must be provided; staff has to be able to fully supervise the area from indoors.
- D.41** Special attention shall be given to environmental comfort in all outdoor spaces; both in terms of shading and wind, as well as in terms of noise and pollution caused by traffic on Rue de la Loi.
- D.42** The choice of surfaces and the application of horizontal and/or vertical green and/or infrastructures for indoor green in outdoor spaces and/or water must consider possible positive effects on microclimate and working atmosphere.
- D.43** The outdoor spaces on the site must comply with requirements on maximum solar exposure, depending on their use (for example, solar exposure is essential in open areas for childcare buildings).

 Public outdoor spaces

 Non-public outdoor spaces

 Children's outdoor spaces

 Environmental quality and comfort in outdoor spaces

- D.44 Articles 13, 14 and 15 of the RRUZ respectively lay down general provisions on outdoor spaces, specific provisions on outdoor space areas and specific provisions on pathway areas. Article 20 addresses the treatment of ground floor and roof surfaces through a minimum biotope coefficient and specifies requisites for water saving measures.
- D.45 Proposals must also carefully evaluate the impact of shading on surrounding areas, especially in nearby outdoor spaces. Furthermore, when filing for a building permit, the RRUZ will require a certificate determining the project's impact on neighbouring buildings and outdoor spaces in terms of solar and wind comfort.
- D.46 The prevailing wind direction in Brussels should be taken into account (see par. C.92).
- D.47 Referring to the activity classes defined by NEN 8100, compared to the mean wind velocities corresponding to Class I (see par. B.131) in streets like Rue de la Loi, the reduction of the mean wind velocity provided simultaneously by wind protection measure (screens, hollows, etc.) should be 20 % for Class II (reduction factor 0.8), and 50 % for Class III (reduction factor 0.5).

D.III | Transport and Accessibility

- D.48 Due to large number of staff and the heavy traffic circulation around the site, mobility is a major concern for the Loi 130 project. At the moment, there are no concrete plans which envisage a change in traffic conditions in Rue de la Loi.
- D.49 The design shall include careful planning for vehicular circulations and accesses to the site, as well as planning for pedestrian and cyclist circulations.
- D.50 The Brussels mobility agency has done the following recommendations:
- Avoid creating vehicular entrances and exits on Rue de la Loi,
 - which would disrupt the flux of cyclists and pedestrians
 - because of the risk of heavy traffic congestion at the exit of the Loi tunnel
 - Access to the site is recommended via secondary streets such as Chaussée d'Etterbeek, Rue de Spa and Rue Joseph II.
 - Loading docks are not allowed on the Rue de la Loi. It is recommended to incorporate the heavy trucks manoeuvring area within the site perimeter, in order not to disrupt the traffic in the neighbourhood.
 - Heavy trucks are not allowed in the tunnels of the Brussels-Capital Region.
 - All potential accesses to the Loi 130 should take into consideration the traffic situation described in section C.V.
- D.51 Design of pedestrian and cyclist routes should ensure connections with the rest of the neighbourhood and with existing public and green spaces. More precisely, pedestrians and bicycles should be able to cross the site from Rue de la Loi to Rue Joseph II and to easily access the new entrance to Maelbeek metro station, Visitor Centre and shops on site.
- D.52 Public space should include outdoor bicycle parking for people who access for instance the childcare centres, shops and Visitor Centre.

Vehicular access and
Loading docks

Pedestrian and
bicycle access

- D.53 The existing metro entrance on the site will be replaced by a new metro entrance in the Loi 130 project: the outer "shell" of the entrance and the connection to the mezzanine level will be part of the design. Works below this level will be designed and managed by the STIB, the local metro agency. Public transport
- D.54 Note that the Maelbeek metro will be adapted to additional passenger flows due to developments on and around the site. Increase in flows will require the enlargement by 5 m of metro platforms at both sides of the rails, which has an impact on the project underground areas. The Loi 130 project shall adapt to particular requirements from the STIB, which are detailed in section E.VII of the functional programme.
- D.55 The Brussels Code for air, climate and energy (COBRACE) aims at reducing the number of off-street parking spaces available in the vicinity of office buildings, in order to dissuade office workers from commuting to work every day. At every new demand or renewal of a building environmental permit, a maximum number of parking spaces is defined according to two factors: Off-street parking
- Office floor area (sq m)
 - Access by public transport
- D.56 Since 3 January 2007, parking spaces are regulated by Title VIII of the Regional Urban Planning Regulation (RRU). The RRU applies to the processing of building permit applications relating to new constructions and to building refurbishments. These regulations apply to location of cars, bicycles and deliveries. Car parks should in principle be covered and ensure the safety of its users and road users. Fulfilment of Title VIII of the RRU shall be well considered in the project.
- D.57 Title IV of the RRU provides rules that must be respected in terms of accessibility to car parks for people with reduced mobility.
- D.58 In addition to these two titles of the RRU, additional rules may be provided for by specific land use plans, subdivision permits, local urban plans, and town planning regulations.
- D.59 The Iris II strategic mobility plan and the parking policy for 2020 call for a reduction of around +/-16 % on street parking spaces in exchange of better use of public spaces.
- D.60 Outdoor spaces shall not contain open-air parking spaces (see par. E.157). On-street parking
- D.61 The circulation of the cyclists should be allowed on the site of the project to enable a connection between the Rue de la Loi and the Rue Joseph II and Rue Philippe Le Bon. Outdoor spaces accessible to the public should include bicycle parking for people who access for instance the children's nursery, the shops and to the Visitor Centre. That parking area can be outdoors. Bicycle circulation and parking

Circulation Spaces

- D.62 With regard to the various possible spatial configurations that may be proposed for the Project, the following values must be respected:
- The maximum horizontal distance to reach a lift cannot exceed 40 m
 - The maximum horizontal distance from a work station (WS) to the services (toilets, kitchenette etc.) cannot exceed 60 m and will preferably be less than 40 m
 - The travel time to/from any work station in the office buildings must be as short as possible, with the target of not exceeding 5 minutes:
 - from the building's entrance/reception area;
 - to one of the restaurants;
 - to one of the cafeterias;
 - to one of the meeting centres.
 - The food delivery circuit must ensure an optimum travel time (target: not exceeding 5 minutes) between the unloading bay and the storage area situated within a production area. The configuration of the circuit must prevent unauthorised shortcuts (e.g.: crossing a car park not forming part of the circuit).
- D.63 To this end, it must be taken into account that a staircase between two floors is equivalent to a horizontal distance of around 50 m and generally forms a psychological barrier.
- D.64 The design team must conduct a human traffic study when designing the vertical and horizontal circulation spaces.

Circulation of goods
Travel time

code	Functions	Construction Phase 1	Construction Phase 2	Total
		TOTAL UA in sqm	TOTAL UA in sqm	TOTAL UA in sqm
Offices		58.270,0	31.879,0	90.149,0
A	Entrance / reception area	1.035,0	515,0	1.550,0
B	Tertiary work spaces	43.743,0	24.316,0	68.059,0
C	Meeting centres	2.480,0	1.170,0	3.650,0
D	Catering	5.230,0	2.785,0	8.015,0
E	Support	3.384,0	1.894,0	5.278,0
F	Sports and cultural infrastructure	998,0	499,0	1.497,0
G	Sanitary facilities	1.400,0	700,0	2.100,0
Visitor Centre		4.774,0		4.774,0
H	Entrance / reception area	796,0		796,0
I	Exhibition spaces	1.636,0		1.636,0
J	Event spaces	1.172,0		1.172,0
K	Tertiary work spaces	473,0		473,0
L	Mass catering	340,0		340,0
M	Support	170,0		170,0
N	Sanitary facilities	187,0		187,0
Day Nurseries		3.771,0	3.771,0	7.542,0
O	Entrance / reception area	111,0	111,0	222,0
P	Children's spaces	2.493,0	2.493,0	4.986,0
Q	Tertiary work spaces	221,0	221,0	442,0
R	Mass catering	475,0	475,0	950,0
S	Support	395,0	395,0	790,0
T	Sanitary facilities	76,0	76,0	152,0
Parking				
U	Entrance / reception area			40,0
V	Parking			according to design
W	Sanitary facilities			according to number of building users
Delivery Areas		600,0	420,0	1.020,0
X	Entrance / reception area	10,0	10,0	20,0
Y	Support	590,0	410,0	1.000,0

code	Functions			TOTAL GFA in sqm
Other functions				3.250,0
Z	Other functions (gross floor)			
Z.1	Retail units			3000,0
Z.2	Metro			250,0

E Spatial and Functional Programme

E.01 The Loi 130 complex will accommodate the following functional entities, with a gross floor area above ground of between 175,000 and 190,000 sq m (see par. D.20):

- Office buildings, which will contain at least 5,250 work stations and associated infrastructure

The design team is encouraged to create as many work stations as possible, by exploiting to the full the potential gross floor area above ground (i.e. a maximum of 190,000 sq m). Its design will ensure that as much of the usable area as possible receives direct natural light, favourable for work stations.

- A Visitor Centre, open to the general public, which must attract visitors to the site for 360,000 visitors annually
- Two day-nurseries for 500 children
- Retail spaces with 3,000 sq m, to extend liveliness beyond office hours and to improve integration in the quarter
- A new access to the Maelbeek metro station
- Outdoor spaces accessible to the public, to be used as routes for pedestrians, mainly consisting of an extension of the axis of the Rue Philippe le Bon connecting Rue Joseph II with Rue de la Loi and allowing access to the various functional entities
- Delivery areas for the various functional entities
- Parking intended for staff members and visitors; as well as a public parking

E.02 The various functional entities will operate independently of each other, except for the private parking and delivery areas, which will be shared where possible by the European Commission buildings (i.e. excluding retail units and metro).

E.03 By adopting a modular approach to the main architectural and technical elements, the buildings will offer adaptability in terms of their use so that, in the future, they can be altered as the needs of the European Commission change, without entailing excessive costs nor disrupting operations. A balance between centralizing technical installations and modularity for future renovations will need to be found.

E.04 A summary of the spatial programme is shown on the other page, diagrams on the following pages provide information on functional relations and other requirements. A detailed room programme table is provided as Appendix 1. The colours of the functional group titles correspond to their colours in the block diagrams.

E.05 Functions of the various entities are described in detail in sections E.I to E.VII.

Summary

General remark to the programme

code	Functions	Construction Phase 1	Construction Phase 2	Total
		TOTAL UA in sqm	TOTAL UA in sqm	TOTAL UA in sqm
Offices		58.270,0	31.879,0	90.149,0
A	Entrance / reception area	1.035,0	515,0	1.550,0
B	Tertiary work spaces	43.743,0	24.316,0	68.059,0
B.1	Office spaces	33.380,0	18.551,0	51.931,0
B.2	Collaborative spaces	5.831,0	3.241,0	9.072,0
B.3	Support spaces	4.532,0	2.524,0	7.056,0
C	Meeting centres	2.480,0	1.170,0	3.650,0
D	Catering	5.230,0	2.785,0	8.015,0
D.1	'Food court' restaurants	3.245,0	1.680,0	4.925,0
D.1.1	Dining room Food court	1.800,0	900,0	2.700,0
D.1.2	Distribution area (self-service and food court)	675,0	370,0	1.045,0
D.1.3	Production area (Food court restaurants)	770,0	410,0	1.180,0
D.2	Banqueting	320,0	270,0	590,0
D.3	200-seat cafeterias	555,0	545,0	1.100,0
D.4	100-seat cafeterias	610,0		610,0
D.4.1	Dining room	400,0		400,0
D.4.2	Production area (100-seat cafeteria)	210,0		210,0
D.5	Sandwich bar	60,0	30,0	90,0
D.6	Vending machine	200,0	100,0	300,0
D.7	Catering staff quarters	240,0	160,0	400,0
E	Support	3.384,0	1.894,0	5.278,0
E.1	Support	1.500,0	650,0	2.150,0
E.2	Maintenance	200,0	200,0	400,0
E.3	Cleaning	430,0	290,0	720,0
E.4	Contractors' area	254,0	254,0	508,0
E.5	Storage	1.000,0	500,0	1.500,0
F	Sports and cultural infrastructure	998,0	499,0	1.497,0
G	Sanitary facilities	1.400,0	700,0	2.100,0
Visitor Centre		4.774,0		4.774,0
H	Entrance / reception area	796,0		796,0
I	Exhibition spaces	1.636,0		1.636,0
J	Event spaces	1.172,0		1.172,0
J.1	Multipurpose room for 150 people	323,0		323,0
J.2	Multipurpose room for 100 people	423,0		423,0
J.3	Multipurpose room for 50 people	246,0		246,0
J.4	Multipurpose room for 30 people	180,0		180,0
K	Tertiary work spaces	473,0		473,0
K.1	Office spaces	365,0		365,0
K.1.1	Individual offices	45,0		45,0
K.1.2	Shared offices	208,0		208,0
K.1.3	Open-plan offices	112,0		112,0
K.2	Collaborative spaces	46,0		46,0
K.3	Support spaces	62,0		62,0
L	Mass catering	340,0		340,0
L.1	Coffee lounge	220,0		220,0
L.2	Coffee stations	80,0		80,0
L.3	Banqueting	40,0		40,0
M	Support	170,0		170,0
M.1	Support	10,0		10,0
M.2	Maintenance	40,0		40,0
M.3	Cleaning	20,0		20,0
M.4	Storage	80,0		80,0
M.5	Waste	20,0		20,0
N	Sanitary facilities	187,0		187,0

Spatial Programme

- E.06** The area requirements of Project Loi 130 are expressed solely as usable area (UA) according to the Measuring Code applicable to Commission buildings in Brussels (Appendix 4), which specifies the division of areas adapted to the practices of the OIB.
- E.07** Each functional entity consists of several functional groups. Each functional group consists of a series of similar main functions and their support functions. Each function breaks down into a series of specific areas or spaces.
- E.08** The main abbreviations used in this document are explained in section G.I “Abbreviations and Definitions”.
- E.09** The following additional areas are to be dimensioned by the design team in order to meet the functional, constructional, technical and environmental requirements:
- Circulation Areas (CA)
 - Service Areas (SA)
 - Construction Floor Areas (CFA)
- E.10** As an example, the area table does not specify the following areas:
- Unloading bay area: this is included in the circulation areas according to the Measuring Code applicable to Commission buildings in Brussels. The unloading bays are therefore included for the record, with the table specifying only usable areas.
 - Bus parking drop-off: as these will preferably be situated outside, they are not included in the usable area, but rather in the undeveloped area.
- E.11** As an exception, the areas of the Welcome Centres and entrances, which are regarded as circulation areas in the Measuring Code, are included in the table of usable areas.
- E.12** The usable area requirements set out below correspond to the minimum. The design team will make maximum use of the potential of above ground areas authorised by the RRUZ (i.e. 190,000 sq m GFA) and will ensure that its design guarantees the most efficient possible usable area to gross floor area ratio, in accordance with the requirements of the programme, the Manual of Standard Building Specifications (MIT), applicable legislation and professional practices, with the aim of maximising the development of usable areas with direct natural lighting for office space.
- E.13** The proposed design must have a gross floor area above ground of at least 175,000 sq m and at most 190,000 sq m. NB: The area of the new access to Maelbeek metro station must not be included in this area above ground.
- E.14** This area (175,000 sq m to 190,000 sq m) should be understood as being "floor area" as defined in the Glossary of the Regional Land Use Plan (PRAS), ie. "All floors covered and providing a clear height of at least 2.20 m in all rooms, excluding premises below ground level which are used for parking, cellars, technical equipment and to deposits. The dimensions of the floors shall be measured outside the walls of the facades, the floors being assumed to be continuous, irrespective of their interruption by internal partitions and walls, ducts, staircases and lifts."
- E.15** Given the slope of the site, some levels may be partially above ground and partially below ground. In this case, a pro rata measurement is applied. That is to say that the part of the level which is mainly (more than 50 % of the height of the level) above ground will be counted in the areas above ground and the part which is mainly (more than 50 % of the height of the level) below ground will be counted as underground.
- E.16** The location of a particular function (basement, ground floor, upper floor etc.) is left to the design team to decide in accordance with the natural lighting and functional relationship requirements expressed in the programme.

Gross floor area and
usable area

code	Functions	Construction Phase 1	Construction Phase 2	Total
		TOTAL UA in sqm	TOTAL UA in sqm	TOTAL UA in sqm
Day Nurseries		3.771,0	3.771,0	7.542,0
O	Entrance / reception area	111,0	111,0	222,0
P	Children's spaces	2.493,0	2.493,0	4.986,0
P.1	Nursery units	1.594,0	1.594,0	3.188,0
P.2	Kindergarten units	584,0	584,0	1.168,0
P.3	Play and learning areas	315,0	315,0	630,0
Q	Tertiary work spaces	221,0	221,0	442,0
Q.1	Offices for administrative staff	58,0	58,0	116,0
Q.2	Offices for psycho-educational staff	24,0	24,0	48,0
Q.3	Collaborative spaces	25,0	25,0	50,0
Q.4	Spaces for nursery nurses	50,0	50,0	100,0
Q.5	Medical office	64,0	64,0	128,0
R	Mass catering	475,0	475,0	950,0
R.1	Restaurant	455,0	455,0	910,0
R.1.1	Staff dining room	100,0	100,0	200,0
R.1.2	Production area (kitchen)	305,0	305,0	610,0
R.1.3	Staff area	50,0	50,0	100,0
R.2	Logistics area			
R.3	Infant feeding bottle room	20,0	20,0	40,0
S	Support	395,0	395,0	790,0
S.1	Support	40,0	40,0	80,0
S.2	Linen room	70,0	70,0	140,0
S.3	Maintenance	30,0	30,0	60,0
S.4	Cleaning	30,0	30,0	60,0
S.5	Storage	185,0	185,0	370,0
S.6	Waste	40,0	40,0	80,0
T	Sanitary facilities	76,0	76,0	152,0

Parking				
U	Entrance / reception area			40,0
V	Parking			
V.1	Parking for personal motor vehicles			
V.2	Public parking			
V.3	Bicycle park			
V.4	Bus drop-off spaces	400,0		400,0
W	Sanitary facilities			(according to number of building users)

Delivery Areas		600,0	420,0	1.020,0
X	Entrance / reception area	10,0	10,0	20,0
Y	Support	590,0	410,0	1.000,0

code	Functions	TOTAL GFA in sqm		
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Other functions		3.250,0		
Z	Other functions (gross floor)			
Z.1	Retail units			3000,0
Z.2	Metro			250,0

E.17 The acceptable footprint area (AFA) is the portion of the site that may be covered with built structures above ground. According to RRUZ (see par. C.40) the target footprint area is 55 % of the site area (SA).

Acceptable footprint area

E.18 The following method shall be used to verify compliance with the AFA:

1. Calculate the sum of the buildings' footprint area at a reference level (BFA0):
For each building, the footprint area at a reference level is the area of the horizontal projection occupied by the building at the building's reference level. The building's reference level is the level in the middle of the length of the pavement that runs along the site on the side of the street whose rules are applicable to determine the building's height according to the RRUZ provisions.
2. Calculate the sum of the buildings' footprint area according to RRUZ (BFA1):
For each building, the footprint area according to RRUZ is the area of the horizontal projection occupied or overhung by the building at the building's reference level.
3. The following condition should be met in order to comply with AFA:
$$BFA1 \leq SA \times 55 \% + (SA - BFA0) \times 25 \%$$

E.19 The following explanations relate to the titles of the various columns in the detailed programme table (Appendix 1):

Detailed spatial programme table

Functions	Corresponds to the function, described in the functional programme (see par. E.01.), for which a usable area must be specified.
Area type	Indicates the type of area of the room or space concerned according to the Measuring Code applicable to Commission buildings in Brussels.
Natural lighting requirements	Indicates the natural lighting requirement of the room or space concerned (see par. F.52): L: general natural lighting (L1 or L2) (L): general natural lighting not compulsory but desirable L1: direct natural lighting L2: indirect natural lighting
UA per unit in sq m	Usable area per dimensioning unit to be allocated to the function concerned
Number of spaces	Number of rooms or spaces to be allocated to the function concerned
Number of units per space	Number of units to be taken into account for the dimensioning of the room or space concerned
UA per space in sq m	Usable area to be allocated for the room or space concerned
TOTAL sq m UA	Total usable area for the function concerned
Capacity (main indicators)	Capacity, for the function concerned, in number of dimensioning units

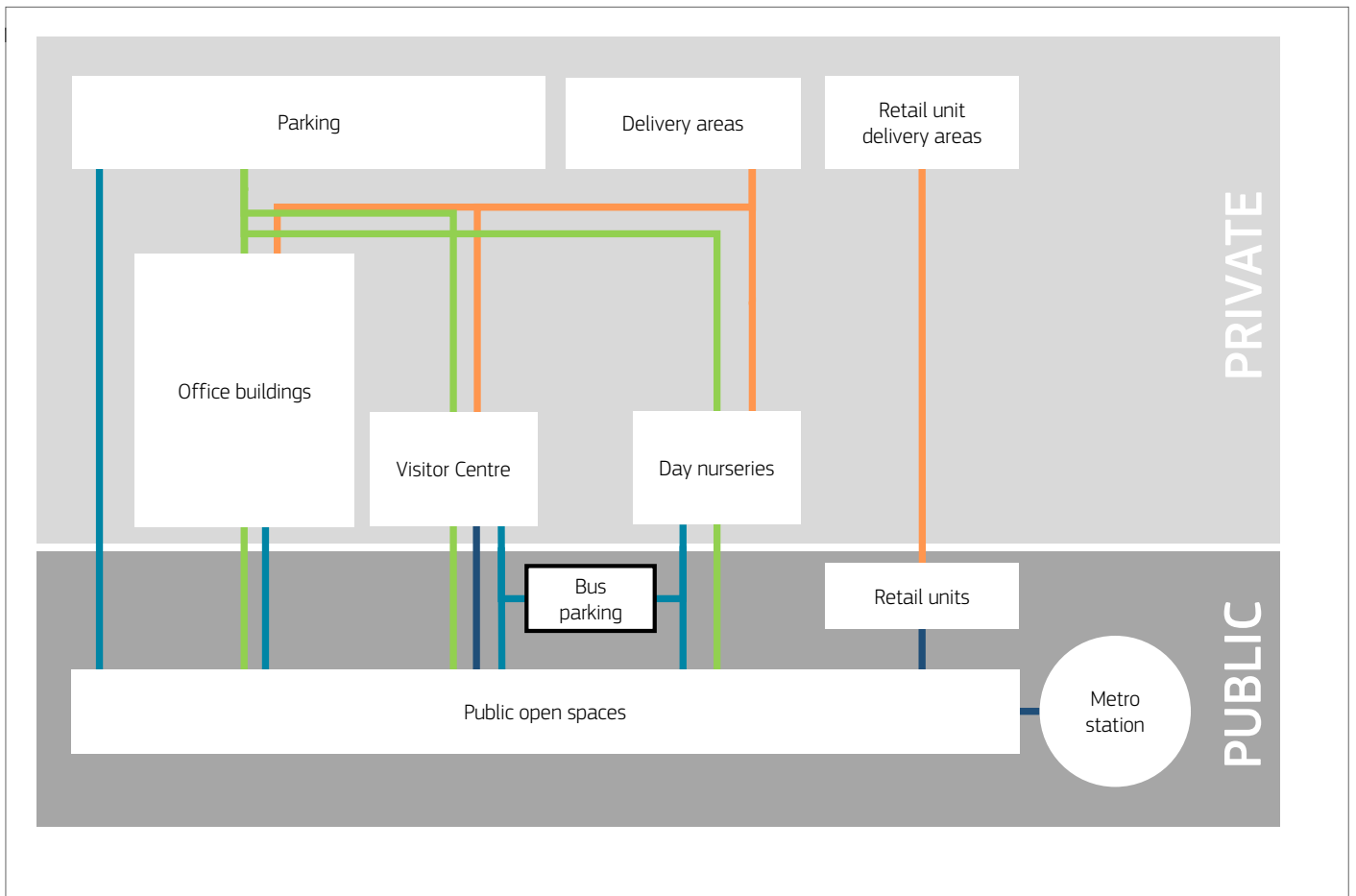


Diagram: Overall program

- E.42 The abbreviation “incl. in” in the table means “included in”.
- E.43 The phrase “according to design” appears in the “number of spaces” column for certain functions. This means that the number of spaces to be allocated to the function depends on the configuration of the design proposed by the design team. For example, the number of toilet blocks will in particular depend on the number of floors and the distance to be covered from a work station (WS), which will vary according to the design. For certain functions, no total usable area is therefore indicated as this depends on the design: for example, the number of first aid rooms (one per building according to the MIT) depends on the number of buildings, which therefore depends on the design proposed by the design team.

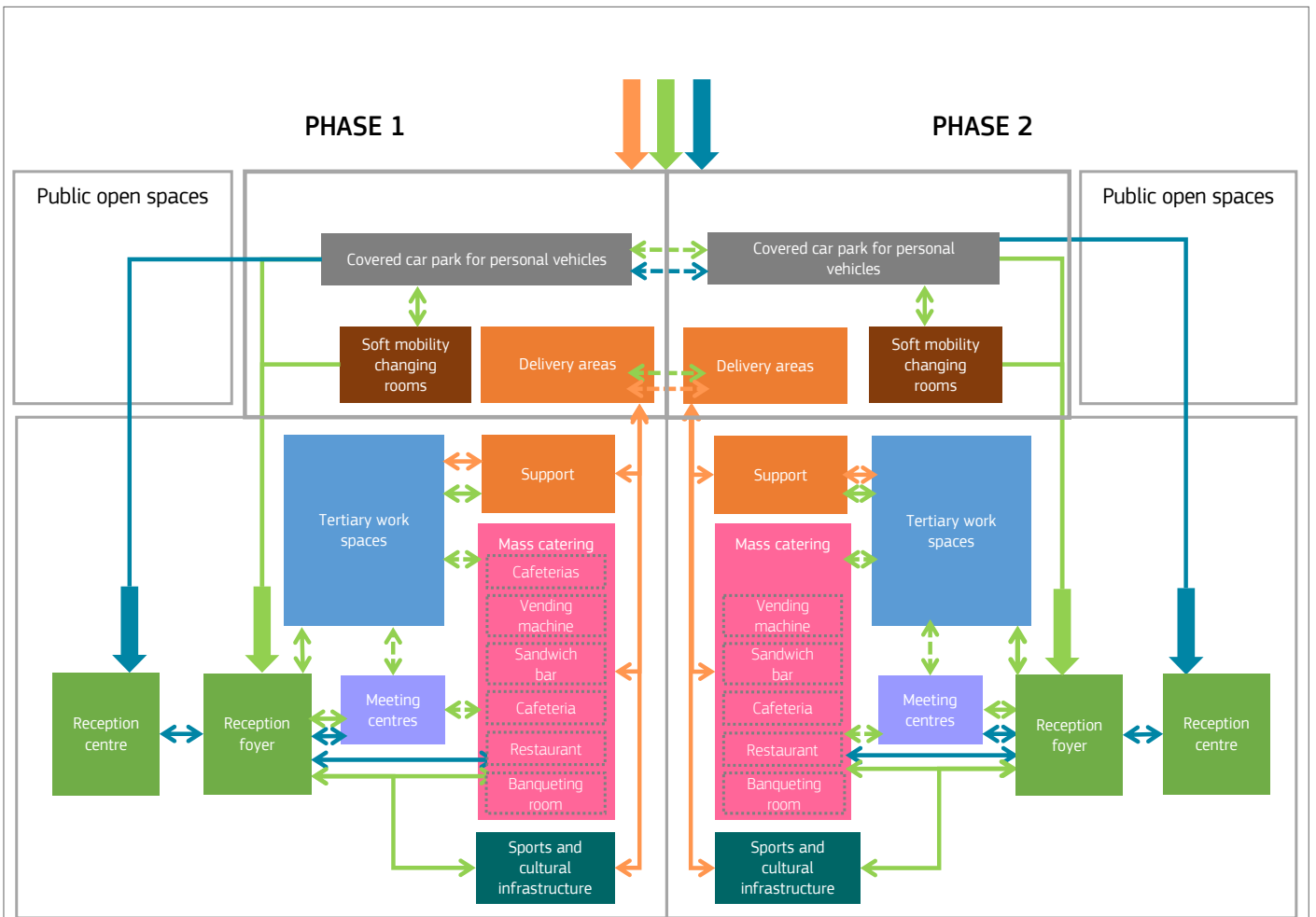
E.I | Office Buildings

- E.44 The main projected user categories are as follows: Users and capacity
- Staff members
 - Accompanied visitors
 - Authorised contractors
 - Authorised suppliers
- E.45 The design must enable the installation of over 5,250 work stations intended for staff members of the European Commission who are involved in administrative activities. Support staff (kitchen, maintenance, reception and security staff) are not included in this number.
- E.46 The design team is encouraged to create as many work stations as possible in accordance with the programme and urban planning rules.
- E.47 The office buildings will be organised to provide tertiary work spaces for staff members of the European Commission; and several functions shared by different services: General organisation
- Meeting centres
 - Catering areas and cafeterias
 - Mail services
 - Maintenance services
 - Sports and cultural infrastructure
- E.48 The office building(s) will be constructed in two construction phases. Their functions must be distributed between the two construction phases according to the area tables in Chapter G.

Functional groups

A. Entrances / reception areas

- E.49 Several entrances (at least one per building) at street level must be provided. Each entrance must enable reception and information, waiting, surveillance and access control functions to be carried out.
- E.50 The number of entrances must be limited for security reasons, while ensuring a sufficient number to reduce travel times and facilitate flows.



OFFICES KEY

Access:



Circulation spaces:



--- Optional link

Functional groups:



Diagram: Office buildings

E.51 The Entrances / reception areas group comprises the following spaces:

- Welcome Centre (see par. F.127) (A.1.1) for controlling visitor access. Not all entrances need to have a Welcome Centre: certain entrances may be reserved solely for staff members
- Reception foyer (A.1.2), which allows all accesses to be visually controlled from a reception desk. Identity checks and badge allocation are carried out in this area. Visitors are collected by staff members from this area. The area includes automatic security gates (PAS)s and automatic security gates for PRMs (PASs/PRMs) for accessing the various zones of the building
- Security officer's room (A.1.3), which particularly contains the panel for relaying information to the emergency services (police, fire, etc.)
- 'First aid' room (A.1.4) for use in medical emergencies. This will be easy for occupants and ambulance services to access and identify
- Health and safety officer's office (A.1.5), adjacent to the 'first aid' room

B. Tertiary work spaces

E.52 The office spaces must be able to accommodate over 5,250 work stations and the various areas needed so that the departments and DGs of the European Commission can function efficiently. The design team is encouraged to create as many work stations as possible in accordance with the programme and urban planning rules, while ensuring cost-efficiency and high-quality flexible work spaces and architecture.

E.53 The tertiary work spaces will accommodate the following functions:

- Office spaces (B.1): these must be adaptable to changes in working methods over two life cycles of 30 years, and must allow the following types of space to be created in an ergonomic way:
 - Individual offices (B.1.1): space enclosed by removable partitions, designed to accommodate one work station. The minimum usable area is 10 sq m per individual office. As an example, traditional Commission buildings follow a modular facade design of 1.2 m and a minimum width of 2.4 m for individual offices.
 - Open-plan offices (B.1.2): work space along the department's circulation spaces, designed to accommodate at least five work stations. The minimum usable area is 7 sq m per work station.

To accommodate reversibility between different types of layout and reduce any loss of efficiency, the office spaces will ideally have a depth of 5.40 m, and not less than 5.00 m or more than 5.80 m.

For the office layouts, the design team will take into account that work surfaces of min. 160 x 80 cm are needed.

- Collaborative / alternative work spaces (B.2), set up near to the office spaces. The following functions will be taken in account:
 - Quiet room (B.2.1): small enclosed space, allowing one person from an open-plan office to be on his or her own for a limited period. Its minimum area is 6 sq m.
 - Meeting room (B.2.2): enclosed space designed to accommodate up to 10 people seated around a table.
 - Informal meeting spaces (B.2.3): space open to the department's circulation spaces, designed for informal and relaxed meetings between staff members, which may include coffee stations or be close to kitchenettes. These spaces will be equipped with relaxing furniture: sofas, coffee tables, high tables with barstools, etc.

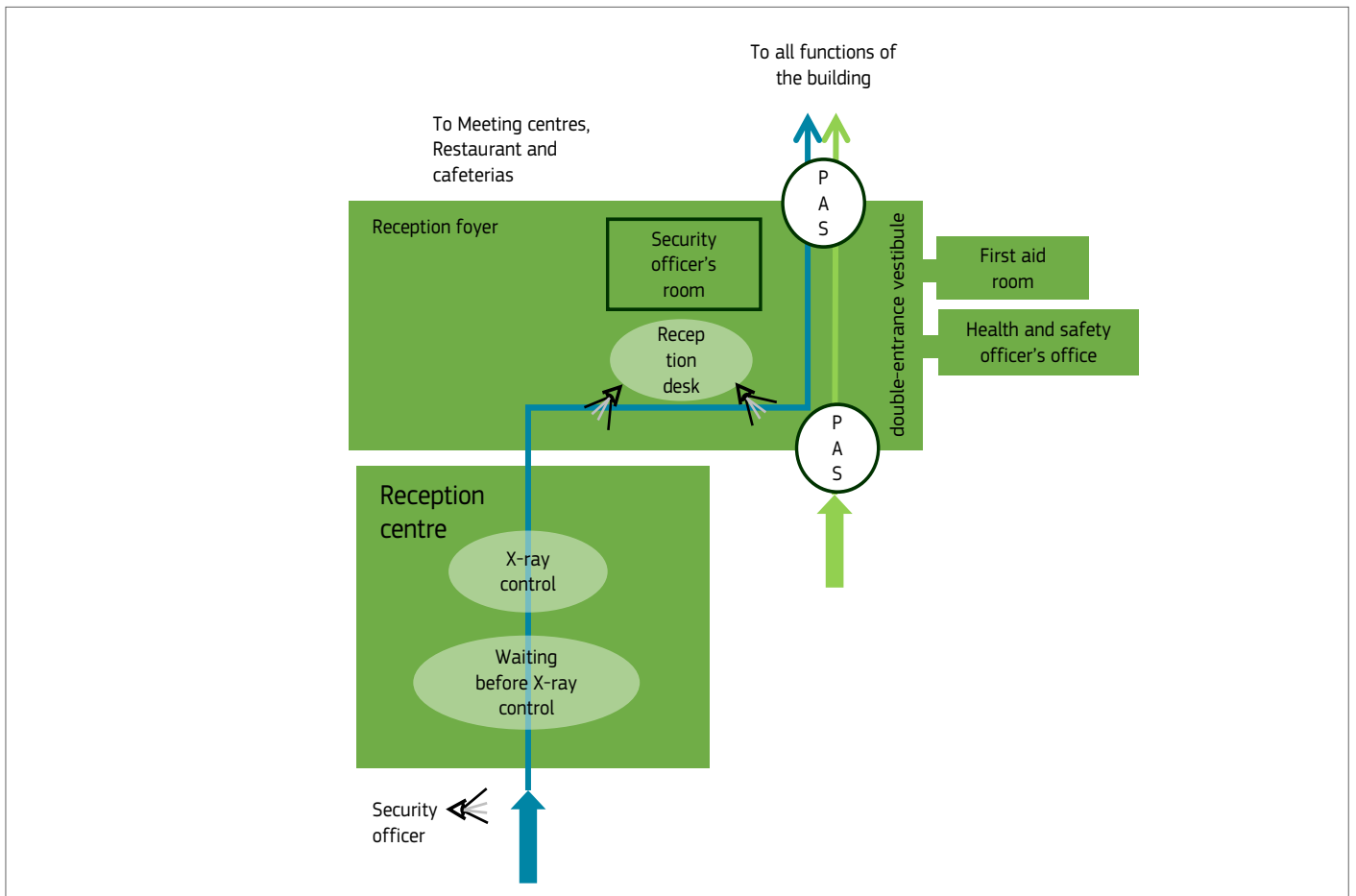


Diagram: Office reception

- Support spaces (B.3): these spaces, situated close to the office and collaborative spaces, are designed to bring together all the support functions. The support spaces will accommodate the following functions:
 - Copy spaces (for multi-function copier) with storage for consumables (B.3.1).
 - Living archive room (B.3.2).
 - Kitchenettes/coffee-relaxation spaces (B.3.3): situated close to the work units, they will act as informal meeting points between units. Combined with an informal meeting space, the kitchenette offers staff an alternative place to eat.

E.54 There will be three zones defined by their natural lighting:

- **Direct light zone (L1):** zone in which the usable area is situated less than 5.80 m from a glazed facade (overlooking a street, garden, atrium or patio), measured perpendicularly from the inner face of this facade. Re-entrant angle zones automatically result in a zero or indirect light zone in the part that does not have a perpendicular view to the glazed facades.
Given that they will be permanently occupied⁴, the office spaces must be in a direct light zone. Exceptionally, collaborative spaces may also be located in this zone.
- **Indirect light zone (L2):** zone in which the usable area is adjacent to a direct light zone, is no more than 1.3 m from a glazed facade and benefits from an unobstructed view of the latter.
Most of the collaborative spaces will be located in this zone.
- **Zero light zone:** zone in which the usable area is not within a direct or indirect light zone. Only support spaces will be located in this zone.

E.55 The office spaces will be able to accommodate various work space configurations according to the specific needs of the departments and DGs. Their flexible design must also allow for rapid, simple and cost-effective changes to the layout and distribution of the various types of space cited above over the building's lifetime. This flexibility will be guaranteed by:

- The structural modular design of the buildings, their facades and ceilings, which will allow individual offices to be created with a minimum loss of surface area;
- Spaces with a usable area free of obstacles (avoid the presence of columns in the usable area);
- Direct natural lighting (avoid zones without any direct light);
- The location of office spaces away from zones affected by noise pollution (as far as possible, avoid locating office spaces close to lift lobbies, kitchenettes, etc.);
- The level of equipment and dimensioning of technical installations, which must allow the expected performance levels for any work space configuration to be met (see section F.V).

C. Meeting centre

E.56 In addition to the meeting rooms for each department (covered in par. E.53), the office buildings will contain at least one meeting centre in each of the two construction phases.

E.57 The purpose of the meeting centres is to group together various types of meeting room (with a capacity of 10, 30, 70 and 150 people). (C.1.1 to C.1.4).

E.58 Grouping rooms together in one or more meeting centres will allow their management and use to be optimised by a dedicated department responsible for managing reservations, logistics and catering.

⁴ Occupation for more than 60 minutes at a time by a user.

- E.59 All the rooms identified in the programme must be distributed between a limited number of meeting centres, while ensuring that the travel time from a work station to the closest centre is as short as possible (target: not exceeding 5 minutes). To facilitate the hosting of visitors, these meeting centres will be situated close to the reception areas and cafeterias.
- E.60 The rooms in the meeting centre must ideally benefit from natural lighting. Rooms situated in a direct light zone must be reversible to office spaces.
- E.61 For each of the two construction phases, one large room in one of the meeting centres must enable cocktail receptions to be organised (see par. E.108) with an adjacent office (C.1.5) for temporary storage and preparation of banquets.

D. Catering

- E.62 The purpose of the catering spaces is to provide a daily catering service to European Commission users.
- E.63 The following aspects must be generally considered:
- Accessibility from the entrance/reception area of the building concerned;
 - User-friendliness and spatial quality of the restaurants and cafeterias;
 - The provision of private terraces is desirable.
- E.64 The kitchen design must respect the following general principles:
- Guarantee the kitchen's accessibility from the goods and food delivery area.
 - Define separate work areas according to the types of activity in order to guarantee food safety.
 - Establish the shortest possible circuits between the activities, for materials and staff, while ensuring that circulation is quick and easy.
 - Respect the 'step-by-step' principle: the various kitchen activities will be organised to avoid any return or crossover between the clean product area and the dirty product area⁵. This organisation will involve a logical and rational progression from delivery of the goods to their consumption and disposal.
- E.65 The catering spaces comprise the following functions:
- Restaurants
 - Banquette room
 - Cafeterias
 - Sandwich bars
 - Vending machines
- E.66 Their infrastructure will provide 1,350 seats and will enable a total production capacity of 2,700 meals/day, distributed in both project construction phases as follows:
- Construction phase 1 restaurant (D.1): 900 seats and 1,800 meals/day
 - Construction phase 2 restaurant (D.1): 450 seats and 900 meals/day
- E.67 The travel time from a work station to the closest restaurant must be as short as possible. Target: not exceeding 5 minutes.

Restaurants

⁵ 'Dirty' area means certain premises or locations that could be the source of serious contamination (e.g.: vegetable cleaning area, sink block/dishwashing area, waste disposal area, etc.) and 'clean' area means those premises where meals are put together and ready-to-serve hot and cold dishes are prepared (e.g.: cold meals, cooking area, etc.).

E.68 Each restaurant will be easy and quick to find from the entrance of the building within which it is situated. The restaurants will be accessible to staff of the European Commission, accompanied visitors and groups of visitors to the Visitor Centre, with which a direct link is desirable (see par. E.115). Certain groups of visitors will have access to the banqueting spaces (D.2.1) adjacent to the restaurants.

E.69 They will comprise the following areas:

- Dining rooms (D.1.1.1), intended for eating meals. There will be two sittings every lunchtime. The dining space must be user-friendly, with acoustics appropriate to the number of users at peak times. It will have natural lighting and will be equipped with secondary dispensing points (water fountains, etc.).

The tray removal area will be independent of the dining space. It will assist the fluid flow of users.

Access from the dining rooms to terraces is desired, provided that these are private (no access from the outdoor spaces), secure and sheltered from the wind.

- Food distribution areas (D.1.2): these will ensure regulated flows, which will be directed according to the 'food court' principle (different stands, for example: Grills, Daily specials, Pizza & pasta, Salad bar, etc.).

The stands (D.1.2.1) will be grouped side by side. Each stand will have its own cash desk, assisting the fluid flow of users and limiting waiting time. The area will be adaptable in case the use of the various stands changes.

Their arrangement will limit bottlenecks as far as possible. There will be a circulation area between the stands and the dining room.

- Food production areas (D.1.3):

A streamlined and centralised production area, specific to each restaurant, must be provided. Each one will respect the 'step-by-step' principle, with strict separation between 'clean' areas and 'dirty' areas.

- Clean area: areas where meals are put together.
- Dirty area: areas where contamination may occur (vegetable cleaning, sink block, etc.).

Hygiene regulations require the use of dedicated clean/dirty goods lifts in the event of vertical circulation systems.

Each restaurant will preferably be arranged on one level, in order to limit vertical circulation spaces as far as possible (production side and dining room side). In particular, the production area must be located such that foodstuffs can be easily conveyed from the delivery area.

Each restaurant will comprise the following spaces:

- Manager's office (D.1.3.1)
- Hot preparation area (D.1.3.2)
- Cold preparation area (D.1.3.3)
- Dishwashing area (D.1.3.4)
- Sink block (D.1.3.5)
- Stores (D.1.3.6)
- Positive temperature cold chambers (D.1.3.7)
- Negative temperature cold chambers (D.1.3.8)
- Unpacking/tin-opening area (D.1.3.9)

E.70 Except for the stores and cold chambers, these areas will ideally have natural lighting, given that they will be permanently occupied by workers.

E.71 The organisation of banquets in the form of cocktail receptions is one of the methods used to showcase the premises of the European Commission, for example by hosting groups from the Visitor Centre. These spaces are not, however, constrained by protocol or confidentiality requirements.

- E.72 Several spaces allowing the organisation of banquets will be provided. They will have natural lighting and will be adaptable to several configurations.
- A banqueting space (D.2.1) with the capacity for 120 people will be positioned adjacent to the dining room of the 900-seat restaurant, to which it may serve as an extension: a movable partition will allow this space to be separated from or opened up to the dining room.
 - A banqueting space (D.2.1) with the capacity for 100 people will be positioned adjacent to the dining room of the 450-seat restaurant, to which it may serve as an extension: a movable partition will allow this space to be separated from or opened up to the dining room.
 - Store rooms (D.2.2) will be connected to the banqueting spaces.
 - A large meeting room within the meeting centre, in each construction phase, will allow banquets to be held. To this end, an office (C.1.5) will be positioned adjacent to this room, for temporary storage and preparation of banquets.
- E.73 The purpose of the cafeterias is the sale and consumption of drinks (hot and cold), sandwiches (cold) and pastries to/by European Commission users.
- E.74 Four cafeterias will be available on the site, distributed in such a way as to ensure fluid flows and minimise the travel time from a work station (target: not exceeding 5 minutes). Each restaurant will have a cafeteria at the entrance/exit in order to supplement the catering offer.
- E.75 Their total capacity of 600 seats will be distributed in both project construction phases as follows:
- Construction phase 1: 1 x 200-seat cafeteria (D.3) and 2 x 100-seat cafeterias (D.4)
 - Construction phase 2: 1 x 200-seat cafeteria (D.3)
- E.76 They will comprise the following areas:
- Dining rooms (D.3.1.1 / D.4.1.1):
- E.77 Each cafeteria will offer a spacious room with natural lighting.
- E.78 Access from the dining rooms to terraces is desired, provided that these are private, secure and sheltered from the wind. Where appropriate, the cafeterias and restaurants may share terraces.
- Food production area (D.3.2 / D.4.2):
- E.79 A production area specific to each cafeteria will be provided for preparing hot drinks and cold sandwiches. Except for the stores, these areas will ideally have natural lighting, given that they will be permanently occupied by workers.
- E.80 The cafeteria products will be conveyed from the delivery area. They may be conveyed via the building's circulation spaces, but the distances involved must be as short as possible.
- E.81 Each cafeteria will comprise the following spaces:
- Manager's office (D.3.2.1 / D.4.2.1)
 - Pantry (D.3.2.4 / D.4.2.4): preparation of sandwiches and hot drinks
 - Counter (D.3.2.2 / D.4.2.2): storage and sale of food prepared in the pantry and/or externally
 - Coffee preparation space (D.3.2.3 / D.4.2.3) for the meeting rooms
 - Sink block (D.3.2.5 / D.4.2.5)
 - Stores (D.3.2.6 / D.4.2.6)

E.82	Sandwich bars (D.5.1) are stands that sell only sandwiches and drinks, without any preparation spaces, dining room or seats. They are totally independent of the cafeterias and the logistics circuit for their restocking is not subject to any constraints.	Sandwich bars
E.83	The travel time from a work station to the closest sandwich bar must be as short as possible (target: not exceeding 5 minutes).	
E.84	To assist their visibility and ensure fluid flows, they will preferably be situated within the area of a circulation space, ideally with natural lighting.	
E.85	Spaces for vending machines providing snacks and hot and cold drinks (D.6.2) will be distributed uniformly across all the office floors. They will have a consumption area (D.6.1) without any seats, allowing informal discussions.	Vending machines
E.86	In addition, "coffee stations" with coffee vending machines that can be used by everyone may be provided in the informal meeting spaces (see par. E.53).	
E.87	Catering staff quarters (D.7) will be strictly separated into male and female quarters. They will comprise changing rooms equipped with double-door full-height lockers (1 per person), showers (1 for every 6 people) and toilets (according to the General Regulation on worker protection (RGPT)).	Catering staff quarters
E.88	The logistics area(s) will handle the receipt, inspection, storage and conveyance of all goods, including foodstuffs needed for food production, as well as waste disposal. They will comprise the following: <ul style="list-style-type: none"> • Delivery areas: the delivery areas are described in section E.V. 	Logistics
E.89	In the case of foodstuffs, for hygiene reasons they must be conveyed from the delivery areas via a circuit strictly reserved for this purpose. The delivery circuit must ensure an optimum travel time (target: not exceeding 5 minutes) between the unloading bay and the storage area situated within a production area. The configuration of the circuit must prevent unauthorised shortcuts (e.g.: crossing a car park not forming part of the circuit).	
E.90	Unpacking work may be carried out in the delivery area. <ul style="list-style-type: none"> • Waste disposal from production to organic waste facilities: for hygiene reasons this must be carried out via areas separate from the delivery areas (see par. E.176). 	
<hr style="border: 0; border-top: 1px solid black; margin-bottom: 5px;"/> E. Support		
E.91	The support services consist of maintenance ('facility management'), mail and security services for each building. They will require the following premises: <ul style="list-style-type: none"> • Control Centre (E.1.1): This will allow the management of security and monitoring of the building by a team consisting of the security staff and the fire and medical emergency service. The centre will cover the following functions: <ul style="list-style-type: none"> - Fire Control Station, with information being delayed to central control centre of the European Commission in other buildings. - Technical, safety and security alarm relays. - Technical and security control of the building. - Control and relay of the building and site video surveillance. - Control of the public-address system. 	
E.92	The work stations in the control centre will have daylight. <ul style="list-style-type: none"> • A crisis management room (E.1.2) will be available right next to the control centre, allowing a crisis unit to meet if a major event occurs at the site. Means of communication and information relays will be available in this room. • Building manager's office (E.1.3 – included in B. Tertiary work spaces). • Incoming and outgoing mail rooms (E.1.4). 	

- Archive areas (E.1.5), intended to house the semi-living archives (which must be kept by law) and historical archives. They will preferably be grouped together.
- Store rooms for maintenance materials (plumbing, HVAC, electricity, chemicals) (E.2.1).
- Building maintenance and cleaning rooms:
 - Centralised store rooms for cleaning products, tools and machinery (E.3.1).
 - Floor-specific rooms (E.3.2) for the local storage of maintenance products and trolleys.
- Other store rooms (E.5.1): furniture, supplies, communication and exhibition materials, etc.
- Contractors' rooms (E.4):
 - Team manager's office (E.4.1 – included in B. Tertiary work spaces.
 - Workshops (E.4.2).
 - Canteen (E.4.3).
 - Kitchenette (E.4.4) adjacent to the canteen.
 - Changing rooms (1 locker per person), showers (1 for every 6 people) and toilets (according to RGPT regulations) (E.4.5).
- Waste container area (Y.1.5): this will house the containers allowing waste to be sorted. Its location in the delivery area (see section E.V) will make it easy for the containers to be emptied by appropriate vehicles.
- Delivery area: the requirements are set out in section E.V.

E.93 NB: Mail sorting and management will be carried out from tertiary work stations, included and described in par. E.139.

F. Sports and cultural infrastructure

E.94 The sports and cultural infrastructure aims to allow staff members of the European Commission to engage in sports and/or cultural activities outside office hours. The functions to be established are as follows:

- Multipurpose rooms (F.1.1), which must be arranged so that they are as flexible as possible in their use. They will ideally have natural lighting. The rooms must be reconfigurable and should ideally be distributed across the complex
- Changing rooms, showers and toilets (F.1.2) appropriate to the capacity of the multipurpose rooms. They may be combined with those intended for users of 'soft' modes of transport (see par. E.169), provided that their spatial locations are compatible

E.95 The location of sports and cultural infrastructure must enable easy access from the relevant building's entrance.

G. Sanitary facilities

E.96 Toilets (G.1.1) must be easily accessible. They must be appropriately distributed across the buildings.

E.97 Their capacity will comply with the applicable regulations (in particular the RGPT).

E.98 One PRM-accessible toilet will be provided in each toilet block.

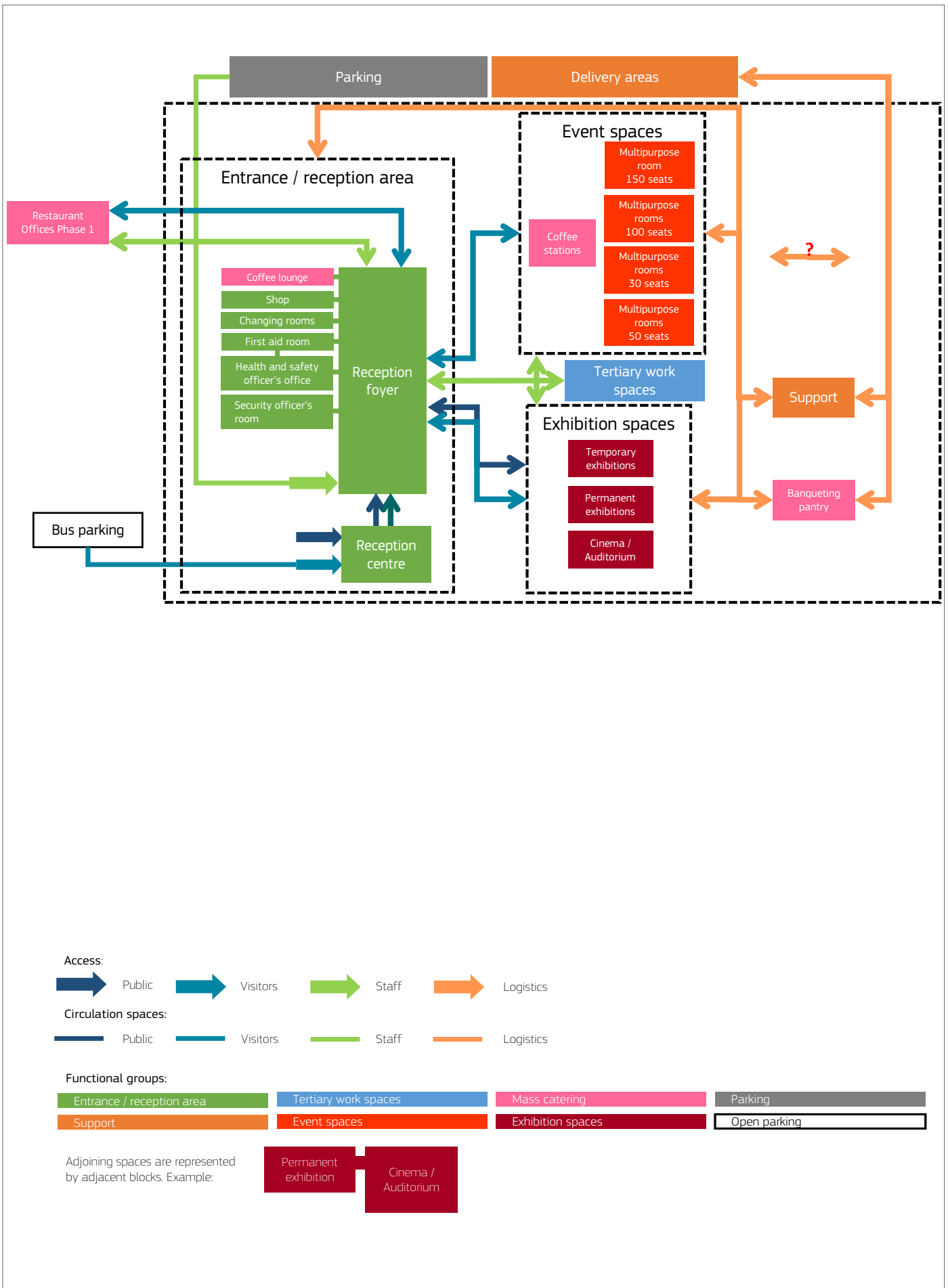


Diagram: Visitor Centre

E.II | Visitor centre

E.99	The Visitor Centre must give citizens a unique overview of the European Commission. It must perform the following functions:	Objectives
	<ul style="list-style-type: none"> • Act as an educational tool explaining the role and activities of the European Commission through briefings, exhibitions and events relating to European Commission news, showing of documentaries and a counter offering information products • Be an emblematic building on the site through its architecture, which must enhance the attractiveness and informative nature of the Centre while illustrating the serious side of the European Commission. The Centre must ultimately become the identifiable 'face' of the European Commission in Brussels for the general public • Act as a driver for the site, in the same way as the retail units and public outdoor spaces, which are intended to enliven the area 	
E.100	Located in construction phase 1 of the complex, the Visitor Centre, will be accessible, firstly, to all citizens, without accreditation, seven days a week and, secondly, to groups of visitors by prior request, on working days. The Visitor Centre will be free of charge.	
E.101	The Centre will receive two different types of visitor:	Users and capacity
	<ul style="list-style-type: none"> • Individual visitors who will be offered a general tour of the exhibition spaces (permanent and temporary). • Groups of visitors requesting specific information on the activities/news of the European Commission and for whom thematic conferences will be organised (following prior registration, around 10 weeks in advance). Three types of visit will be offered: <ul style="list-style-type: none"> - General visits: general presentation of the European Commission; - Specific visits: general presentation followed by a conference on a particular theme; - 'Tailor-made' visits: tailor-made programme ranging from a half day to one and a half days, aimed at opinion-leaders. (Members of national and regional parliaments, government representatives, public officials, journalists, media representatives, senior representatives of civil society, networks of EU informers, academies, postgraduate students, researchers, teachers, other groups by special request) 	
E.102	The building will also receive the following categories of users:	
	<ul style="list-style-type: none"> • European Commission staff assigned to the Visitor Centre; • Contractors involved in the visits of certain groups; • Logistics staff (contractors and suppliers). 	
E.103	The required capacity is 345,000 visitors per year, including:	
	<ul style="list-style-type: none"> • 280,000 individual visitors (500 to 750 visitors expected each day); • 60,000 to 65,000 people on group visits (2,000 groups per year, 8 groups per day at peak times, 15 to 150 people per group). 	

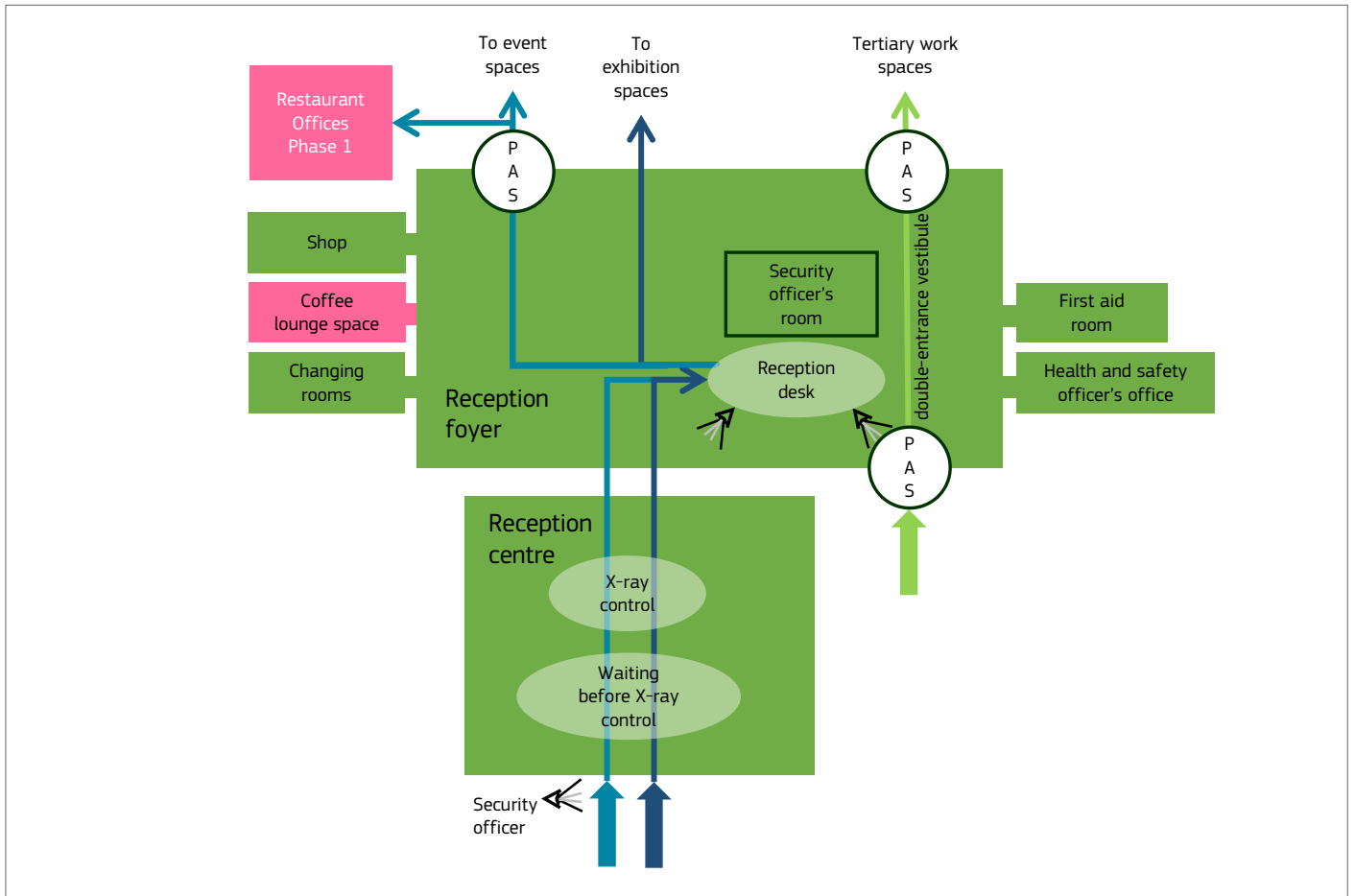


Diagram: Visitor centre reception

E.104 This area must be able to open independently for longer hours, irrespective of the other functional entities present on site.

General organisation

E.105 The Visitor Centre will comprise:

- A foyer area in the entrance/reception area, where visitors to the Visitor Centre will be generally welcomed, appropriate security controls carried out, and services and amenities offered to the public
- Permanent and temporary exhibition spaces, which, through a wide range of multimedia interactive tools, will aim to create a journey for visitors to the heart of the European Community's activities
- Event spaces allowing the organisation of conferences and seminars in particular
- Tertiary work spaces, containing work stations for staff involved in managing the Visitor Centre
- Catering spaces, including a coffee lounge and an office allowing the organisation of banqueting in the exhibition space
- Support areas to ensure the efficient functioning of the Centre

Functional groups

H. Entrance / reception area

E.106 As the first area accessed by the public, the reception area must meet the following objectives:

- Secure the Centre by allowing security measures to be discretely conducted without harming the desired image of openness;
- Inform visitors via an easily identifiable general reception;
- Clearly guide visitors towards the Centre's various areas.

E.107 The Entrances / reception areas group comprises the following spaces:

- Welcome Centre (see par. F.128), for controlling visitor access. X-ray screening systems will be dimensioned for a total capacity of 500 people/hour and 250 bags/hour.
- Reception foyer (H.1.2): forming the general reception point of the Visitor Centre, this will contain the services and amenities offered to the public. Staff members may directly access this foyer via single-person revolving doors controlled by badge. It will comprise:
 - a reception desk that will physically welcome visitors to the Centre, answer phone calls and issue access devices for the various areas;
 - a waiting area for groups of visitors before they are collected by the Centre's staff. This will be equipped with screens, internet terminals and interactive devices which will immerse visitors, as soon as they arrive, into the world of the European Commission while facilitating their wait. The four main roles of the European Commission (right of initiative, executive power, guardian of the Treaties, international dimension) will be displayed in this area. Individual visitors will then be able to freely access the exhibition spaces, while groups of visitors will access the event spaces via PASs.
- A shop (H.1.3), selling publications, souvenirs, gifts and products connected with the European Commission, opening onto the reception foyer.
- Cloakrooms (H.1.4), where visitors may leave their personal items (including suitcase-type bags), opening onto the reception foyer.
- Security officer's room (H.1.5), from where all the accesses can be visually controlled and which will particularly contain the panel for relaying information to the emergency services in order to facilitate their actions.

- 'First aid' room (H.1.6) for use in medical emergencies. This will be easy for occupants and ambulance services to access and identify.
- Health and safety officer's office (H.1.7), adjacent to the 'first aid' room.

I. Exhibition spaces

- E.108** The exhibition spaces will accommodate permanent installations as well as temporary themed exhibitions throughout the year. These spaces will be accessible to all visitors. They will comprise in particular:
- Permanent exhibition spaces (I.1.1):
 - at the entrance to this space, the first visible element will be the timeline of the European Commission, retracing its history and recalling the major decisions that have marked the terms of the various successive colleges.
 - a section entitled 'Europe around the corner' will present the different projects financed by the EU in the various regions.
 - installations ('Commissioners' wall'), panels, audio extracts and interactive educational terminals will mark the permanent route designed so that visitors can observe, question and understand at their own pace in terms of interest and curiosity.
 - computer terminals will be available for use by visitors so that they can discover the range of European Commission digital documents on offer.
 - Temporary exhibition spaces (I.1.2 I.1.1): these will be modular and adjustable into spaces of varying sizes, allowing the organisation of different types of event. Outside public opening hours, they will allow cocktail receptions to be held as a conclusion to the visit of certain groups.
 - A cinema room / auditorium (I.1.3), with a capacity of around 80 places, forming part of the route through the Visitor Centre.
- E.109** Store rooms (M.4.1) will be available directly adjacent to the exhibition spaces for multimedia, exhibition and display materials.

J. Event spaces

- E.110** The event spaces in the Visitor Centre will allow the site to be positioned as a place for debate and exchange on matters relating to the EU, the European Commission and other subjects connected with the Institutions. Used to receive groups accompanied by the Centre's staff, they will comprise:
- A 150-seat room (J.1.1) and its three interpreting booths (J.1.2);
 - Two rooms with 100 seats each (J.2.1), one of which will be equipped with three interpreting booths (J.2.2);
 - Two rooms with 50 seats (J.3.1) and three interpreting booths each (J.3.2);
 - Three rooms with 30 seats each (J.4.1).
- E.111** The furniture arrangement in these rooms will encourage participative sessions and allow for the space to be reorganised, for example with chairs with integrated writing tablets.
- E.112** Each interpreting booth will have the capacity for four work stations and four desks.

K. Tertiary work spaces

- E.113 Around 45 people will be responsible for the day-to-day management of the Visitor Centre. The 'Centre Management' unit will comprise:
- Office spaces for the staff:
 - three individual offices (K.1.1);
 - nine shared offices with two work stations and two shared offices with four work stations (K.1.2);
 - 16 work stations in open-plan offices for the reception staff (K.1.3);
 - Shared collaborative spaces:
 - a meeting room with 10 seats (K.2.2);
 - a quiet room (K.2.1);
 - an informal meeting space (K.2.3);
 - Shared support spaces:
 - copying tools (K.3.1);
 - an archive room (K.3.2);
 - a coffee/kitchenette space (K.3.3).
- E.114 The offices will be located adjacent to the event spaces to aid the work of staff in charge of organising events.

L. Catering

- E.115 This will comprise:
- A 'coffee lounge' (L.1), offering cafeteria-type services and comprising the following spaces:
 - lounge space (L.1.1);
 - counter (L.1.2);
 - pantry (L.1.3);
 - store (L.1.4);
 - Small 'coffee stations' (L.2), situated immediately adjacent to the event rooms;
 - A banqueting pantry (L.3.1), allowing the temporary storage (during the day), preparation and distribution of food and beverages for cocktail receptions. This will therefore be directly connected to the exhibition spaces.
- E.116 Groups of visitors who remain on site throughout the day will be invited to take their meals in one of the restaurants in the office buildings of the European Commission (see par. O). To this end, a direct functional link between the Visitor Centre and the restaurant in construction phase 1 is desirable.

M. Support

- E.117 The support services consist of maintenance ('facility management') services. They will require the following premises:
- Building manager's office (M.1.1), consisting of a tertiary work station.
 - Store rooms for maintenance materials (M.2.1).
 - Building maintenance and cleaning rooms:
 - store rooms for maintenance supplies and products (M.3.1);
 - floor-specific rooms (M.3.2) for maintenance products and trolleys.
 - Miscellaneous store rooms (M.4.1), serving the exhibition spaces.
 - Bin room (M.5.1), allowing the sorting and combining of waste. Its location must allow waste to be easily transferred to the waste collection bays accessible to refuse trucks (Y.1.4).
 - Delivery area, which is easily accessible for the various deliveries (see section E.V).

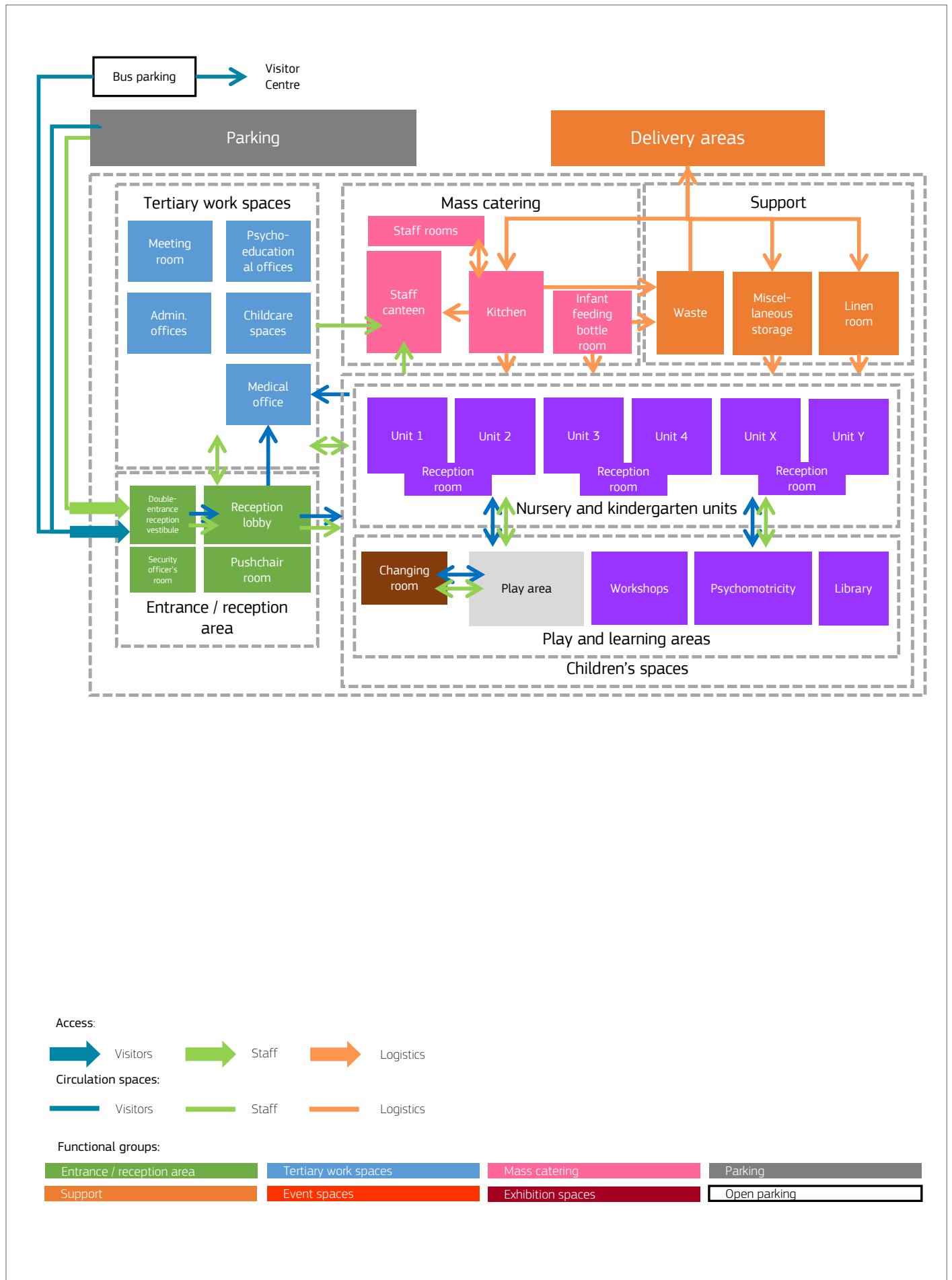


Diagram: Day Nursery

 N. Sanitary facilities

- E.118 Toilets (N.1.1 and N.1.2) must be easily accessible. They must be appropriately distributed across the buildings.
- E.119 Their capacity will comply with the applicable regulations (in particular the RGPT) and will take account of the maximum capacity of the spaces served.
- E.120 At least one PRM-accessible toilet will be provided in each toilet block in accordance with the provisions of the RRU and the MIT.

 E.III | Day nurseries

E.121 The Project includes the creation of two day-nurseries on site (one for each construction phase of the Project). Each day nursery will be a fun, clean and secure place and will be designed so that it is protected from outside view (protection of privacy).

Objectives

E.122 The main projected user categories are as follows:

Users and capacity

- Children between 0 and 4 years of age;
- Parents and persons authorised to drop off/pick up children;
- Day nursery staff;
- Contractors and suppliers.

E.123 Each day nursery will accommodate 254 children, divided into:

- 13 sections of 14 children aged from 8 weeks to 3 years;
- 4 sections of 18 children aged from 3 to 4 years.

E.124 Around 60 qualified staff will manage and organise each day nursery (administrative, educational and nursery staff, psycho-educational staff, medical staff, logistics staff).

E.125 Children will attend the day nursery on a full-time or part-time basis from 7.45 am to 6.30 pm. The opening hours of the building (for staff) are from 7.00 am to 8.00 pm.

E.126 The premises and facilities will allow a variety of learning activities to be organised encouraging the children's development, meals to be served, and rest time and activities to be organised according to the age of the children who will be divided into sections.

General organisation

E.127 Each day nursery will meet the most stringent requirements of the Belgian organisations responsible for early childhood (Belgian standards ONE and Kind & Gezin).

E.128 The two day-nurseries will offer the same services. Each day nursery will be organised around the following spaces:

- Nursery units, offering spaces for activities, meals and rest. Independently designed, each nursery unit will accommodate 14 children between 0 and 3 years of age in the care of 2 nursery nurses. Each kindergarten unit will accommodate 18 children between 3 and 4 years of age in the care of 2 teachers.
- Spaces shared by all the nursery and kindergarten units, comprising:
 - a common reception area
 - play and learning areas (including an inner courtyard)
 - a central kitchen preparing and distributing snacks and meals for the children and staff
 - a central infant feeding bottle room preparing and distributing feeding bottles for each of the sections
 - a linen area
 - storage spaces distributed equally between the units
 - a medical office
 - staff spaces

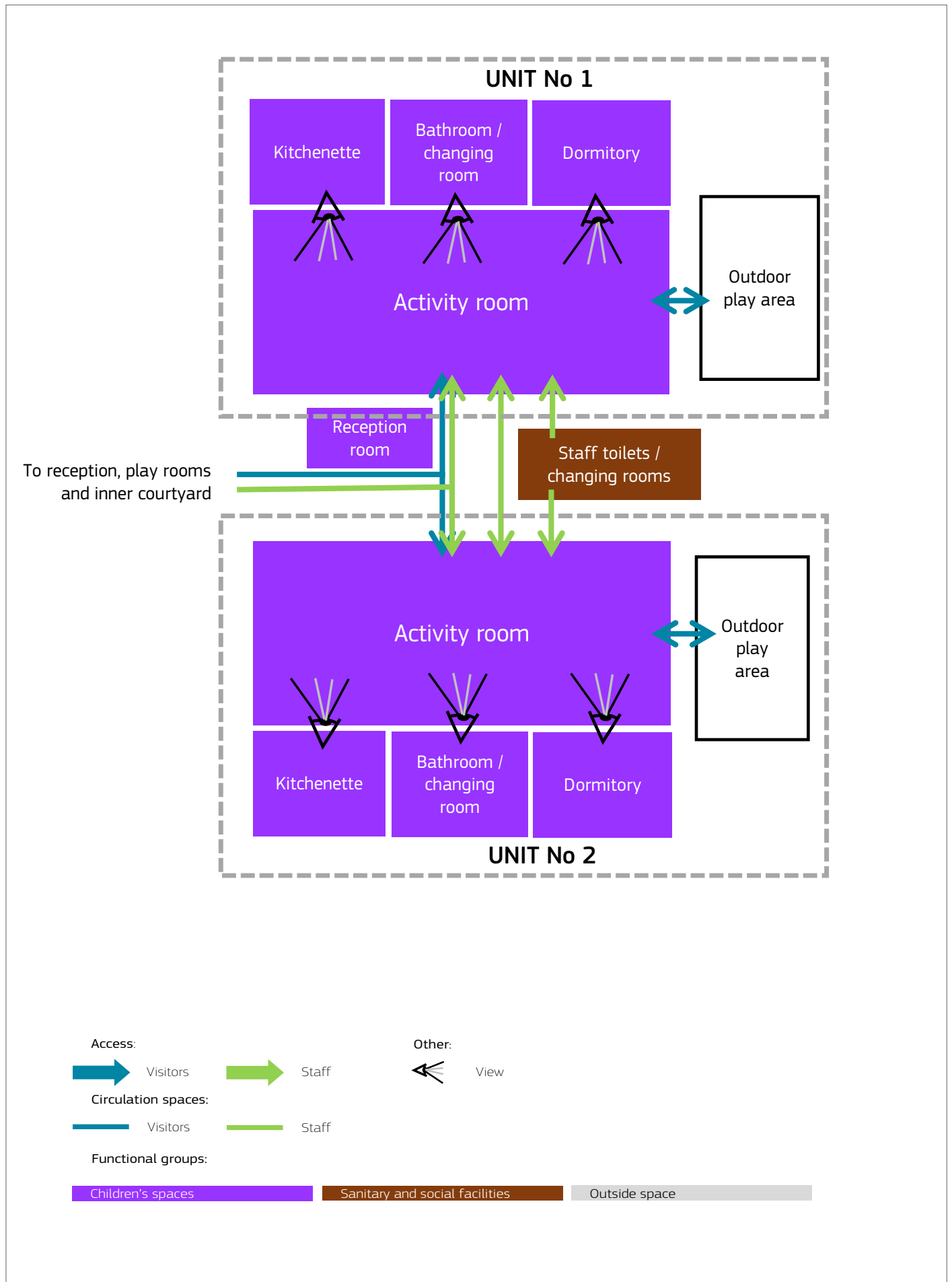


Diagram: Typical Nursery Unit

Functional groups

O. Entrance / reception area

- E.129 There should be a single entrance from the public outdoor space for each day nursery.
- E.130 The reception area of each day nursery will consist of the following spaces:
- A double-entrance reception vestibule (O.1.1) involving PASs and PASs/PRMs
 - A security officer's area (O.1.2), located in the double-entrance reception vestibule and equipped with a reception desk allowing people's identities to be checked
 - A reception lobby (O.1.3)
 - A room for storing pushchairs (O.1.4), immediately adjacent to the reception lobby.
- E.131 The entire reception lobby will also be equipped with a video surveillance system. Staff access will be via an electronic check at the building entrance.
- E.132 Parents and staff will then be freely admitted into all areas of the day nursery, except for the following:
- medical area: accessible only with the doctor's approval;
 - food production area: reserved for kitchen staff;
 - rooms for the maintenance services, reserved for authorised staff.
 - office spaces, reserved for authorised staff.

P. Children's spaces

- E.133 The nursery units (P.1) will all have the same design so that they can be used for all age groups. Only the furniture will be adapted to the age of the children.
- E.134 The kindergarten units (P.2) will have different designs (see MIT).
- E.135 The units will be designed to connect in pairs, which will allow staff to be flexible in their management (allowing a nursery nurse to occasionally supervise two units). The sections will connect through activity rooms.
- E.136 Each unit will at least comprise the following:
- A reception room (P.1.1 / P.2.1), shared by two adjacent units. This will be equipped with lockers for storing the children's footwear and jackets.
 - An activity room (P.1.2 / P.2.2), which will be the main place in the section where children play, eat and snack, and around which the other spaces in the unit will be arranged. The activity rooms will not have any obstacles preventing supervision (blind corners, columns, etc.). They will be designed to allow staff to visually check them from the dormitory, bathroom and kitchenette.
 - A dormitory (P.1.3 / P.2.3), away from sources of noise (ventilation, circulation spaces, etc.) and in which the bays will be easy to darken (failing this, the dormitories may be located in a zero-light zone). The dormitory will contain one bed per child and also evacuation beds (three for nursery units, one for kindergarten units).
 - A bathroom/changing room (P.1.4 / P.2.4), equipped with a small bath, changing tables, and toilets and washbasins at children's level.
 - A kitchenette (P.1.5 / P.2.5), reserved for staff who will eat there in turn. NB: lunch and snacks for children and staff will be prepared in the central kitchen.
 - Changing rooms (P.1.6 / P.2.6) and toilets for staff (P.1.7 / P.2.7), possibly shared by two adjacent units.
- E.137 In each day nursery, the following rooms or spaces will be shared:
- Two workshops (P.3.1) for cultural and recreational activities. These will be adjacent, but separated by movable walls so that the area can be adapted.

Nursery and kindergarten units

Play and learning areas

- A psychomotricity room (P.3.2) allowing for learning games, ball games and any other discipline requiring space.
- A library (P.3.3), equipped with bookshelves, chairs for the adults and cushions on the floor for the children.
- An open-air play area (P.3.5). The play area will preferably be divided into two distinct parts: a covered part and an open part, allowing children to remain outside even when it is raining or very hot. Its design and location will take account of:
 - noise generated by the children (disturbing for neighbouring offices)
 - air quality
 - sunlight
 - protection from view from public space
- Toilets/changing room (P.3.4), equipped with changing tables and also toilets and washbasins at children's level - directly accessible from the play area.

E.138 Each room will have a water supply with a sink at children's level and will be directly connected to a block of children's toilets (P.3.4).

Q. Tertiary work spaces

E.139 The staff spaces, which will be shared by the various nursery and kindergarten units, will comprise the following in each day nursery:

- Office spaces for the administrative and psycho-educational staff, who will need to move about on a very regular basis between the various nursery and kindergarten sections:
 - five individual work stations (Q.1.1 / Q.1.2 / Q.2.1);
 - two workstations in a shared office (Q.1.3).
- Collaborative spaces, consisting of a modular meeting room for 25 people (Q.3.1).
- A mail space, equipped with lockers and located in a circulation area close to the office spaces.
- Spaces for the nursery nurses, consisting of:
 - a rest room (Q.4.2), offering a calm and relaxing environment for the well-being of teaching staff;
 - an occasional office (Q.4.1) for the nursery nurses and teachers, equipped with a few work stations.
- A medical office (Q.5): this will be staffed by a paediatrician and two nurses. It will be organised around the following spaces:
 - a waiting room (Q.5.1), away from the main access passage to the nursery and kindergarten sections, while still being easy to access. It will contain a play corner where the nurses can observe the behaviour of children.
 - offices for the nurses (Q.5.3) and doctor (Q.5.2), directly accessible from the waiting room. Children will firstly go into the office of a nurse and will then be taken to the doctor's office for examination. The medical equipment will be stored in the nurses' offices.
 - toilets for adults and children (Q.5.4) will be accessible from the waiting room and will ideally be specific to the medical office.

E.140 The location of these spaces will allow parent-doctor dialogue under conditions of utmost discretion. The medical office will be located such that it is easy to access from the reception area and various sections of the day nursery.

R. Catering

E.141 The catering spaces of each day nursery will comprise the following:

- A dining room (R.1.1.1) (canteen), with a 50-seat capacity. This must be user-friendly, with appropriate acoustics. It will have natural lighting.
- A central production area (kitchen), preparing meals and snacks for the children and staff. This will be so designed that it respects the 'step-by-step' principle and will be located such that food can be easily and quickly distributed to the units. It will comprise the following spaces:
 - Manager's office (R.1.2.1)
 - Storekeeper's office (R.1.2.2)
 - Hot preparation area (R.1.2.3)
 - Cold preparation area (R.1.2.4)
 - Dishwashing area – Sink block (R.1.2.5)
 - Vegetable preparation area (R.1.2.6)
 - Stores (R.1.2.9 and R.1.2.10)
 - Cold storage (positive and negative temperature cold chambers) (R.1.2.11)
- Except for the stores and cold chambers, these areas will ideally have natural lighting, given that they will be permanently occupied by workers.
- Support areas such as:
 - Equipment store (R.1.2.12)
 - Maintenance products store (R.1.2.13)
 - Trolley area (R.1.2.14)
 - Cleaning room (R.1.2.15)
- A central infant feeding bottle room (R.3.1) preparing and distributing feeding bottles for each of the sections.
- Changing rooms for catering staff (R.1.3.1): these will be strictly separated into male and female facilities and will be integrated into the clean/dirty circuit. They will comprise changing rooms equipped with double-door full-height lockers (1 per person), showers (1 for every 6 people) and toilets (according to RGPT).
- Logistics areas: these will handle the receipt, inspection, storage and conveyance of all foodstuffs needed for food production, as well as waste disposal. They will comprise the following functions:
 - Delivery areas:
The delivery areas may be shared not only by the restaurants, but also with the other logistics services, with reserved times to prevent conflict (see par. E.175). For hygiene reasons, foodstuffs must be conveyed from the delivery areas via a circuit strictly reserved for this purpose. The delivery circuit must ensure a travel time not exceeding 10 minutes between the unloading bay and the storage area situated within a production area. The configuration of the circuit must prevent unauthorised shortcuts (e.g.: crossing a car park not forming part of the circuit).
Although the unloading bays may be shared by the restaurants and logistics functions, the storage will, however, be separate for each functional area.
 - Unpacking (R.1.2.7) directly in the delivery area.
 - Unboxing (R.1.2.8) in the production area.
 - Waste disposal from production areas to organic waste facilities (Y.1.7): for hygiene reasons, this must be carried out via areas separate from the delivery areas (see par. E.90). The organic waste facilities will be adjacent to the waste container area (Y.1.5) in the delivery area (see section E.V) and may be shared by the office buildings (Y.1.6).

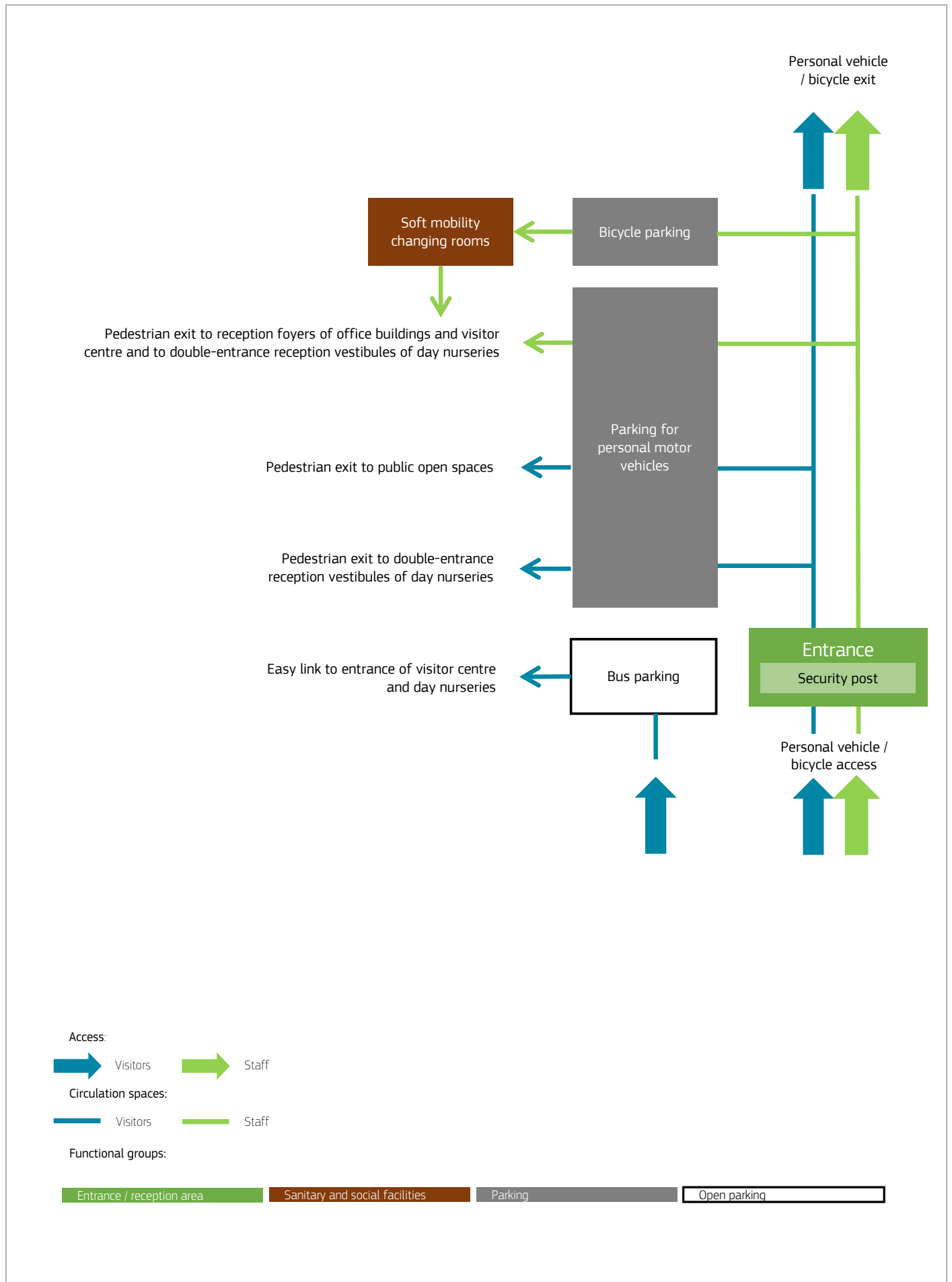


Diagram: Parking

S. Support

- E.142 The support services consist of maintenance ('facility management') services. They will require the following premises for each day nursery:
- Building manager's office (S.1.1) (included in the tertiary work spaces)
 - A workshop (S.1.2) for minor maintenance work
 - A linen area, consisting of:
 - a 'clean linen' room (S.2.1)
 - a 'dirty linen' room (S.2.2)
 - a laundry room for washing and drying linen and stuffed toys (S.2.3)
 - Store rooms for maintenance materials (S.3.1) (plumbing, HVAC, electricity, chemicals)
 - Building maintenance and cleaning rooms:
 - centralised store rooms for cleaning products, tools and machinery (S.4.1)
 - floor-specific rooms (S.4.2) for the local storage of maintenance products and trolleys
 - Miscellaneous store rooms (S.5): educational materials, furniture, etc.
 - Waste disposal: see par. E.176
 - Delivery area: Each day nursery must be easily accessible for the various deliveries, including for the kitchen. Each one will therefore have a location in the unloading bays for delivery lorries. The unloading bays may be shared with other functional entities accommodated at the site. However, the storage areas will be independent and specific to each functional area.

T. Sanitary facilities

- E.143 Sanitary facilities will comprise:
- Toilets (T.1.1); these must be easily accessible. They must be appropriately distributed across the buildings. Their capacity will comply with the applicable regulations (in particular the RGPT). One PRM-accessible toilet will be provided in each toilet block.
 - Changing rooms (T.1.2), equipped with lockers (1 for every 2 people), showers (1 for every 6 people) and toilets (according to RGPT), for roving staff of the nursery and kindergarten units (nursery nurses not assigned to a given section).

E.IV | Parking

- E.144 On the one hand to provide staff and visitors of the various functional entities of the European Commission with parking facilities and on the other hand to carry out a study on the possibility of creating a car parking open to the public.

Objectives

- E.145 Parking (except for bus parking and for the open to the public parking) will be accessible to people holding a valid access badge. The main projected user categories are as follows:

Users and capacity

- staff members
- visitors (40 to 50 spaces)
- contractors
- suppliers

- E.146 Covered parking spaces will be provided for:
- Staff and visitor cars:
 - a number of 922 parking spaces comprising 1 PRM space per 50 spaces are required in accordance with the COBRACE, MIT and French standard NF P91-120.
 - Staff and visitor bicycles: a fixed number of 922.
- E.147 The possibility to provide a separate covered public parking should be studied for a capacity of about 350 spaces, including 1 PRM space per 50 spaces, designed in accordance with the French standard NF P91-120.
- E.148 An on-street drop-off zone for 4 buses may be foreseen along the Rue Joseph II. After drop-off, the buses will park in a dedicated zone defined by the Brussels Capital Region awaiting to pick up their passengers.
- E.149 This functional area will comprise the following:
- A single covered staff and visitors' car park (ideally the car park in construction phase 2 will be connected to the car park in construction phase 1). If necessary, one car park per construction phase may be envisaged.
 - Changing rooms intended for users of soft modes of transport.
 - If possible, a single covered general public car park.

General organisation

Functional groups

U. Entrance / reception area

- E.150 The staff and visitors' car park will have the following accesses:
- Access / exit for motor vehicles:
 - a limited number of entrances/exits to the staff and visitors' car park to reduce the security control costs. There will be at least two entrances/exits (one per construction phase). Each access may have several lanes allowing the flow of soft mobility vehicles and personal vehicles to be distributed. The optimal number of lanes shall be confirmed by a traffic flow study in these locations.
 - two accesses (one per construction phase) between the staff and visitors' car park site and the "Parking Loi" in order to improve the accessibility of the site and to reduce traffic congestion in the surrounding streets (morning) and in the parking itself (evening).
 - one security post per entrance and exit (U.1.1), in accordance with the MIT, situated such that all flows can be visually checked.
- E.151 If possible, the public car park will have only one access.
- E.152 The following system will be used, in this order, at the entrances of the staff and visitors' car park, for motor vehicles:
1. Traffic lights.
 2. Badge reading via terminal.
 3. Bicolour light signals (red/green), allowing the guards to visualize from a distance the state of validation of access control.
 4. Addition of a dynamic signal system over each lane.
 5. Vehicle registration plate recognition system.
 6. Certified double-barrier type gate for vehicles, formed by:
 - a certified high security motorized lifting barrier (certified K4, K8 or K12)
 - a non-certified lifting barrier, placed to the inside of the building
 - A 75 cm high road blocker, certified K4, K8 or K12, placed after the exterior barrier.

7. Checking of the underside of vehicles via a specific camera system in the gate.
8. Tire deflation device located downstream from the double-barrier type gate, as well as speed bump after the gate and metallic speed gates at the building entrance (e.g. before the ramp).

E.153 The following system will be used at the exits, for motor vehicles:

- A certified high security motorized lifting barrier (certified K4, K8 or K12)
- A 75 cm high road blocker, certified K4, K8 or K12, placed after the exterior barrier.
- Addition of a dynamic signal system over each lane.
- The entrance for bicycles will be equipped with a simple metal barrier armed with a badge reading via terminal.

E.154 In case of the presence of a public parking, the systems to be used at the entrance and the exit of the public car park will be defined at a later stage according to the adopted solution of the winning project.

E.155 Article 25 of the RRUZ defines how vehicle accesses to structures should be designed.

- Access / exit for pedestrians:
 - direct pedestrian exits for European Commission staff, via single-person revolving doors fitted with a badge reader, to:
 - the reception foyers of the office buildings;
 - ideally, the double-entrance reception vestibules of the day nurseries;
 - ideally, the reception foyer in the Visitor Centre.
 - pedestrian exits for visitors to the public outdoor space within the site perimeter. The visitor then goes to the Welcome Centre.
 - pedestrian exits for previously registered European Commission contractors: the car park will allow access to the logistics circulation spaces / service corridors of the building, via appropriate access control measures.

E.156 The pedestrian exits must be lockable by means of security doors. The vehicle exits must be lockable by means of exterior sectional shutters.

V. Parking

E.157 It should be noted that, under Article 13(2) of the RRUZ, 'Outdoor spaces shall not contain open-air parking spaces. All parking spaces within the perimeter shall be integrated into the structures.'

E.158 Parking for personal motor vehicles (V.1):

- The MIT and French standard NF P91-120 must be observed.
- The car park will in particular have:
 - charging points for electric cars (10 % of spaces);
 - PRM spaces (see Title IV of the RRU);
 - a system enabling the indication and counting of free spaces.

Parking for personal vehicles

E.159 For security reasons, the public parking should ideally be located outside the footprint of European Commission buildings. Alternatively, the structure of this car park should be independent of that of the European Commission buildings and the adjacent parts should provide structural reinforcement measures in order to be capable of withstanding any attack.

Public parking (V.2)

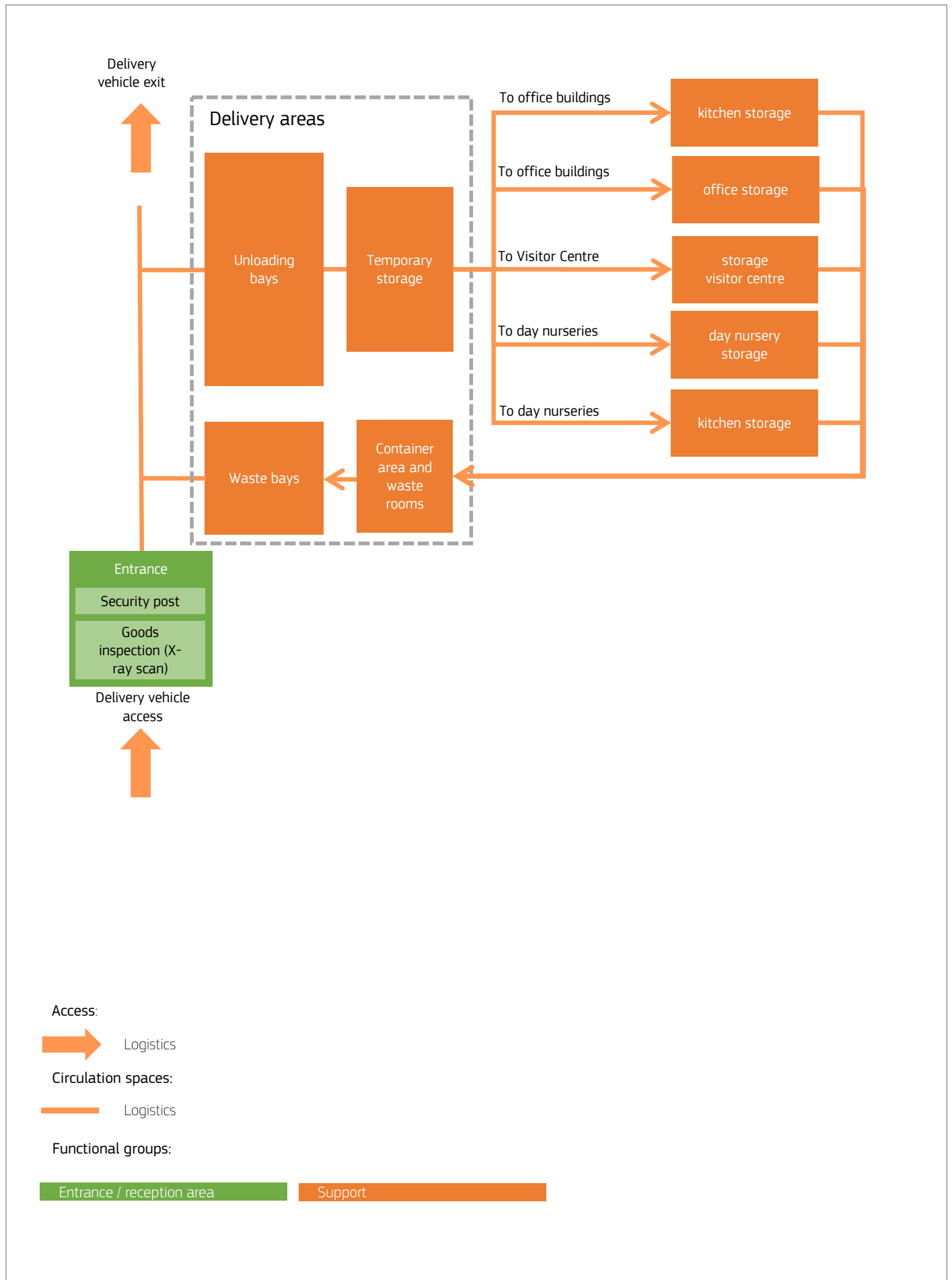


Diagram: Delivery Areas

E.160	The bicycle park will in particular have: <ul style="list-style-type: none"> • Racks allowing bicycles to be stored; • Charging points for electric bicycles (10 % of spaces). 	Bicycle park (V.3):
E.161	There will be easy access to the 'soft mobility' changing rooms.	
E.162	Several drop-off areas for buses, ideally situated on road, must be provided at the site: <ul style="list-style-type: none"> • Four drop-off type bus spaces (V.4.1) allowing groups of visitors for the Visitor Centre to arrive at the site and children from the day nurseries to go on excursions (one space accessible for each day nursery). 	Bus drop-off areas
E.163	The bus drop-off areas will be ideally situated at a short distance from the two-day nurseries and the Visitor Centre to avoid multiplying the number of spaces.	
E.164	Their location will allow easy access to the entrances of the Visitor Centre and day nurseries to facilitate the movement of PRMs, older people and children (ideally a distance of less than 100 m). Ideally, the route will be protected from the elements.	
E.165	The City of Brussels proposes to reserve bus parking spaces for the European Institutions at the Avenue de la Renaissance.	
W. Sanitary facilities		
E.166	"Soft mobility" changing rooms (W.1.1), separated into male and female facilities, equipped with lockers (at least 1 per bicycle space calculated on the basis of the BREEAM Technical Manual), showers (calculated on the basis of the BREEAM Technical Manual with at least one per 25 bicycle spaces) and toilets (one per 50 bicycle spaces) will be provided for staff using soft modes of transport. They will be located immediately adjacent to the bicycle spaces.	

E.V | Delivery areas

E.167	Main Objectives are: <ul style="list-style-type: none"> • Enable the receipt, inspection, temporary storage and conveyance of all goods and foodstuffs needed to ensure the efficient functioning of the various buildings on the site. • Enable the disposal of waste from the various buildings on the site. 	Objectives
E.168	The European Commission delivery areas will be accessible to previously authorised vehicles and persons. The main projected user categories are as follows: <ul style="list-style-type: none"> • Staff members • Suppliers 	Users and capacity
E.169	The delivery areas for the retail units will not be controlled by the European Commission.	
E.170	In terms of capacity: <ul style="list-style-type: none"> • European Commission delivery areas: four unloading bay spaces • Retail unit delivery areas: two unloading bay spaces. 	
E.171	This functional area will comprise the following: <ul style="list-style-type: none"> • One (or more) covered logistics area(s), consisting of unloading bays ideally shared by the various European Commission buildings. • A separate covered logistics area for the retail units, which is structurally independent and situated under the open areas or under buildings other than those occupied by the European Commission. 	General organisation

 Functional groups

Y. Entrance / reception area

E.172 The area will comprise the following:

- A limited number of entrances and exits to reduce the security control costs. There will be at least two (one for each construction phase). Minimum access dimensions: 4 m in width and 5 m free height. The accesses will be located such that they cause the least possible disruption to traffic on the road. In this case, accesses on Rue de la Loi (red axis) must be avoided.
- Secure goods inspection area: Prior to entering the building, goods must be inspected. The inspection area will be equipped with:
 - drive-through X-ray scanner for delivery lorries;
 - x-ray tunnel for pallets (X.1.2);
 - waiting area for two delivery lorries.
- Entrance to delivery areas will be secured as follows:
 1. Badge reading via terminal
 2. A certified high security motorized lifting barrier (certified K4, K8 or K12) and a 75 cm high road blocker (certified K4, K8 or K12, or equivalent certification)
 3. Video surveillance
 4. Integration of all equipment in the security supervision system
- Exit of motor vehicles will be secured as follows:
 1. A certified high security motorized lifting barrier (certified K4, K8 or K12)
 2. A 75 cm high road blocker (certified K4, K8 or K12).
- Addition of a dynamic signal system over each lane.
- A traffic flow study shall be developed to ensure an optimal dimensioning of spaces and equipment, in order to accommodate vehicle inflow during peak hours without detriment to security controls.
- One security post (X.1.1) per entrance and exit, in accordance with the MIT, situated such that all flows can be visually checked.

E.173 The area will be accessible to previously authorised vehicles.

E.174 The design team will ensure separation between the delivery vehicle and personal vehicle flows to guarantee the safety and security of goods and people.

 Y. Support

E.175 The unloading bay area(s) may be shared not only by the restaurants, but also with the other logistics services of the European Commission buildings, with reserved times to prevent conflict.

E.176 It will comprise:

- Unloading bay area, consisting of:
 - two semi-trailer spaces (Y.1.1) in construction phase 1, including one specifically for the catering services;
 - two semi-trailer spaces (Y.1.1) in construction phase 2, including one specifically for the catering services;
 - a security officer's post (Y.1.3), allowing the bays to be visually controlled;
 - a temporary storage space (Y.1.2), allowing delivered materials to be stored until they can be conveyed to their proper storage space. This storage space will therefore connect to the circuit of logistics circulation spaces in the buildings. These circulation spaces will be accessible to:

- previously registered European Commission contractors, via an appropriate access control;
- delivered goods that have been inspected via the temporary storage space, which will serve as a double entrance (access from the side of the unloading bays and access from the side of the logistics circulation spaces).

E.177 The unloading bays will be equipped with lifting platforms.

- Waste disposal area. This will be separate from the delivery areas (logistics and kitchen) for hygiene reasons. It will comprise the following:
 - an area for containers (Y.1.5) allowing waste to be sorted.
 - areas for organic waste from the offices (Y.1.6).
 - areas for organic waste from the day nurseries (Y.1.7).
 - a loading bay space (Y.1.4) for the removal of waste by an appropriate vehicle.

E.VI | Other functions

		Retail units (Z.1)
E.178	The retail units (Z.1.1) meet the requirements of the RRUZ by providing residents and employees in the quarter with local market services and amenities with a total of 3,000 sq m.	Objectives
E.179	The main projected user categories are as follows: <ul style="list-style-type: none"> • General public (residents, employees working in the European Quarter, etc.) • European Commission staff members present on site • Staff of the retail units • Suppliers 	Users
E.180	The type and size of the retail units to be located within the site are undecided at the time of writing this programme, given that the needs once the Project has been completed cannot be determined at this stage.	Nature of the retail areas
E.181	As a priority, the retail units will target local residents.	
E.182	At this stage, it is not intended that monovalent facilities (cinema, theatre, garage, etc.), clothing stores or DIY shops will be located within the Loi 130 complex.	
E.183	From the 3,000 sq m the European Commission suggests having restaurants and sporting facilities (amounting to 1,500 sq m).	
E.184	The construction and layout choices must allow the retail areas to be flexible in their use and to evolve over time. As such: <ul style="list-style-type: none"> • The retail units will be arranged into adjacent modules of approximately 100 sq m, so that the area can be adapted according to the plans for these retail units • Each module will have a free height without any structural or technical component (even if occasional, such as air ducts, suspended ceilings or raised floors) of at least 4.50 m • Each module will allow catering activities to be accommodated (exhaust hoods must be installable). 	Organisation of the retail areas
E.185	The delivery areas will preferably be located underground to limit logistics flows on the surface (see section E.V).	
E.186	Given the excellent public transport service, it is not intended that parking spaces for the retail units will be created.	

- E.187 The retail unit delivery area will comprise the following main functions:
- An independent logistics access, which will be totally separate from the covered car park and logistics areas of the European Commission (access and circulation spaces);
 - Unloading bay area, consisting of:
 - two semi-trailer spaces
 - a temporary storage space, allowing delivered materials to be stored until they can be conveyed to their retail unit storage spaces
- E.188 The logistics area for the retail units will be structurally independent of the European Commission buildings and situated under the open areas of the site or under buildings other than those occupied by the European Commission.
- E.189 The design team is free to propose any location meeting the requirements of the programme and the RRUZ. It must, however, endeavour to:
- Locate the retail units adjacent to quality public outdoor spaces and where flows converge
 - Ensure good visibility
 - Avoid, as far as possible, interrupting the continuity of retail units (by car park exits, service areas, etc.)
 - Locate the retail units outside the perimeter of the European Commission buildings for security reasons. However, the European Commission buildings may adjoin or sit above the retail units (situation to be avoided as far as possible), provided that structural reinforcement measures are adopted for the party walls and that the retail units have 'fusible' external walls allowing the force of an explosion to be dissipated.
- E.190 The design team is free to propose the construction of the retail units in construction phase 1 or in phase 2 of the project. However, it will ensure that disruption caused by the construction phase 2 site to the activity of any retail units constructed in construction phase 1 is limited.
- E.191 Particular attention must be paid to the architectural treatment of the unit facades. The design team will propose an image for the retail units different from the office architecture.

 Retail unit
 delivery areas

 Location on the site

Metro station (Z.2)

- E.192 In line with the redevelopment of the European Quarter, the metro stations Arts-Loi / Maelbeek / Schuman need to be adapted to the expected increase of passengers by 2025-2030. Stations Arts-Loi and Schuman have already been redeveloped. The works for the Maelbeek station should still be performed.
- E.193 The Maelbeek station was built in 1965 when the first Brussels Metro line was constructed. It currently handles 4,000 to 5,000 people per hour. The STIB wants to increase the station's capacity from 3,000 to 9,000 people/hour at peak times. The station has three entrances in total. One giving access to the East mezzanine from the Chaussee d'Etterbeek and two giving access to the West mezzanine serving also as underground passage below the Rue de la Loi.
- E.194 The planned works will cover: increase the depth of both platforms by 5 m over a length of 50 m, adapt vertical circulation between the platforms and mezzanines, new vertical circulation between mezzanine and ground floor.

 Introduction

- E.195 The existing metro entrance on the Loi 130 site can be replaced. The design shall encompass the entrance at ground level and the West mezzanine. The design shall follow the general principles below:
- The new entrance shall be accessible from a public place offering a pedestrian connection with the Rue Philippe Le Bon;
 - From the new entrance a direct and comprehensible passage to the West mezzanine shall be created;
 - The design will take into account the increase in passenger capacity between ground floor and mezzanine (stair, escalators and PRM lifts);
 - Aim at maintaining the accessibility of the existing entrance during the works;
- E.196 The new entrance on the Loi 130 site (Z.2.1) will be dimensioned for 3,000 passengers per hour. An escalator will have a maximum capacity of 7,000 persons/hour. The level of the West mezzanine is 50.64 m. The technical and spatial requirements are the following:
- E.197 At ground level:
- Two escalators at 30 ° in parallel: one rising and one descending. The required space is estimated at 8.0 m x 21 m (including clearance zones);
 - An adjacent stairwell of 2.0 m wide;
 - A structure with roof offering a floor to ceiling clearance of at least 3.75 m;
 - A PRM lift;
- E.198 At West mezzanine level:
- A passage from the entrance to the mezzanine with a minimum width of 6.0 m;
 - Between the passage and the access control, a minimum clearance of 5.0 m needs to be provided;
- E.199 Important technical note: A horizontal technical duct is situated alongside the concrete walls of the metro tunnel, under the sidewalk of the Rue de la Loi. This duct should be preserved and remain accessible at all times as it gives access to the post tensioning cables of the concrete roof slab above the mezzanine level and -1 of the parking Loi.

General principles

F Technical and Sustainability Programme

F.1 | Introduction

F.01 This chapter describes the most relevant technical requirements that the project must respect, in order to allow the teams to develop the most adequate concepts in the competition.

F.02 The full list of the competition deliverables is explained in section B.IV.

F.1.1. Regulatory framework

F.03 The Project will comply with the applicable legislation in Belgium and the Brussels-Capital Region.

F.04 The European Commission requirements as regards technical and environmental aspects are set out in the Manual of standard building specifications (MIT). Chapter F includes a summary of the current version of the MIT (2011), complemented with some additional European Commission requirements.

F.05 These requirements may evolve after the competition, according to the evolution of the legislation and the European Commission needs.

F.06 The list of applicable legislation and regulations is defined in the Appendix in Section G.I "Abbreviations and Definitions".

F.1.2. Spatial organisation

Dimensioning for technical provisions

F.07 The dimensioning of circulation spaces, escape routes, toilets, facilities and equipment will be based on the following maximum occupancy:

Spaces intended for human occupation	Usable area per person
Office spaces	7 sq m / person
Collaborative spaces and meeting rooms	2 sq m / person
Restaurant and cafeteria	2 sq m / person
Foyer	1.5 sq m / person
Sport multipurpose rooms	3.5 sq m / person
Multipurpose rooms in Visitor Centre	3.5 sq m / person
Workshops in Day nursery	3.5 sq m / person

F.08 The maximum occupancy of functional entities not listed above must be estimated based on the programme of requirements contained in this document and the applicable legislation⁶.

⁶ Applicable legislation corresponds to the "Arrêté du 21 décembre 2007 déterminant des exigences en matière de performance énergétique et de climat intérieur des bâtiments", "Annexe VII (modifié par l'Arrêté du Gouvernement de la Région de Bruxelles-Capitale du 26 janvier 2017 modifiant l'AGRBC du 21 décembre 2007 déterminant des exigences en matière de performance énergétique et de climat intérieur des bâtiments", and the "Annexe XVI Dispositifs et méthode de Ventilation Hygiénique pour le Non Résidentiel"

Minimum ceiling heights

F.09 The following minimum ceiling heights (clear heights) are:

Spaces	Minimum ceiling heights
Ground floors	4 m
Office spaces and collaborative spaces	≥ 2.6 m ⁷
Meeting centre	3.5 m
Horizontal circulation areas	2.4 m
Exhibition spaces in Visitor Centre	according to the architectural design and respect for comfort
Auditorium in Visitor Centre	according to the architectural design and respect for comfort
Basement floors	2.2 m
Indoor car parks and circulation ramps	2.2 m (2.0 free of obstacles)
Indoor loading bay, truck/lorry manoeuvring areas	4.30 m
Technical facilities in attic areas	3.0 m
Retail units	4.5 m

F.II Environmental aspects

F.II.1. General objectives

- F.10 The European Commission's goal is to occupy very high-quality buildings, particularly as regards environmental performance.
- F.11 The aim is for a design meeting the excellent environmental criterion according to the BREEAM.
- F.12 The Project will be rated as 'Excellent' according to the BREEAM International New Construction standard applicable on the date of publication of the Competition. The scope of the certification will generally be 'Fully Fitted', except for the retail units for which the scope will be limited to 'Shell and Core'.
- F.13 The Project will also be in line with the European Union Green Public Procurement (EU GPP) criteria for Office Building Design, Construction and Management.

F.II.2. Energy performance objectives

- F.14 Within the framework of Directives 2010/31/EU and 2012/27/EU of the European Parliament and of the Council on the energy efficiency and performance of buildings, the European Commission has set itself the goal of occupying buildings with a very high energy performance and, by 2019, aims to be occupying nearly zero-energy buildings (NZEB).
- F.15 In this competition, a NZEB is defined as a building that meets at least the EPB (energy performance of buildings) requirements of the Brussels-Capital Region, currently in the framework of the COBRACE regulation (Brussels Code for air, climate and energy), wherein the primary energy consumption associated with heating, cooling, hot water and auxiliary equipment (pumps and fans) and lighting is largely offset by the production of renewable energy on the site lot(s), i.e. the actual footprint (according to the land register) of Project Loi 130.

⁷ Areas where the floor to ceiling height is less than 2.5 m are not included for the purposes of defining office areas

- F.16 As a reference, The COBRACE regulation is in line with the European recommendations⁸ for minimum NZEB requirements for offices. These recommendations (oceanic climate, including Brussels) refer to 40-55 kWh/(sq m.y) of net primary energy with, typically, 85-100 kWh/(sq m.y) of primary energy use, covered by 45 kWh/(sq m.y) of on-site renewable sources.
- F.17 As regards the energy efficiency of those facilities and equipment not included in the EPB Work and NZEB calculation (computer equipment, kitchen equipment, lifts, outside lighting and parking, etc.), preference will be given to facilities that offer the lowest operating and maintenance costs.
- F.18 The Project's energy efficiency will comply with the regulations applicable in the Brussels-Capital Region, in the context of the COBRACE and its implementing decrees on the date when the planning application is submitted. Further information on the minimum EPB requirements for new buildings can be obtained from the Brussels Environment website⁹.
- F.19 The technical programme sets the NZEB objectives as a strict minimum for the Loi 130 compound; however, candidates are required to prove higher energy efficiency in compliance of technical requirements (BREEAM excellent rating).
- F.20 During the competition; the proposals will include a description of the strategies to be implemented in order to achieve these objectives in the Project, as requested for phase 1 in form D1 (par. B.108) and for phase 2 in form D2 (par. B.155) and a report (par. B.152).

Validation of energy objectives

F.II.3. Specific criteria

- F.21 The various Project stages must take account in account the following specific environmental criteria:
- F.22 Reduction of energy use and production of carbon emissions:
- Architectural and construction strategies: implementing measures such as high performance and air-tight building envelopes, control of solar gains, thermal inertia, orientation of buildings and functions etc.
 - Energy efficient building services: HVAC and MEP, including hot water, lighting systems, electrical appliances, lifts, building management systems including energy sub-metering and monitoring
 - Use of low-carbon and on-site renewable energy sources for heating and cooling, air humidification, hot water production, etc.
- F.23 Health and well-being: attain the degree of comfort defined in section F.III in terms of internal conditions, including:
- Thermal comfort; temperature, humidity, air speed
 - Indoor air quality
 - Visual comfort: natural and artificial light and view-out quality
 - Acoustic comfort: zoning and strategies for management of external and internal noises
- F.24 Water management:
- Low drinking water consumption: efficient equipment, reuse of rainwater and treated water, leakage detection, etc.
- F.25 Resource-efficient construction:
- Efficient material use

⁸ European Commission Recommendation (EU) 2016/1318 of 29 July 2016 on guidelines for the promotion of nearly zero-energy buildings and best practices to ensure that, by 2020, all new buildings are nearly zero-energy buildings.

⁹ <https://environnement.brussels/thematiques/batiment/la-performance-energetique-des-batiments-peb>

- Construction waste management during the life cycle
- Choice of materials with low environmental life cycle impacts
- Designing for durability and resilience
- Construction waste management during the life cycle
- Functional adaptability
- Incorporation of recycled products

F.26 Land use, ecology and biodiversity:

- To ensure the best possible opportunities for the development of biodiversity and ecosystems, environmentally developable areas (gardens in open ground, permeable ground surfaces (RRUZ article 21), wet areas, vegetated surfaces, crops, etc.) are encouraged in the plot occupied by the building¹⁰.
- The design and diversity of the vegetation in the surroundings must enrich the quality of the urban experience, with the use of indigenous species being favoured.
- To reduce the need for irrigation, the use of species requiring regular watering must be limited as far as possible.
- Flood resilience by implementing measures to increase the resilience and resistance of the development to flooding

F.II.4. Water use

F.27 To ensure rational water use, the following principles will be analysed and implemented:

- Use of low water flow equipment for toilets, urinals, sanitary taps, showers and kitchen equipment
- Reuse of rainwater
- Reuse of treated water
- Leakage detection system
- System for automatically cutting off the supply to toilets
- System for metering and sub-metering water consumption, reported to the BMS

F.28 In accordance with the RRUZ (Article 19), a storm water basin must be installed, which will be associated with one (or more) rainwater recovery tank(s).

Storm and Rain Water

F.29 The rainwater recovery must be correctly dimensioned for the structure and its use.

F.30 To reduce the need for irrigation, it is recommended that only plant species requiring natural rates of precipitation are used. The use of species requiring regular watering must be limited as far as possible.

F.II.5. Materials

F.31 In the design, the use of construction materials in their standard dimensions will be favoured. The choice of materials will take in account their Life Cycle (Life Cycle Analysis or LCA) in accordance with ISO 14040:2006 and ISO 14044:2006 or EN 15978:2011.

F.32 The definition of materials at the design stage will avoid restrictions on choice due to a property specific to one supplier or manufacturer.

¹⁰ In accordance with the RRU, Title I, Article 13:

Courtyard and garden areas shall have a permeable planted surface in open ground across at least 50 % of their area, unless an exemption is granted.

Inaccessible flat roofs of more than 100 sq m must be developed into vegetated roofs.

- F.33 Materials will be labelled or certified or be technically approved by the UBAtc¹¹ (ATG) or equivalent in another EU Member State.
- F.34 Materials will be chosen that:
- Do not harm health or disrupt the electromagnetic environment
 - Do not result in energy being wasted in their extraction, conversion and recycling
 - Help to reduce the building's environmental impact throughout its life cycle, particularly in terms of energy management
- F.35 In order to facilitate recycling, preference will be given to materials composed of natural or synthetic fibres, and not a combination of both.
- F.36 All wood used must be labelled PEFC, FSC or equivalent.

F.II.6. Waste management

- F.37 Clearly signed locations must be provided in the building for collecting and storing materials to be recycled such as batteries, bulbs, cardboard, cartridges, solvents, glass, metal, paper, food packaging, etc.
- F.38 One or more central waste storage rooms, dimensioned for separate collection, are to be placed directly near loading bay (see par. E.1.76).

F.III Well-being

F.III.1. Comfort

Climatic comfort

Outdoor climatic conditions

- F.39 For a static calculation, the following outdoor conditions must be applied for Brussels:
- Basic outdoor temperature in winter: -8 °C, 90 % RH
 - Basic outdoor temperature in summer: +30 °C, 50 % RH
 - In all seasons: wind speed: 5 m/s

Permanently occupied spaces

- F.40 The air conditioning systems must be designed based on comfort category II in accordance with NBN EN 15251.
- F.41 The following comfort conditions must be observed in the following areas occupied by staff¹²:

Interior comfort conditions

Area	Operative Temperature °C (variable range)		Relative Humidity calculation values %	
	Heating	Cooling	Heating	Cooling
A. Permanently occupied spaces				
Offices				
Office spaces, collaborative spaces and meeting rooms	20-24	23-26	40-70	
Restaurants and cafeteria	20-24	23-26	40-70	
Visitor Centre				
Exhibition spaces	20-24	23-26	40-70	
Multipurpose rooms	20-24	23-26	40-70	
Auditorium	20-24	23-26	40-70	
Interpreting booths	20-25.5	20-25.5	40-70	

¹¹ See www.ubatc.be

¹² The occupied zone defined in EN 16798-3:2017 is regarded as the entire floor area, except for a peripheral area of 0.15 m (0.5 m in the case of windows), with a usable height of 1.80 m.

Day nurseries				
Dormitory	18-22 ¹³	25-27 ¹⁴	40-70	NC
Activity room, psychomotricity room, workshops	20-22	NC	40-70	NC
Reception	20-22	NC	40-70	NC
Dining room	20-22	NC	40-70	NC
Bathroom	20-22	NC	40-70	NC
Corridor	20-22	NC	NC	NC
B. Non-permanently occupied spaces ¹⁵				
Circulation areas, foyer and double-entrance vestibules	≥ 18		-	
Living archives	≥ 18		-	
Toilets	≥ 18		-	
Showers and changing rooms	≥ 22		-	
Reconfiguration and General telecommunications rooms	≥ 25°C +/- 1°C		-	
Store rooms, workshops, unpacking/unboxing room and pantries	≥ 16		-	
Parking	≥ 5		-	
'Paper' bin rooms	≥ 16		-	
Organic waste rooms	≥ 15		-	

NC: not controlled

Sun protection

- F.42 Thermal comfort (including protecting against overheating) will preferably result from the basic architectural choices (proportion of facade, characteristics of glazing, etc.).
- F.43 If necessary, other means may be used, such as fixed or removable slats, blinds, etc.

General points

- F.44 A fresh air mechanical ventilation system guarantees air quality; this can be complemented with natural ventilation systems.
- F.45 The air may be treated when necessary to guarantee comfort conditions.

Access to outside air

- F.46 The installation of opening windows and natural ventilation systems are subject to the energy concept of the project.

Air quality

¹³ According to the recommendations of the Commission's day nursery medical services, for babies under one year, dormitories must not be heated to more than 18°C to 20°C.

¹⁴ According to the recommendations of the Commission's day nursery medical services, the use of air conditioning must be limited to times when outside temperatures exceed 25°C. Temperature differences of more than 5°C between the dormitory and other rooms must be avoided.

¹⁵ In general, the minimum low temperature of the ambient air in winter to be maintained in areas that are not permanently occupied is 14°C.

F.47 Opening windows or natural ventilation systems are not desired in the following cases:

- If the outside air is heavily polluted (Class ODA3/ANF3 according to EN 16798-3:2017), opening windows or natural ventilation systems must not be installed on the facade.
- Windows exposed to outside air pressures that are too high (in particular above a height of 25 m) must not open. Other natural ventilation systems may be considered.
- In accordance with the specifications of the DG Security of the European Commission, windows on the ground floor must be fixed or open with a key.
- In the case of atriums, opening windows may be installed provided that this is authorised by the European Commission.

Fresh air flow rate

- Permanently occupied spaces¹⁶

F.48 The design fresh air flow rate of ventilation systems must ensure a default absolute CO₂ concentration of less than 800 ppm in work areas¹⁷,

F.49 The dimensioning of ventilation systems should follow the maximum occupancy indicated in tables “Interior comfort conditions”, see par. F.41.

F.50 In office areas, an additional air flow rate reserve should allow the transformation of 10 % of open-plan offices (7 sq m per person) into meeting rooms (2 sq m per person).

- Other spaces

F.51 The design fresh air flow rate of ventilation systems must ensure 22 cbm/h pers.

General points

F.52 The following guidelines must be observed:

- Work stations must receive daylight.
- Ambiances must be visually soothing.
- Natural light must be used as much as possible.
- Glare must be avoided (direct and reflected light, whatever the user’s position at the work station).
- Comfortable artificial lighting must be available.

Natural light

F.53 Natural light must be present in workplaces with ‘permanent’ work stations.

F.54 At least 80 % of the office area must have a Daylight Factor (DF)¹⁸ of 1.5 % for facades without any external obstructions or 0.7 % otherwise¹⁹.

F.55 In the day nurseries, all rooms occupied by children should be well lit and should receive daylight.

F.56 Measures must be taken to combat glare and solar radiation, particularly by using appropriate solar protection chosen according to the orientation of the areas and darkening needs.

F.57 The design must meet the following requirements for work areas:

Visual comfort

¹⁶ Definitions in accordance with the provisions on the ventilation of non-residential buildings, the Law of 4 August 1996 on the well-being of workers at work and its implementing decrees, the Well-being at work code and the RGPT. Includes office areas, meeting rooms, sport facilities, restaurants and day nurseries.

¹⁷ This value represents between 45 and 52 cbm/h pers.

¹⁸ This factor is the ratio of internal natural light received at a point (generally the work surface or floor level) to the simultaneous external light on a horizontal surface, in an unobstructed site, in overcast conditions. It is expressed as a %.

¹⁹ In accordance with the EU GPP criteria.

- Meeting rooms receiving daylight must be equipped with adjustable solar protection or curtains allowing the rooms to be fully darkened.
- Offices and other work stations must be equipped with adjustable solar protection and/or blinds according to their orientation.

F.58 In the day nurseries, suitable and effective protection from direct sunlight should be installed to prevent rooms from heating up during sunny periods, while allowing daylight to penetrate living/dining areas.

F.59 For the Visitor Centre, the design of natural and artificial light conditions will be subject to the proposed design.

Artificial light

F.60 In order to ensure visual comfort, the artificial lighting installation must at least comply with the following levels:

Area	Em (lux) Minimum illuminance levels ²⁰
Offices	
Office spaces, collaborative spaces and meeting rooms	300 (ambiance) 500 (workstation), dimmable
Kitchenettes	300
Restaurants and cafeteria	300-400
Kitchen	500
Foyer	400 (reception desk) 200 (hall), dimmable
Horizontal Circulation areas	100
Vertical circulation areas (stairs and ramps)	150
Permanent security zone	500 dimmable
Dispatching GTC	500 dimmable
Sanitary premises	200
Technical room and accessible shaft	200-500 ²¹
Storage room	200
Visitor Centre	
Exhibition spaces	according to design
Auditorium	300
Interpreting booths	350
Day nurseries	
Dormitory	300
Activity room, psychomotricity room, workshops	300
Reception	200
Dining room	300
Bathrooms	300

²⁰ According to EN 12464-1, the illuminance level (Em) is the required average lighting level on a surface. It is measured either at workspace level (0.85 m from the ground), or, in case of circulation spaces or archives, at the floor level.

²¹ Depending on the use of each space.

Parking	
Circulation	75-100
Parking space	50-75
PRM parking space	100

General points

Acoustic comfort

- F.61 Where a space is included within a larger space, the acoustic requirements must be met separately for each space.
- F.62 The design team should:
- Group together areas for noisy activities and keep these away from intellectual work areas (offices, conference rooms, etc.)
 - Optimise the position of areas in relation to external disruption
 - Optimise the configuration of open-plan offices to maximise acoustic comfort
- F.63 All possible measures will be taken to avoid discomfort caused by rain (impact noises) and wind (whistling, vibrations). The design team will avoid all window, blind and shutter systems that would be noisy in the event of wind.
- F.64 All possible measures will be taken to ensure that acoustic comfort at work stations is guaranteed no matter how the premises are arranged.
- F.65 The minimum reverberation time will be determined according to the intended use of the area so that discomfort in a space where the sound is over-absorbed is avoided.

Sound pressure levels

- F.66 The sound pressure level in certain areas must be limited to:

Areas	L_{Aeq} (dBA)
Offices	
Offices (individual, shared, open-plan)	35-45
Meeting rooms	40
Large meeting rooms/conference rooms	35
Restaurant, cafeterias	45
Kitchens	50
Visitor Centre	
Exhibition spaces	according to design
Auditorium	40
Day nurseries	
Dormitory	30-40
Activity room, psychomotricity room, workshops	40
Reception	40
Dining room	40
Bathrooms	40

- F.67 In accordance with the RRUZ, the site's development will aim to minimise negative effects, particularly in terms of shadows and winds (see Article 13).
- F.68 Pedestrian zones on accessible areas of roofs, plinth and surrounding streets, with indication of their intended use shall be considered according to the activity classes defined by NEN 8100 (see par. B.131).

Wind comfort

F.III.3. Accessibility for people with disabilities

- F.69 As a signatory of the Convention on the Rights of Persons with Disabilities, the European Commission has committed to ensuring that disabled people can fully exercise their rights on an equal basis with all other citizens.
- F.70 The principles cover both persons with reduced mobility and persons with visual or hearing impairments. The aim is to offer them as much independence as possible.
- F.71 Structures and exterior spaces must be designed and built to be accessible and usable by disabled people. They must follow the 'universal design' principle from the Convention on the Rights of Persons with Disabilities, i.e. the design of products, environments, programmes and services to be usable by all people, to the greatest extent possible, without the need for adaptation or specialised design.
- F.72 Surfaces of areas in the outdoor spaces with access for the disabled with wheel chairs must be even and robust, avoiding a use largely free of vibrations.
- F.73 Buildings must comply with the applicable standards and regulations, in particular:
- Title IV of the RRU on the accessibility of buildings for persons with reduced mobility
 - ISO 2603:2016 – for the interpretation booths
 - Section BIII9 of the MIT
- F.74 The following documents may be used as guidelines for developing specific solutions:
- ISO 21542:2011

F.III.4. Fire Safety

- F.75 The building must comply with local, regional and federal regulations, including:
- The Law of 4 August 1996 on the well-being of workers at work and its implementing decrees, the Well-being at work code and the RGPT (see Appendix 6);
 - The fire basic standards;
 - The requirements of the Fire and medical emergency service of the Brussels-Capital Region (SIAMU).
- Additional requirements**
- F.76 Vertical walls and doors must have a fire resistance of EI 30 and EI₁ 30 respectively along escape routes on levels other than the escape level (even for low-rise or medium-rise buildings²² where the area of the compartment is less than 1,250 sq m). The fire resistance of partitions between offices must also be EI 30.
- Photocopying rooms must have vertical walls and doors with a fire resistance of EI 30 and EI₁ 30 respectively, with door retainers that automatically close the doors.
 - Kitchenettes will preferably have vertical walls and doors with a fire resistance of EI 30 and EI₁ 30 respectively, with door retainers that automatically close the doors.
- F.77 Automatic sprinkler systems will be fitted in the buildings in accordance with the fire basic standards. Pending a formal decision by the SIAMU at the planning permission stage, sprinklers for medium-rise and high-rise buildings within the meaning of the basic standards must be specified.
- F.78 Sprinklers must be specified for bin rooms and large storage rooms.
- F.79 The number of escape routes and emergency exits must be calculated according to the maximum capacity of the office buildings, i.e. where all the office spaces are open-plan (7 sq m/person).

²² In accordance with the Belgian fire basic standards:

Low-rise buildings: escape height less than 10 m.

Medium-rise buildings: escape height equal to or between 10 m and 25 m.

Security levels

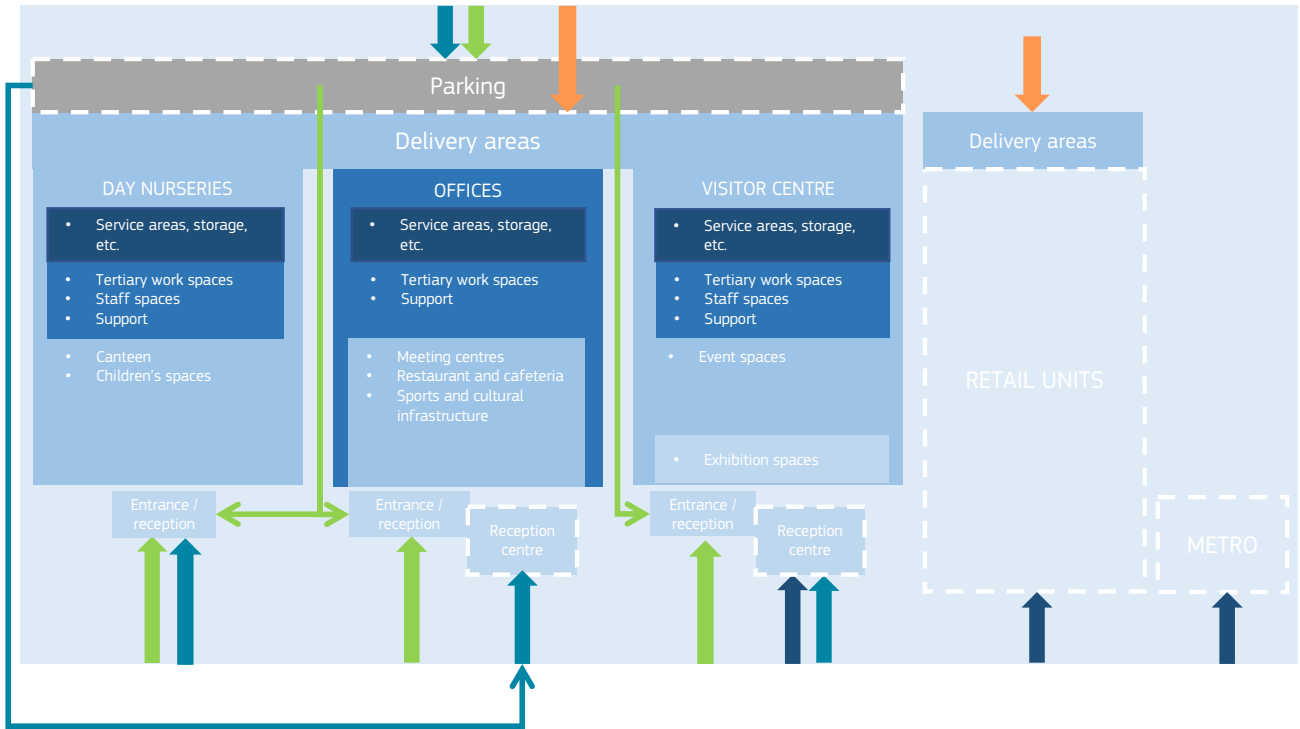


Diagram: Security Levels

F.80 An addressable fire detection system with full surveillance will be specified in accordance with NBN S 21-100-1 and NBN S 21-100-2 on fire detection and alarm systems.

F.IV | Security

F.IV.1. Security levels

F.81 Several security levels are defined in order to limit any malicious activities. Each zone of the building has a security level that requires the installation of an access control system allowing people's access to a given zone to be screened. The systems and methods used for these security levels are described in Chapter F3. Only the security levels and functions to which they apply are defined at this point.

Level 0
Access to the site

F.82 **Security Level 0** includes the outdoor spaces within the site which are accessible to the general public without restriction. No enclosure around these spaces is planned within the site.

F.83 However, the very design of the site's spatial organisation will incorporate the concept of security ('security by design') (see section F.IV).

F.84 NB: Not all spaces without buildings will be public outdoor spaces. Some courtyards and gardens will be reserved for the use of the European Commission (see par. F.92).

F.85 **Security Level 1** applies to:

Security level 1
Internal public zone

- Entrances/reception areas of buildings, with a distinction being made between the following users:
 - staff: they may directly access the reception foyers of buildings, via single-person revolving doors controlled by a badge reader;
 - visitors: all visitors to the office buildings and Visitor Centre must first pass through a Welcome Centre (see par. F.127) before being able to access the reception foyers of the buildings. The day nurseries do not require a Welcome Centre
- Exhibition spaces in the Visitor Centre
- Circulation spaces specific to these functions

F.86 **Security Level 2A** comprises:

Security Level 2A
Parking area

- Parking areas
- Delivery areas and their accesses: the logistical routes for lorries pass through these areas

F.87 This area will be accessible to persons holding a valid access badge or equivalent and to vehicles (personal and delivery vehicles) that have previously been registered and authorised.

F.88 On entering the area, vehicles will follow visual and electronic inspection (badge control).

F.89 Under normal conditions and during office hours, access to this area will be supervised by a guard, who will have a security booth meeting the OIB's MIT specifications. The security booth will preferably supervise access to the parking and delivery areas.

F.90 Staff going from the parking area to the social zone or administrative zone must pass through the access control at the entrance/reception area of the buildings (Security Level 1), via single-person revolving doors controlled by badge. Visitors (including those appropriately authorized), going from the parking area to the zone to be visited must firstly pass through the public outdoor space (Security Level 0) and then through a Welcome centre (Security Level 1).

F.91 NB: This area will generally allow access to a large number of Security Level 4 areas, access to which will be controlled by appropriate measures.

F.92 Security Level 2B applies to:

- Meeting centres;
- Restaurant and cafeteria;
- Sports and cultural infrastructure;
- Event spaces in the Visitor Centre;
- Nursery and kindergarten units of the day nurseries;
- Play areas of the day nurseries;
- Courtyards and gardens reserved for the use of the European Commission;
- Circulation spaces specific to these functions

Security Level 2B
Social zone

F.93 This zone will be subject to direct access control from the building's entrance/reception area, which, if possible, will be separate from the access control for the administrative zone.

F.94 The aforementioned access control will involve PASs and PASs/PRMs (automatic security gates for persons with reduced mobility) or, failing that, an alternative access control system guaranteeing single person project and approved by the European Commission.

F.95 Security Level 3 applies to:

- Tertiary work spaces
- Certain areas of the Support functional group
- Circulation spaces specific to these functions.

Security Level 3
Administrative zone

F.96 This zone, which accommodates the tertiary work spaces, is controlled at its entrances and exits. This is the zone with the highest traffic and the access control points at the entrances/reception areas will be carefully dimensioned.

F.97 Security Level 3 accesses will be electronically controlled for each member of staff. Access control will involve PASs and PASs/PRMs.

F.98 Visitors will always be accompanied in this zone, after having been collected at the building's reception by a member of staff.

F.99 For the Visitor Centre, the limited number of staff does not justify installing specific PASs for this zone.

F.100 Additionally, access will be visually controlled by security officers in the reception area. In the case of day nurseries, access control will involve PASs and PASs/PRMs or, failing that, an alternative access control system guaranteeing single person project and approved by the European Commission.

F.101 Direct access, where applicable, between Security Level 3 and Level 2B will also be electronically controlled.

F.102 Security Level 4 include the following:

- Control stations
- Archives
- Store rooms
- Reconfiguration rooms (LAN Room)
- Main telecommunications rooms
- PABXs
- Other service areas

Security Level 4
Restricted zone

F.103 Certain specific areas will be subject to restricted access and, for safety and security reasons, will require adapted access control (double-entrance vestibule, intercom, badge, biometrics, access code, locks, etc.). They will be accessible only by authorised persons.

F.104 These areas may be accessible from a zone with a security level below 3.

F.IV.2. Security in respect of malicious acts

F.105 There are two complementary types of security measure in respect of malicious acts:

General points

- Passive physical measures (such as barriers, bollards, structural reinforcements, etc.) that do not require any human intervention;
- Active operational measures (guards, sensors, CCTV, etc.) that do require human intervention. The security concept must ensure an adequate level of protection against the following principal threats:
 - vehicle-borne improvised explosive devices
 - individual improvised explosive devices
 - attacks with automatic weapons
 - attacks targeting specific people (including abductions)
 - chemical or biological attacks (via the HVAC installations)
 - attacks by unmanned aerial vehicles (drones)
 - computer attacks (less connected with passive physical measures)

F.106 The following measures constitute guidelines.

F.107 The building will not be permanently occupied. The operating hours will change as required.

F.108 After the competition, the DG Human Resources and Security of the European Commission will arrange for a risk analysis to be conducted during the design phase. This may potentially impact on the following aspects:

- Choice of the type of glazing;
- Reinforcement of the external walls of buildings and protection allowing the effects of an explosion to be absorbed and reduced.

F.109 The concept of passive physical measures is based on the following four basic principles:

Basic principles

- Optimisation of the siting of buildings: the most cost-effective approach involves increasing the security distances. The siting of buildings must prevent vehicles and persons from approaching them as far as possible (see par. F.110).
- Prevention of the collapse of buildings: preventing progressive collapse under all circumstances is a fundamental structural requirement (see par. F.157).
- Minimisation of flying debris: the main aim is to significantly reduce the risks associated with flying debris, which can be fatal or cause serious injuries. The failure of a complete glazed facade must be avoided in all cases. The risk of limited impact from an individual improvised explosive device may be accepted provided that additional measures are taken, for example: by ensuring that areas with high occupancy (meeting room, restaurant, etc.) do not have openings onto public outdoor spaces (see choice of glazing in par. F.188).
- Multi-layer protection: a multi-layer protection strategy involving Welcome Centres helps to improve security (see par. F.127 ff).

Peripheral measures

Measures

F.110 Spaces around buildings must be kept clear, particularly immediately adjacent to public outdoor spaces. Anything that could act as a projectile or conceal items or persons must be avoided.

F.111 The very design of the site's spatial organisation will incorporate the concept of security ('security by design') in order to minimise the effects of potential attacks on the buildings and their occupants by means of the layout of buildings, design of accesses and distance from public areas.

F.112 The layout of the buildings will help people to feel safe and secure in public outdoor spaces by avoiding shadowy areas, corners and complex routes.

F.113 An appropriate security distance should be considered where possible in order to prevent unauthorised vehicles from approaching the buildings. In terms of protecting the site against ram-raiding vehicles, its peripheral protection may involve as many fixed obstacles as possible in the form of architectural measures according to realistic attack scenarios. These elements, which must harmoniously integrate into the architectural style, should generally be sited as far away as possible from the buildings: they can take the form of differences in level, fixed and removable bollards, specially designed urban furniture, parapets, lighting devices, etc.

F.114 Traffic within the site will be strictly limited to first-response vehicles (rescue and fire prevention services), the movement of which will not be obstructed.

F.115 Risk areas within the site will be adequately protected against external attack. Those areas with a high occupancy (restaurants, etc.) or premises critical to the building's operation will be located and/or protected taking into account the risk factor for attacks in various forms.

F.116 Accompanying measures to increase the feeling of security should be envisaged, such as a system of external lighting on detection of presence covering the areas around the buildings that are at risk. Shadowy areas adjacent to pedestrian walkways should be avoided to keep people safe as they cross the site or leave buildings later on in the day.

Perimeter measures

- F.117 The vehicle parking entrances must be lockable by means of exterior sectional shutters.
- F.118 All accesses must have a guard post.
- F.119 Certain functions (restaurant, day nurseries for children, etc.), if located adjacent to public outdoor spaces, will in particular be covered by special measures. In addition to the peripheral measures (see par. F.110), the use of laminated safety glass should be envisaged. In specific cases (windows overlooking streets), additional measures must be taken.
- F.120 The following classes are recommended for external framework:
- F.121 resistance class 4 according to NBN EN 1627 (for accessible facades).
- F.122 Facades must not have any grooves or crevices that can be used for scaling the building or for vertical or horizontal movement.
- F.123 All control areas receiving the public must be configured such that they drastically reduce the impact of an explosion on the building, particularly its internal areas (see section F.IV).
- F.124 External fire escapes are prohibited.

Volumetric measures

- F.125 Volumetric measures (video surveillance, movement sensors, location constraint, access control, etc.) depend on the level of risk and specific aspects of the design. The requirements will therefore be defined during the design phase, after the competition, by the European Commission.
- F.126 Invacuation principles should be taken into account from the initial design phases, based on realistic scenarios.

Welcome Centre

- F.127 All visitors (including journalists) will first pass through a Welcome Centre before they can access the building entrance (except for day nurseries). Its function is to segregate visitors and check whether they pose a danger.
- F.128 Outside the Centre, a security officer will ascertain the reason for the visitor's presence. The Centre will be entered via single-person revolving doors fitted with a barcode reader so that visitors' e-passes can be read. Inside the Centre, bags will be checked using an X-ray scanner. The number of X-ray scanners will be such as to guarantee minimum waiting time. Queues outside the Centre should be avoided and the time spent by the visitor inside the Welcome Centre should be minimised.
- F.129 The Centre will consist of:
- PREFERABLY, an external structure, separate from the building, with a light 'explodable' roof allowing the force of an explosion to be dissipated upwards;
 - ALTERNATIVELY, if the separate solution is not possible, an area on the inside edge of the building where the walls in contact with the building are reinforced and the walls in contact with the outside are 'explodable' so that the force of an explosion is dissipated.
- F.130 In all cases, the projection of debris or pieces of glass towards the public waiting outside the Centre and the propagation of shock waves into the main building should be prevented as far as possible.
- F.131 The path from the Welcome Centre to the identity check and badge issue area will snake through reinforced walls in order to protect this area from any explosion in the Welcome Centre.
- F.132 Visitors must pass through at least two revolving doors in order to limit the risks of attack with automatic weapons.
- F.133 NB: As an example, the Centre may be located in the basement with overhead lighting.

Prohibitions

- F.134 The following measures are not wanted by the European Commission:
- Security gates on external doors
 - Bars on windows
 - Protection barriers around the site periphery

F.V | Flexibility

F.V.1. Adaptability

- F.135 The buildings must offer a range of options for their use so that, in the future, they can be altered as the needs of the European Commission change, without entailing excessive costs.
- F.136 In this respect, adopting a modular approach to the main architectural (structure and facade) and technical elements as well as specifying an adequate imposed load (see section F.V) will ensure the building's adaptability.
- F.137 Likewise, the design team will ensure that spaces can be divided, allowing for the phasing of future renovation or redevelopment work and possibly occupation in the future by other bodies.

Retail units

- F.138 It must be possible to reconfigure the division of the retail units without altering the building's structure.

Day nurseries

- F.139 It must be possible to reconfigure the day nursery spaces into office spaces without altering the building's structure.

F.V.2. Layout flexibility

- F.140 Layout flexibility means the aptitude of the undeveloped space to assume various layouts. This is measured in terms of the potential to assume various layouts and the ease of redevelopment and/or adaptation work on the building elements, technical equipment and control systems.

Office buildings

- F.141 It must be easy to adapt all the office spaces in the office buildings into open-plan offices, partitioned offices or a combination of both.
- F.142 In office areas, 10 % of open-plan office areas should be adaptable into meeting rooms.

F.V.3. Technical requirements

Partitioning

- F.143 As far as possible, room partitions and, especially, in office spaces, must be interchangeable, modular, prefabricated, and removable.
- F.144 It must be possible to install or remove removable partitions without removing the suspended ceiling.
- F.145 There must be no technical equipment (cables, sockets, etc.) in the partitions separating offices (perpendicular to the facade).

Raised floors

- F.146 A raised floor must be installed in office and similar areas to ensure flexibility and aid the routing of electrical and telecommunications network
- F.147 In all areas except for service areas, the European Commission would prefer networks to be routed through raised floors (which must be fully removable without any obstacle such as carpet strips) or suspended ceilings, via the circulation corridors. This preference must in particular be balanced against the needs for available thermal inertia in order to meet the energy performance requirements. The design team will ensure that the needs for flexibility and maintenance are reconciled with the energy performance requirements.
- F.148 For the foyers, restaurants, meeting centres, Visitor Centre and day nurseries, raised floors are not imposed. Here, networks can be routed through suspended ceilings or walls on condition easy access is ensured.

Suspended ceilings

- F.149 Suspended ceilings, if existing, must be removable taking account of the possibility of repartitioning every facade module in order to allow a flexible layout (i.e. bandrasters etc. are installed, if necessary).
- F.150 It must be possible to install or remove acoustic panels in the false ceiling above partitions every facade module.
- F.151 In the absence of suspended ceilings, the arrangement of acoustic panels suspended from the ceiling (to improve reverberation in the rooms) must not prevent repartitioning every two facade modules.

Service shafts

- F.152 The vertical ducts for service shafts will be rectilinear with 20 % spare capacity.

Technical installations

- F.153 The primary equipment (electricity, computing, lighting, ventilation, air conditioning, fire detection) must be dimensioned and designed for the maximum floor capacity, in order to serve all possible layout configurations (see table F.05, "Dimensioning for technical provisions").

F.VI | Structural strength

- F.154 Available data on topography and subsoil is defined in par. C.80 ff. and Appendix 3. Geotechnical and geological situation". Due to the difficulty to access the buildings, no soil tests have been done on the site to date. A soil study based on the retained project will have to be developed after demolition of existing buildings, to determine the capacity of the soil.

F:VI.1. Structural load values

F.155 The imposed loads to be specified for the various areas of the building are those laid down in EN 1991-1-1.

F.156 However, for reasons of flexibility in the future use of areas (adaptability), the following imposed load values excluding partitions (mobile or other) are desirable:

Area	Minimum imposed load
Any area (including offices)	Minimum Class C2 4.0 kN/sq m and point load of 4.0 kN
Entrances to public or administrative buildings, day nurseries and visitor centre	Class C3 5.0 kN/sq m and point load of 4.0 kN
Retail units	Class D1 5.0 kN/sq m and point load of 4.0 kN
Living archive rooms (paper store, computer rooms, main kitchen, service areas and other) ²³	Class E1 7.5 kN/sq m and point load of 7.0 kN
Underground car parks (light vehicles)	Class F 2.5 kN/sq m and point load of 20 kN ²⁴
Access roads, delivery areas, areas accessible to firefighting vehicles (GVW ²⁵ < 160 kN) Plaza, where applicable (GVW < 160 kN)	Class G 5 kN/sq m and point load of 90 kN ²⁶
Meeting/conference rooms (fixed seats)	Class C2 4.0 kN/sq m and point load of 4.0 kN

F:VI.2. Progressive collapse

F.157 Progressive collapse is characterised by disproportionate damage and widespread consequences resulting from initial local damage. This damage can have a variety of causes, e.g.: impacts, earthquakes, explosions, weakness of foundations. The risks of progressive and disproportionate collapse following a breakdown, accident or attack must be mitigated as far as possible. Belgian standard NBN EN 1991-1-7 contains analysis and design recommendations to prevent progressive collapse. According to this standard, certain buildings are consequence class 3, in the design phases after the competition and may have an impact on the design.

F.158 The retail unit structure will be independent of the rest of the buildings. If certain retail units have party walls with other buildings, these walls will be independent and must be able to withstand any attack.

Foundation strategy

²³ Load bearing for specific functions in other archive rooms (area suitable for the installation of archives on mobile shelving ...) will be defined after the competition

²⁴ 10 kN concentrated on two squares of 0.10 x 0.10 m where the axes are 1.80 m apart.

²⁵ GVW: Gross vehicle weight.

²⁶ 45 kN concentrated on two squares of 0.10 x 0.10 m where the axes are 1.80 m apart.

 F:VI.3. Non-exhaustive list of references

- F.159 The candidates have to design in accordance with Eurocodes and all Belgian norms in application. For example, the design has to satisfy to the below criteria:
- Earthquake
 - NBN EN 1998-1 §3.2: very low seismicity.
 - Non-progressive collapse
 - NBN EN 1991-1-7 section 5 and annex A: consequence class 3
 - Fire resistance of structure
 - "Arrêté royal du 7 décembre 2016 modifiant l'arrêté royal du 7 juillet 1994 fixant les normes de base en matière de prévention contre l'incendie et l'explosion, auxquelles les bâtiments nouveaux doivent satisfaire." or
 - "Koninklijk besluit tot wijziging van het koninklijk besluit van 7 juli 1994 tot vaststelling van de basishnormen voor de preventie van brand en ontploffing waaraan de nieuwe gebouwen moeten voldoen."
 - Comfort criteria (under horizontal loads, ...)
 - NBN EN 1990, NBN EN 1991-1-1, NBN EN 1991-1-4, NBN B03-003 (section 8 vibrations)

 F.VII | Technical installations

- F.160 Technical installations mean all electrical (high and low voltage), plumbing, fire protection and firefighting, HVAC, lifts and centralised building management installations.
- F.161 The technical systems:
- Will be as simple as possible in their design and implementation
 - Will be easily accessible
 - Will require little maintenance, or maintenance will be easy
 - Will have proven reliability
 - Will be energy efficient
 - Will have a minimum spare capacity of 20 % (primary systems, vertical ducts, cable trays, floor ducts, patch panels)
- F.162 Centralisation of the technical equipment is preferred in order to better control costs and any operating failures, while ensuring the continuity of activities during renovation/maintenance phases in the various functional entities. This centralisation particularly concerns:
- The different types of hot and cold production
 - The power sources (Uninterruptible Power Supply (UPS) or No Break\ generators\ transformer stations)
 - The ventilating units serving one functional area within the building.
- F.163 This preference does not rule out the possibility of decentralising certain installations if the 'service delivered/life cycle cost' ratio is better. Decentralisation should particularly be analysed for applications requiring dedicated and stand-alone installations.
- F.164 The retail units will be stand-alone and technically independent from the rest of the buildings. Their stacks, extractors and service ducts will not cross other buildings in the Project.

 General points

 Centralisation of the installations

<p>F.165 In addition to the installations or equipment regarded as vital based on the regulatory requirements (see the fire basic standards and the RGIE), an independent power source must supply:</p> <ul style="list-style-type: none"> • The surveillance and security control systems • The emergency lighting • The return of lifts to the escape level • The uninterruptible power supply equipment • The PRM lift platforms • The cold rooms of restaurant and self-service kitchens • The computer rooms, reconfiguration rooms and PABX rooms, including the production and distribution of cold for these rooms • The BMS and controls: central system and Local Network Routing/Processing Unit 	<p>Independent power source</p>
<p>F.166 The installations will be designed to function by geographical zone (according to the building's architecture) and by functional zone. The zones will be common to the various installations.</p>	<p>Zoning of the installations</p>
<p>Passenger lifts</p>	
<p>F.167 All the parking levels and those levels accommodating work stations or collective services will connect by lifts to the buildings' entrance levels.</p>	<p>Vertical circulation</p>
<p>F.168 The number of lifts will be determined based on a circulation study to ensure a minimum transport capacity of 15 % in five minutes with a maximum waiting time of 25 seconds to 30 seconds (see CIBSE Guide D and standard BS 5655-6:2011).</p>	
<p>F.169 Protection of persons and goods</p> <ul style="list-style-type: none"> • For security reasons, people going from the parking levels to the upper levels must pass through the buildings' entrance spaces. A set of lifts serving the parking levels from the buildings' entrance spaces must be specified²⁷. 	
<p>Goods lifts</p>	
<p>F.170 Each building must have at least one goods lift with dimensions allowing the transport of pallets, serving all levels, including those with service areas. The lift must be equipped with accessories for a booking service.</p>	
<p>F.171 All the goods lifts must be capable of transporting people.</p>	
<p>F.172 At least one goods lift per zone must be capable of evacuating a person lying horizontally without having to use the stairs.</p>	
<p>F.173 For the visitor's centre the lifts will be adapted to the exhibition concept.</p>	
<p>"Firefighter" and "evacuation" lifts</p>	
<p>F.174 There should be two types of lifts to be used in an emergency:</p> <ul style="list-style-type: none"> • 'Firefighter' lift: <ul style="list-style-type: none"> - the 'firefighter' lift, which can be used as a normal lift, must have controls allowing it to be used in override mode under the direct control of firefighters. - in high-rise buildings, each level (except possibly for the service floor on the top level) must be served by a 'firefighter' lift connecting it to the escape level according to the basic standards on the prevention of fire and explosion. 	

²⁷ Lifts serving both upper levels and underground levels must be secured to prevent unauthorised access to the underground levels.

- 'Evacuation' lift:
 - the 'evacuation' lift, which can be used as a normal lift, must allow the evacuation of injured, sick and disabled people by authorised European Commission staff.
 - these must be installed on the basis of risk analyses and according to European Commission specifications. An 'evacuation' lift is required by the European Commission for medium-rise and high-rise buildings²⁸. In medium-rise buildings, the 'evacuation' lift can also be used as a 'firefighter' lift.

Prohibitions

F.175 The following are prohibited:

- End-of-life technologies;
- Experimental technologies;
- Fluid pipes embedded in the concrete, except for activation of the thermal mass, where applicable.

F.VIII | Operation and maintenance

F.176 During the study and work phases, the design team must pay particular attention to the operating and maintenance conditions.

General points

F.177 The design of the installations and structures must meet the following general objectives to ensure continuous operation and reduce the operating and maintenance costs:

- Availability of equipment and premises;
- Maintenance and optimisation of operating performance;
- Reliability and performance of technical installations;
- Redundancy (partial or complete) of certain installations, based on the MIT;
- Maintenance of comfort levels for building users.

F.178 To this end, centralisation of the technical equipment will be preferred in order to better control costs and operating failures.

F.179 The choice of materials and equipment proposed by economic operators must:

- Be suited to the specific uses defined in the programme;
- Allow maintenance to be optimised from the point of view of both durability and performance (accessibility, frequency, etc.), while respecting the various constraints, whatever the corresponding service concerned.

F.180 Technical equipment will be chosen on the basis of simple proven solutions that do not require a high degree of technicality for programming and operation.

Life cycle costing

F.181 In terms of operating and maintenance costs (including cleaning), materials and equipment with equivalent performance will be chosen in view of improving the life cycle cost²⁹ over 30 years + 30 years (investment cost + maintenance cost + end-of-life cost).

F.182 The materials and equipment proposed by the design team will offer the best 'need met/life cycle cost' ratio.

²⁸ High-rise buildings: evacuation height above 25 m in accordance with the Belgian fire basic standards.

²⁹ According to ISO 15686-5 or EN 15643-4 and EN 16627.

Accessibility

- F.183 All the structures and in particular the technical installations (networks, equipment, etc.) and glazing will be easily and safely accessible for maintenance, cleaning and replacement.
- F.184 The requirements for safe access for people will be met as a priority by the design (elimination of the risk) and collective protection.
- F.185 The technical installations will be accessed from circulation spaces and away from areas of activity.
- F.186 All green spaces must be accessible to the same degree as service areas (lawnmower, removal of plants, etc.), including any green roofs for which the accesses will be appropriately dimensioned.

Cleaning and maintenance

- F.187 The materials used must require as little maintenance and renewal as possible so that disruption to activities due to technical work is minimised.
- F.188 Maintenance and cleaning of the building must be simple and easy, particularly due to:
- Avoiding the use of any absorbent material;
 - Choosing easy-to-clean carpeting in the form of tiles rather than in lengths;
 - Aiming to use self-cleaning 'antistatic' glazing;
 - Favouring stone rather than wood flooring;
 - Integrating the carpeting into the ground at the building entrances;
 - Specifying a sufficient number of water taps for cleaning the glazing.
- F.189 The building envelope, facade walls and their exterior coverings, if any, will not require any extensive long-term maintenance. Weather protection devices to limit dirt and runoff will in particular be specified.
- F.190 The materials used for landscaping and planting must be such as to limit vandalism. In the event of vandalism, damage must be repairable with a minimum amount of resources.
- F.191 The outside planting must not require specific watering.

Removability

- F.192 It must be possible to remove and refit all the building envelope, partitions, equipment and internal finishing works with removable parts while ensuring a minimal impact.

Ease of work

- F.193 It must be easy to work on equipment and installations (e.g. easy and quick replacement of units, distances between pipes to allow for the replacement of valves, etc.) by design (e.g. electrical equipment can be unplugged, units can be accessed without dismantling them, etc.).
- F.194 In the event of work on one part of an installation (renewal of a functional unit for example), the latter's design will limit to an absolute minimum the impact on the rest of the installation. It must be possible to replace installations without any structural work being required.

Interchangeability and replacement

- F.195 Equipment will be selected in particular whereby, as far as possible, a component can be replaced by an identical component from another brand.
- F.196 Finishing products must consist of modular elements so that these can be easily replaced in the event of wear. Consideration must be given to the adaptability and change in configuration of offices.

Standardisation

- F.197 In terms of integration, every possible step will be taken to facilitate maintenance, replacement and operation by avoiding the multiplication of components and/or systems (e.g. use of standardised components to facilitate maintenance and minimise stocks).
- F.198 Standardisation will also apply to finishing products such as carpeting, doors (e.g. widths of 73 cm, 83 cm and 93 cm), paint (also colour) and ceilings.
- F.199 In addition, the nature of coverings, and therefore their maintenance protocols, will be the same in each zone to avoid having to use different processes and tools in the same maintenance zone.

Building Management System (BMS)

- F.200 A Building Energy Management System (BEMS) shall be installed and commissioned that provides occupants and facilities managers with real-time information on the building's energy use by using networked sensors and a minimum of half hourly utility metering.
- F.201 The user interface shall allow for information on the buildings energy use to be analysed and downloaded by occupants and facilities managers without requiring significant training. Occupants shall also be able to adjust comfort conditions in zones of the building.
- F.202 The performance of key aspects of the building that can be controlled by the system shall be easy to adjust i.e. lighting, heating, cooling. Additionally, the system shall allow for:
- Analysis and control of energy uses for different zones within the building (as a minimum for heating, cooling, lighting);
 - Performance optimisation according to ambient conditions inside and outside the building, and;
 - Diagnosis of the reason for any deviations from design performance.

G

Appendix

- Appendix 1: Detailed Room programme
- Appendix 2: RRUZ (digital file)
- Appendix 3: Report on Geotechnical and geological situation (digital file)
- Appendix 4: Measuring code and measuring code table
- Appendix 5: Note on RRUZ "Urban planning framework for block B of the 'Projet Urbain Loi' urban redevelopment project (digital file)
- Appendix 6: Summary on fire safety regulations

Forms

- Form A1: Declaration of Authorship Phase 1
- Form B1: Key Indices Phase 1
- Form C1: Room Programme Phase 1
- Form D1: Building Specifications Phase 1
- Form E1: Building Dimensions Phase 1
- Form A2: Declaration of Authorship Phase 2
- Form B2: Key Indices Phase 2
- Form C2: Room Programme Phase 2
- Form D2: Building Specifications Phase 2
- Form E2: Building Dimensions Phase 2

G.I | Abbreviations and definitions

- ADT Agence de Développement Territorial de la Région de Bruxelles-Capitale (Regional development agency of the Brussels-Capital Region)
- AFA acceptable footprint area ; defined in RRUZ chapter 1 Nr. 15, note of RRUZ point 1 and Competition Brief par. E.17
- AFSCA Agence fédérale pour la Sécurité de la Chaîne alimentaire (Federal agency for food chain safety)
- ATG Technical approval issued by the UBAtc (Union belge pour l'agrément technique dans la construction – Belgian union for technical approval in construction)
- Architectural policy guide http://ec.europa.eu/oib/documents_en.cfm
- Basic standards This means the Royal Decree of 7 July 1994 laying down basic standards on fire and explosion prevention, with which new buildings must comply, and its amending decrees
- BMS Building Management System
- BEMS Building Energy Management System
- BRE Building Research Establishment (UK)
- BREEAM BRE Environmental Assessment Method: this is the method of assessing the environmental performance of buildings developed by the BRE
- BREEAM Technical BREEAM International New Construction 2016 manual
- CA Circulation Area: see Measuring Code
- CCTV Closed Circuit Television: video surveillance system
- CFA Construction Floor Area: see Measuring Code
- COBRACE Order implementing the Code bruxellois de l'Air, du Climat et de la Maîtrise de l'Énergie (Brussels Code for air, climate and energy)

<ul style="list-style-type: none"> • Code du bien-être • Competition • CRPD • DG • DIN 276 • DNG • EC • EN 15978:2012 • EN 16798-3:2017 • EU • EU GPP • Floor area • FSC • GFA • Goods • GPP • GVW • HACCP • HVAC • ISO 14040:2006 • ISO 14044:2006 & A1:2018 • K4, K8 or K12 • Kind & Gezin • Loi 130 site • MIT • Measuring Code • MEP • NEN 8100:2006 • NFA • Non building land • NZEB • OIB • ONE • PABX • PAD • PASs/PRMs • PEB • PEFC 	<p>Well-being at work code comprises all the decrees implementing the Law of au travail (4 August 1996 on the well-being of workers at work (except for the Royal being at work code) Decree of 25 January 2001 on temporary or mobile work sites)</p> <p>The restricted international architecture competition organised by the European Commission for the Project</p> <p>Convention on the Rights of Persons with Disabilities</p> <p>Directorate-General of the European Commission</p> <p>reference and explanation of cost groups 300/400/500</p> <p>Deuxieme Nivellement Général</p> <p>European Commission</p> <p>Sustainability of construction works - Assessment of environmental performance of buildings - Calculation method</p> <p>Energy performance of buildings - Ventilation for buildings - Part 3: For non-residential buildings - Performance requirements for ventilation and room-conditioning systems (Modules M5-1, M5-4)</p> <p>European Union</p> <p>European Union Green Public Procurement criteria for Office Building Design, Construction and Management: http://ec.europa.eu/environment/gpp/eu_gpp_criteria_en.htm</p> <p>See definition in Title VIII of the RRU</p> <p>Forest Stewardship Council</p> <p>Gross Floor Area: see Measuring Code; also defined in the glossary of the Regional Land Use Plan (PRAS) and Competition Brief E.14ff</p> <p>All materials and goods covered by the Project: office supplies, food-stuffs, etc.</p> <p>Green Public Procurement (see EU GPP)</p> <p>Gross vehicle weight</p> <p>Hazard Analysis and Critical Control Point: method of managing food safety</p> <p>Heating, ventilation, and air conditioning</p> <p>Environmental management - Life cycle assessment - Principles and framework</p> <p>Environmental management - Life cycle assessment – Requirements and guidelines</p> <p>following American Standards DOS</p> <p>Public early childhood service answering to the Flemish Region</p> <p>The Site</p> <p>Manual of standard building specifications – OIB (http://ec.europa.eu/oib/documents_en.cfm)</p> <p>The Measuring Code applicable to Commission buildings in Brussels and its annex</p> <p>Mechanical, Electrical and Plumbing</p> <p>Wind comfort and wind danger in the built environment</p> <p>Net Floor Area: see Measuring Code</p> <p>defined in RRUZ chapter 1 Nr. 28, note of RRUZ point 2</p> <p>Nearly zero-energy building</p> <p>European Commission's Office for Infrastructure and Logistics in Brussels</p> <p>Office de la Naissance et de l'Enfance (Birth and early childhood office) - Public service answering to the Ministry of the French Community of Belgium</p> <p>Private Automatic Branch Exchange</p> <p>Plan d'aménagement directeur, Land Use Strategic and regulatory framework</p> <p>Portillon automatique de sécurité (Automatic security gate)</p> <p>Performance énergétique des bâtiments</p> <p>Programme for the Endorsement of Forest Certification</p>
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- Private spaces Private spaces are places and premises over which the European Commission has total control
- Project Loi 130 The project to construct a building complex on the Site
- Public outdoor spaces In contrast to private spaces, public outdoor spaces are spaces where the European Commission shares control with a third party or does not have any control
- RH Relative humidity
- PRM Person with reduced mobility
- PRDD Plan Régional de Développement Durable de la Région de Bruxelles-Capitale (Regional sustainable development plan of the Brussels-Capital Region)
- RGIE Règlement Général sur les Installations Electriques (General Regulation on electrical installations)
- RGPT Règlement Général pour la Protection du Travail (General Regulation on worker protection)
- RRU Règlement Régional d'Urbanisme (Regional urban planning regulation)
- RRUZ Règlement Régional d'Urbanisme Zoné (Regional zoned planning regulation), approved 12 December 2013 - Decree of the Government of the Brussels-Capital Region approving the Regional Zoned Planning Regulation and the contents of the planning certificate and planning permission application for the perimeter of Rue de la Loi and its surroundings
http://www.adt-ato.brussels/sites/default/files/documents/20140130_publication_RR_UZ_au_MB.pdf
- SA Service Area: see Measuring Code
- SIAMU Service d'Incendie et d'Aide Médicale Urgente de la Région de Bruxelles-Capitale (Fire and medical emergency service of the Brussels-Capital Region)
- Site The land situated between Rue de la Loi, Rue de Spa, Rue Joseph II and Chaussée d'Etterbeek on which the Project will be constructed
- SITEX Means the dossier describing the existing situation
- STIB Société des Transports Intercommunaux de Bruxelles (Intercommunal transport company of Brussels)
- UA Usable Area: see Measuring Code
- UA1 Main Usable Area - Living and accommodation: see Measuring Code
- UA2 Main Usable Area - Administrative areas: see Measuring Code
- UA3 Main Usable Area - Production, craftwork, industry, experiences: see Measuring Code
- UA4 Main Usable Area - Storage, distribution and sales: see Measuring Code
- UA5 Main Usable Area - Training, education and culture: see Measuring Code
- UA6 Main Usable Area - Care and convalescence: see Measuring Code
- UA7 Secondary Usable Area: see Measuring Code
- UDA Undeveloped Area: see Measuring Code
- UBAtc Union belge pour l'agrément technique dans la construction (Belgian union for technical approval in construction)
- WS Work Station: individual work space with the furniture and computer equipment needed for the service tasks of European Commission staff (superficie de plancher)

No	Code	Functions	CONSTRUCTION PHASE 1			CONSTRUCTION PHASE 2			TOTAL									
			Col.1 Col.2	Col.3	Col.4 Col.5 Col.6 Col.7	Col.8	Col.9	Col.10		Col.11	Col.12	Col.13	Col.14	Col.15	Col.16	Col.17		
			Security level	Natural lighting	sqm UA per unit	Number of spaces	units per space	UA per space	TOTAL UA	in sqm	Number of spaces	units per space	UA per space	TOTAL UA	in sqm	Capacity (main indicators)	TOTAL UA	in sqm
Offices																		
1	A	Entrance / reception area							58.270,0	1.085,0				31.879,0	515,0		90.149,0	
2	A.1.1	Welcome Centres	CA 1	L	0,50/person	(according to design)	670 people	335,0							165,0	1000 people	500,0	
3	A.1.2	Reception foyer	CA 1	L	2% x office spaces	(according to design)	335,0								350,0	(according to design)	1050,0	
4	A.1.3	Security officers' rooms	UA2A	4	L		1 room/building	16,0	(according to design)	16,0					16,0	(according to design)		
5	A.1.4	First aid rooms	UM6	1	L		1 room/building	20,0	(according to design)	20,0					20,0	(according to design)		
6	A.1.5	Health and safety officers' offices	UA2B	3	L1		1 room/building	20,0	(according to design)	20,0					20,0	(according to design)		
7	B	Tertiary work spaces							43.743,0					24.316,0			68.059,0	
8	B.1	Office spaces							33.580,0					18.551,0			51.931,0	
9	B.1.1	Individual offices	UA2B	3	L1													
10	B.1.2	Open-plan offices	UA2B	3	L1													
11	B.2	Collaborative spaces							5.831,0					3.241,0			9.072,0	
12	B.2.1	Quiet rooms	UA2B	3	L2	5,5 % x office spaces	1.836,0	6,0						6,0	1.020,0	2.856,0		
13	B.2.2	Meeting spaces (10 people)	UA2A	3	L2	6,5 % x office spaces	2.160,0	20,0						20,0	1.200,0	3.360,0		
14	B.2.3	Informal meeting spaces	UA1	3	L2	5,5 % x office spaces	1.836,0	20,0						20,0	1.020,0	2.856,0		
15	B.3	Support spaces							4.532,0					2.524,0			7.056,0	
16	B.3.1	Copying/paper storage points	UA2A	3	L	2 % x office spaces	664,0	8,0						8,0	368,0	1.032,0		
17	B.3.2	Living archives	UA2A	3	L	7,5 % x office spaces	2.500,0	20,0						20,0	1.400,0	3.900,0		
18	B.3.3	Kitchenettes	UA1	3	L	4 % x office spaces	1.568,0	12,0						12,0	756,0	2.124,0		
19	C	Meeting centres							2.480,0					1.170,0		1.950 seats	3.650,0	
20	C.1.1	Small rooms (max. 10 people)	UA2B	2B	L	2,00/seat	110	20,0						20,0	10 seats	160 seats	320,0	
21	C.1.2	Medium-sized rooms (max. 30 people)	UA2B	2B	L	2,00/seat	190	60,0						60,0	30 seats	540,0	1.680,0	
22	C.1.3	Large rooms (max. 70 people)	UA2B	2B	L	2,00/seat	30	140,0						140,0	70 seats	280,0	700,0	
23	C.1.4	Large rooms (max. 150 people)	UA2B	2B	L	1,50/seat	30	150 seats						225,0	150 seats	225,0	600 seats	900,0
24	C.1.5	Banqueting pantry	UA1	4	L		25,0	25,0						25,0	25,0		25,0	
25	D	Catering							5.250,0					2.785,0			8.035,0	
26	D.1	'Food court' restaurants							3.245,0					1.680,0		2 restaurants	4.925,0	
27	D.1.1	Dining room Food court	UA1	2B	L		1.800,0							900,0			2.700,0	
28	D.1.1.1	Dining room Food court	UA1	2B	L	2,00/seat	1.800,0	1.800						900,0	450 seats	1.350 seats	2.700,0	
29	D.1.2	Distribution area (self-service and food court)	UA1	L			675,0							370,0			1.045,0	
30	D.1.2.1	Stands	UA1	2B	L		65,0							40,0			55,0	
31	D.1.2.2	Customer walking distribution area	UA1	2B	L		550,0							170,0			520,0	
32	D.1.3	Production area (Food court restaurants)												900 meals/day			1.180,0	
33	D.1.3.1	Head Chef's office	UA3	4	L		25,0							15,0			40,0	
34	D.1.3.2	Hot kitchen	UA3	4	L		160,0							90,0			250,0	
35	D.1.3.3	Cold kitchen	UA3	4	L		100,0							60,0			160,0	
36	D.1.3.4	Dishwashing area	UA3	4	L		40,0							20,0			60,0	
37	D.1.3.5	Sink block	UA3	4	L		180,0							80,0			260,0	
38	D.1.3.6	Stoves	UA4	4	L		120,0							70,0			190,0	
39	D.1.3.7	Positive cold storage	UA4	4	L		80,0							100,0			120,0	
40	D.1.3.8	Negative cold storage	UA4	4	L		100,0							100,0			60,0	
41	D.1.3.9	Unpacking/unboxing	UA4	4	L		25,0							15,0			40,0	
42	D.2	Banqueting												270,0			590,0	
43	D.2.1	Banqueting rooms	UA1	2B	L	2,50/person	300,0	120 people						100 people		220 people	550,0	
44	D.2.2	Stores	UA4	4	L		20,0							20,0			40,0	
45	D.3	200-seat cafeterias												545,0		2 cafeterias	1.100,0	
46	D.3.1	Dining room	UA1	2B	L	2,00/seat	400,0							400,0			800,0	
47	D.3.1.1	Dining room	UA1	2B	L	2,00/seat	400,0	200 seats						400,0	200 seats	400,0	800,0	
48	D.3.2	Production area (200-seat cafeteria)												155,0			300,0	
49	D.3.2.1	Chef's office	UA3	4	L		10,0							10,0			20,0	
50	D.3.2.2	Counter	UA1	4	L		40,0							40,0			80,0	

No	Code	Functions	Type	Security level	Natural lighting	sqm UA per unit	CONSTRUCTION PHASE 1				CONSTRUCTION PHASE 2				TOTAL	
							Col.8	Col.9	Col.10	Col.11	Col.12	Col.13	Col.14	Col.15	Col.16	Col.17
52	D3.2.4	Pantries	UA1	4	L		1.0	150	150	150	1.0	150	150			300
53	D3.2.5	Sink block	UA3	4	L		1.0	250	250	250	1.0	250	250			500
54	D3.2.6	Stores	UA4	4			1.0	350	350	350	1.0	350	350			700
55	D4	100-seat cafeterias					2.0	610.0	610.0	610.0				2 cafeterias	610.0	
56	D4.1	Dining room	UA1	2B	L	2.00/person		400.0	400.0	400.0				200 seats	400.0	
57	D4.1.1	Dining room	UA1	2B	L	2.00/person		200.0	200.0	200.0				100 seats	200.0	
58	D4.2	Production area (100-seat cafeteria)	UA3	4	L		2.0	200	200	200					200	
59	D4.2.1	Chief's office	UA1	4	L		2.0	500	500	500					500	
60	D4.2.2	Counter	UA3	4	L		2.0	400	400	400					400	
61	D4.2.3	Meeting coffee production	UA1	4	L		2.0	300	300	300					300	
62	D4.2.4	Pantries	UA3	4	L		2.0	300	300	300					300	
63	D4.2.5	Sink block	UA3	4	L		2.0	400	400	400					400	
64	D4.2.6	Store	UA4	4			2.0	60.0	60.0	60.0					60.0	
65	D5	Sandwich bar	UA1	2B	L		2.0	300	300	300				30.0 sandwich bars	300	
66	D5.1	Points of sale	UA1	2B	L		2.0	100.0	100.0	100.0					100.0	
67	D6	Vending machine	UA1	2B	L		8.0	1200	1200	1200					1200	
68	D6.1	Dining room	UA1	2B	L		8.0	800	800	800					800	
69	D6.2	Vending machine area	UA1	2B	L		8.0	240.0	240.0	240.0					240.0	
70	D7	Catering staff quarters	UA7	4		2.00/person		240.0	240.0	240.0				40 people	240.0	
71	D7.1	Changing rooms / showers / toilets	UA7	4		2.00/person		120.0	120.0	120.0				40 people	120.0	
72	E	Support						3 384.0	3 384.0	3 384.0					1 894.0	5 278.0
73	E.1	Support						1 500.0	1 500.0	1 500.0					650.0	2 150.0
74	E.1.1	Control centre	UA2A	4			1.0	400.0	400.0	400.0					400.0	
75	E.1.2	Crisis management	UA2A	4			1.0	50.0	50.0	50.0					50.0	
76	E.1.3	Building manager's office	UA2B	3	L1		(nct. in office spaces)	-	-	-					-	
77	E.1.4	Mail deposit	UA4	3			2.0	250	250	250					250	
78	E.1.5	archives	UA4	4		3 % x office spaces	5.0	2000	2000	2000					2000	
79	E.2	Maintenance						2000.0	2000.0	2000.0					2000.0	
80	E.2.1	Store for maintenance materials	UA4	4			4.0	500	500	500					500	
81	E.3	Cleaning						430.0	430.0	430.0					720.0	
82	E.3.1	Store room for maintenance supplies and products	UA4	4			3.0	1500	1500	1500					3000	
83	E.3.2	Floor-specific rooms	UA7	4		1 % x office spaces	(according to design)	280.0	280.0	280.0					420.0	
84	E.4	Contractors' area						254.0	254.0	254.0				40 people	508.0	
85	E.4.1	Team leader's office	UA2B	3	L1		(nct. in office spaces)	-	-	-					-	
86	E.4.2	Workshops	UA3	4	L		2.0	500	500	500					1000	
87	E.4.3	Gantern	UA1	4	L	2.00/seat	2.0	800	800	800				20 seats	1600	
88	E.4.4	Kitchenette	UA1	4	L		2.0	240	240	240				20	480	
89	E.4.5	Changing rooms / showers / toilets	UA7	4		1.25/person	2.0	500	500	500				20 people	1000	
90	E.5	Storage						1 000.0	1 000.0	1 000.0					500.0	1 500.0
91	E.5.1	Store rooms	UA4	4			10.0	1000	1000	1000					500.0	1 500.0
92	F	Sports and cultural infrastructure						998.0	998.0	998.0					499.0	1 497.0
93	F.1	Multipurpose rooms	UA5	2B	(L)		6.0	1280	1280	1280					840	1 1520
94	F.2	Changing rooms / showers / toilets	UA7	2B		1.25/person	2.0	230.0	230.0	230.0				46 people	345.0	565.0
95	G	Sanitary facilities						1 400.0	1 400.0	1 400.0					700.0	2 100.0
96	G.1.1	General toilets	UA7	1		4.5 % x office spaces	(according to design)	1 400.0	1 400.0	1 400.0					700.0	2 100.0

CONSTRUCTION PHASE 1			CONSTRUCTION PHASE 2						TOTAL				
No	Code	Functions	Col.7	Col.8	Col.9	Col.10	Col.11	Col.12	Col.13	Col.14	Col.15	Col.16	Col.17
			sqm UA per unit	Number of spaces	Number of units per space	UA per space in sqm	TOTAL UA in sqm	Number of spaces	Number of units per space	UA per space in sqm	TOTAL UA in sqm	Capacity (main indicators)	TOTAL UA in sqm
Visitor Centre													4,774.0
97 H Entrance / reception area													796.0
98	H.1.1	Welcome centre	CA 1 L		1.0	250.0	250.0				250.0		250.0
99	H.1.2	Reception foyer	CA 1 L		1.0	350.0	350.0				350.0		350.0
100	H.1.3	Shop	UA4 1 L		1.0	700	700				700		700
101	H.1.4	Cloakrooms	UA7 2B		1.0	80.0	80.0				80.0		80.0
102	H.1.5	Security officers' rooms	UA2A 4 L		1.0	16.0	16.0				16.0		16.0
103	H.1.6	First aid rooms	UA6 1 L		1.0	30.0	30.0				30.0		30.0
104	H.1.7	Health and safety officers' offices	UA2B 3 L1					(not in office spaces)					
105 I Exhibition spaces													1,636.0
106	I.1.1	Permanent exhibitions	UA5 1 L		1.0	750.0	750.0				750.0	150 people	750.0
107	I.1.2	Temporary exhibitions	UA5 1 L		1.0	750.0	750.0				750.0	150 people	750.0
108	I.1.3	Chemistry auditorium (80 seats)	UA5 1 L		1.0	136.0	136.0				136.0	80 seats	136.0
109 J Event spaces													1,172.0
110 J.1 Multipurpose room for 150 people													323.0
111	J.1.1	Multipurpose room (150 people)	UA5 2B L		1.0	300.0	300.0				300.0	150 seats	300.0
112	J.1.2	Interpreting booths	UA5 3 L		3.0	23.0	23.0				23.0	12 work stations	23.0
113 J.2 Multipurpose room for 100 people													423.0
114	J.2.1	Multipurpose room (100 people)	UA5 2B L		2.0	200.0	400.0				400.0	200 seats	400.0
115	J.2.2	Interpreting booths	UA5 3 L		3.0	23.0	23.0				23.0	12 work stations	23.0
116 J.3 Multipurpose room for 50 people													246.0
117	J.3.1	Multipurpose room (50 people)	UA5 2B L		2.0	100.0	200.0				200.0	100 seats	200.0
118	J.3.2	Interpreting booths	UA5 3 L		6.0	46.0	46.0				46.0	24 work stations	46.0
119 J.4 Multipurpose room for 30 people													180.0
120	J.4.1	Multipurpose room (30 people)	UA5 2B L		3.0	60.0	180.0				180.0	90 seats	180.0
121	J.4.2	Interpreting booths	UA5 3 L		8.0	8.0	8.0				8.0		8.0
122 K Tertiary work spaces													473.0
123 K.1 Office spaces													365.0
124 K.1.1 Individual offices													45.0
125	K.1.1.1	Head of Unit work stations	UA2B 3 L1		3.0	25.00WS	25.0				25.0	3 WS	25.0
126	K.1.1.2	Staff work stations	UA2B 3 L1		2.0	10.00WS	20.0				20.0	1 WS	20.0
127 K.1.2 Shared offices													208.0
128	K.1.2.1	Staff work stations	UA2B 3 L1		11.0	8.00WS	144.0				144.0	26 WS	144.0
129	K.1.2.2	Staff work stations	UA2B 3 L1		2.0	8.00WS	32.0				32.0	8 WS	32.0
130 K.1.3 Open-plan offices													112.0
131	K.1.3.1	Staff work stations	UA2B 3 L1		2.0	7.00WS	112.0				112.0	16 WS	112.0
132 K.2 Collaborative spaces													46.0
133	K.2.1	Quiet rooms	UA2B 3 L2		1.0	6.0	6.0				6.0		6.0
134	K.2.2	Meeting spaces (10 people)	UA2A 3 L2		1.0	20.0	20.0				20.0		20.0
135	K.2.3	Informal meeting spaces	UA1 3 L2		1.0	20.0	20.0				20.0		20.0
136 K.3 Support spaces													62.0
137	K.3.1	Copying/paper storage points	UA2A 3		2.0	8.0	16.0				16.0		16.0
138	K.3.2	Living archives	UA2A 3		1.0	30.0	30.0				30.0		30.0
139	K.3.3	Kitchens/ettes	UA1 3		1.0	16.0	16.0				16.0		16.0
140 L Mass catering													340.0
141 L.1 Coffee lounge													220.0
142	L.1.1	Lounge space	UA1 1 L		1.0	160.0	160.0				160.0		160.0
143	L.1.2	Counter	UA1 3 L		1.0	20.0	20.0				20.0		20.0
144	L.1.3	Bar/try	UA1 4 L		1.0	20.0	20.0				20.0		20.0
145	L.1.4	Store	UA4 4		1.0	20.0	20.0				20.0		20.0

No	Code	Functions	Type	Security level	Natural lighting	sqm UA per unit	CONSTRUCTION PHASE 1				CONSTRUCTION PHASE 2				TOTAL	
							Col.8	Col.9	Col.10	Col.11	Col.12	Col.13	Col.14	Col.15	Col.16	Col.17
146	L2	Coffee stations	UA1	2B			40	200	800	800					800	
147	L2.1	Coffee stations	UA1	2B			40	200	800	800					800	
148	L3	Banqueting	UA1	4	L		1.0	400	400	400					400	
149	L3.1	Banqueting pantry	UA1	4	L											
150	M	Support							1700	1700					1700	
151	M.1	Support	UA2B	3	L1				100	100					100	
152	M.1.1	Building manager's office				1000WS			100	100					100	
153	M.2	Maintenance	UA4	4			1.0	1000	400	400					400	
154	M.2.1	Store for maintenance materials	UA4	4			1.0	400	400	400					400	
155	M.3	Cleaning	UA4	4			1.0	200	200	200					200	
156	M.3.1	Store room for maintenance supplies / products	UA4	4			1.0	200	200	200					200	
157	M.3.2	Floor-specific rooms	UA7	4			(according to design)	20	20	20					20	
158	M.4	Storage	UA4	4			1.0	800	800	800					800	
159	M.4.1	Store rooms	UA4	4			1.0	800	800	800					800	
160	M.5	Waste	UA7	4			1.0	200	200	200					200	
161	M.5.1	Bin room	UA7	4			1.0	200	200	200					200	
162	N	Sanitary facilities							1870	1870					1870	
163	N.1.1	General toilets - public	UA7	1			(according to design)		1500	1500					1500	
164	N.1.2	General toilets - staff	UA7	2B			(according to design)		370	370					370	

No	Code	Functions	Type	Security level	Natural lighting	sqm UA per unit	CONSTRUCTION PHASE 1			CONSTRUCTION PHASE 2			TOTAL			
							Col.8	Col.9	Col.10	Col.11	Col.12	Col.13	Col.14	Col.15	Col.16	Col.17
							Number of spaces	Units per space	UA per space	TOTAL UA	Number of spaces	Units per space	UA per space	TOTAL UA	Capacity (main indicators)	
Day Nurseries																
165	0	Entrance / reception area					3.771,0	111,0	3.771,0	111,0	3.771,0	111,0	3.771,0	111,0	7.542,0	
166	0.1.1	Double-entrance reception vestibule	CA	1	L	15,0	1,0	15,0	15,0	150	1,0	15,0	15,0	300		
167	0.1.2	Security officer's area	UA2A	4	L	16,0	1,0	16,0	16,0	160	1,0	16,0	160	320		
168	0.1.3	Reception lobby	CA	1	L	40,0	1,0	40,0	40,0	400	1,0	40,0	400	800		
169	0.1.4	Pushchair room	UA6	1	L	40,0	1,0	40,0	40,0	400	1,0	40,0	400	800		
170	0.1.5	First aid room	UA6	1	L	-	-	-	-	-	-	-	-	-		
171	0.1.6	Health and safety officer's office	UA2B	3	L1	-	-	-	-	-	-	-	-	-		
Children's spaces																
172	P	Children's spaces					2.493,0	130	2.493,0	130	2.493,0	130	2.493,0	508 children	4.986,0	
173	P.1	Nursery units					1.594,0	40	1.594,0	40	1.594,0	40	1.594,0	260	3.188,0	
174	P1.1	Reception room	UA1	2B		112,0	7,0	112,0	112,0	160	7,0	112,0	112,0	224,0		
175	P1.2	Activity room	UA1	2B	L	4,00child	14 children	56,0	56,0	14 children	14 children	56,0	56,0	144 children	1.456,0	
176	P1.3	Dormitory	UA1	2B		2,00child	14 children	28,0	28,0	14 children	14 children	28,0	28,0	78,0		
177	P1.4	Bathroom / changing room	UA1	2B				18,0	18,0			18,0	18,0	48,0		
178	P1.5	Kitchenette	UA1	2B				6,0	6,0			6,0	6,0	15,6,0		
179	P1.6	Staff changing room	UA7	2B				3,0	3,0			3,0	3,0	7,8,0		
180	P1.7	Staff toilets	UA7	2B				3,0	3,0			3,0	3,0	7,8,0		
181	P1.8	Outdoor play area		2B		15,00		For the record (outdoor area)				3,0	3,0	7,8,0		
182	P.2	Kindergarten units					584,0	40	584,0	40	584,0	40	584,0	8,0	1.168,0	
183	P2.1	Reception room	UA1	2B		32,0	2,0	32,0	32,0	16,0	2,0	32,0	32,0	64,0		
184	P2.2	Activity room	UA1	2B	L	4,00child	18 children	72,0	72,0	18 children	18 children	72,0	72,0	288,0	576,0	
185	P2.3	Dormitory	UA1	2B		2,00child	18 children	36,0	36,0	18 children	18 children	36,0	36,0	144,0	288,0	
186	P2.4	Bathroom / changing room	UA1	2B				18,0	18,0			18,0	18,0	44,0		
187	P2.5	Kitchenette	UA1	2B				6,0	6,0			6,0	6,0	14,4,0		
188	P2.6	Staff changing room	UA7	2B				3,0	3,0			3,0	3,0	7,2,0		
189	P2.7	Staff toilets	UA7	2B				3,0	3,0			3,0	3,0	7,2,0		
190	P2.8	Outdoor play area		2B		15,00		For the record (outdoor area)				3,0	3,0	7,2,0		
191	P.3	Play and learning areas					315,0	40	315,0	40	315,0	40	315,0	630,0		
192	P3.1	Workshops	UA1	2B	L	60,0	2,0	60,0	60,0	60,0	2,0	60,0	60,0	240,0		
193	P3.2	Psychomotricity room	UA1	2B	L	140,0	1,0	140,0	140,0	10 seats	10 seats	140,0	140,0	280,0		
194	P3.3	Library	UA5	2B	L	40,0	1,0	40,0	40,0	40,0	1,0	40,0	40,0	80,0		
195	P3.4	Changing room / toilets	UA1	2B		15,0	1,0	15,0	15,0	15,0	1,0	15,0	15,0	30,0		
196	P3.5	Play area		2B		-	-	For the record (outdoor area)	-	-	-	For the record (outdoor area)	-	-		
Tertiary work spaces																
197	Q	Tertiary work spaces					221,0	10	221,0	10	221,0	10	221,0	442,0		
198	Q.1	Offices for administrative staff					58,0	10 WS	58,0	10 WS	58,0	10 WS	58,0	116,0		
199	Q.1.1	Individual office for day nursery manager	UA2B	3	L1	18,00WS	1 WS	18,0	18,0	1 WS	1 WS	18,0	18,0	36,0		
200	Q.1.2	Individual offices	UA2B	3	L1	10,00WS	1 WS	10,0	10,0	1 WS	1 WS	10,0	10,0	40,0		
201	Q.1.3	Shared offices with 2 WS	UA2B	3	L1	10,00WS	2 WS	20,0	20,0	2 WS	2 WS	20,0	20,0	40,0		
202	Q.2	Offices for psycho-educational staff					24,0	4 WS	24,0	4 WS	24,0	4 WS	24,0	48,0		
203	Q.2.1	Individual offices	UA2B	3	L1	12,00WS	1 WS	12,0	12,0	1 WS	1 WS	12,0	12,0	48,0		
204	Q.3	Collaborative spaces					25,0	10 seats	25,0	10 seats	25,0	10 seats	25,0	50,0		
205	Q.3.1	Meeting spaces (10 people)	UA2A	3	L2	2,50/seat	10 seats	25,0	25,0	10 seats	10 seats	25,0	25,0	50,0		
206	Q.4	Spaces for nursery nurses					50,0	8 WS	50,0	8 WS	50,0	8 WS	50,0	100,0		
207	Q.4.1	Occasional office	UA2B	3	L1	5,00/seat	4 WS	20,0	20,0	4 WS	4 WS	20,0	20,0	40,0		
208	Q.4.2	Rest room	UA1	3	L1			30,0	30,0			30,0	30,0	60,0		
209	Q.5	Medical office					64,0	6 WS	64,0	6 WS	64,0	6 WS	64,0	128,0		
210	Q.5.1	Waiting room	UA1	2B				10,0	10,0			10,0	10,0	20,0		
211	Q.5.2	Individual office for paediatrician	UA6	3	L1	15,00WS	1 WS	15,0	15,0	1 WS	1 WS	15,0	15,0	30,0		
212	Q.5.3	Shared offices with 2 WS for nurses	UA6	3	L1	15,00WS	2 WS	30,0	30,0	2 WS	2 WS	30,0	30,0	60,0		
213	Q.5.4	Toilets	UA7	2B		3,00/toilet	3,0	9,0	9,0	3,0	3,0	9,0	9,0	18,0		

No	Code	Functions	Type	Security level	Natural lighting	sqm UA per unit	CONSTRUCTION PHASE 1				CONSTRUCTION PHASE 2				TOTAL		
							Col.8	Col.9	Col.10	Col.11	Col.12	Col.13	Col.14	Col.15	Col.16	Col.17	
214	R	Mass catering					475.0										475.0
215	R.1	Restaurant	UA1	2B	L	2.00/seat	100.0	1.0	50 seats	100.0	1.0	50 seats	100.0	1.0	100 seats	200.0	455.0
216	R.1.1	Staff dining room	UA1	2B	L	2.00/seat	100.0	1.0	50 seats	100.0	1.0	50 seats	100.0	1.0	100 seats	200.0	455.0
217	R.1.1.1	Staff dining room	UA1	2B	L	2.00/seat	100.0	1.0	50 seats	100.0	1.0	50 seats	100.0	1.0	100 seats	200.0	455.0
218	R.1.2	Production area (kitchen)	UA3	4	L		100.0	1.0		100.0	1.0		100.0	1.0		200.0	610.0
219	R.1.2.1	Head chef's office	UA3	4	L		100.0	1.0		100.0	1.0		100.0	1.0		200.0	610.0
220	R.1.2.2	Storekeeper's (steward's) office	UA3	4	L		100.0	1.0		100.0	1.0		100.0	1.0		200.0	610.0
221	R.1.2.3	Hot preparation area	UA3	4	L		500.0	1.0		500.0	1.0		500.0	1.0		1000.0	1000.0
222	R.1.2.4	Cold preparation area	UA3	4	L		150.0	1.0		150.0	1.0		150.0	1.0		300.0	300.0
223	R.1.2.5	Dishwashing area-sink block	UA3	4	L		400.0	1.0		400.0	1.0		400.0	1.0		800.0	800.0
224	R.1.2.6	Vegetable preparation area	UA3	4	L		150.0	1.0		150.0	1.0		150.0	1.0		300.0	300.0
225	R.1.2.7	Receipt - unpacking	UA4	4	L		100.0	1.0		100.0	1.0		100.0	1.0		200.0	200.0
226	R.1.2.8	Unboxing	UA4	4	L		50.0	1.0		50.0	1.0		50.0	1.0		100.0	100.0
227	R.1.2.9	Food store	UA4	4	L		300.0	1.0		300.0	1.0		300.0	1.0		600.0	600.0
228	R.1.2.10	Day store	UA4	4	L		100.0	1.0		100.0	1.0		100.0	1.0		200.0	200.0
229	R.1.2.11	Cold storage	UA4	4	L		150.0	3.0		150.0	3.0		150.0	3.0		450.0	450.0
230	R.1.2.12	Equipment store	UA4	4	L		150.0	1.0		150.0	1.0		150.0	1.0		300.0	300.0
231	R.1.2.13	Maintenance products store	UA4	4	L		100.0	1.0		100.0	1.0		100.0	1.0		200.0	200.0
232	R.1.2.14	Trolley area	UA4	4	L		250.0	1.0		250.0	1.0		250.0	1.0		500.0	500.0
233	R.1.2.15	Cleaning room	UA7	4	L		150.0	1.0		150.0	1.0		150.0	1.0		300.0	300.0
234	R.1.3	Staff area					500.0			500.0			500.0			1000.0	1000.0
235	R.1.3.1	Staff changing rooms	UA7	4	L	1.25/person	250.0	2.0	20 people	250.0	2.0	20 people	250.0	2.0	20 people	500.0	500.0
236	R.2	Logistics area															
237	R.2.1	Unloading bay	CA	4	L			1.0	For the record (occupation area CA)		1.0	For the record (occupation area CA)					
238	R.3	Infant feeding bottle room					20.0			20.0			20.0			40.0	40.0
239	R.3.1	Infant feeding bottle room	UA1	4	L		20.0	1.0		20.0	1.0		20.0	1.0		40.0	40.0
240	S	Support					395.0			395.0			395.0			790.0	790.0
241	S.1	Support					40.0			40.0			40.0			80.0	80.0
242	S.1.1	Building manager's office	UA2B	3	L1	10.00/W5	100.0	1.0		100.0	1.0		100.0	1.0		200.0	200.0
243	S.1.2	Workshops	UA3	4	L		300.0	1.0		300.0	1.0		300.0	1.0		600.0	600.0
244	S.2	Linen room					70.0			70.0			70.0			140.0	140.0
245	S.2.1	Clean linen room	UA1	4	L		350.0	1.0		350.0	1.0		350.0	1.0		700.0	700.0
246	S.2.2	Dirty linen room	UA1	4	L		50.0	1.0		50.0	1.0		50.0	1.0		100.0	100.0
247	S.2.3	Laundry room	UA1	4	L		150.0	2.0		150.0	2.0		150.0	2.0		300.0	300.0
248	S.3	Maintenance					30.0			30.0			30.0			60.0	60.0
249	S.3.1	Store for maintenance materials	UA4	4	L		300.0	1.0		300.0	1.0		300.0	1.0		600.0	600.0
250	S.4	Cleaning					30.0			30.0			30.0			60.0	60.0
251	S.4.1	Cleaning products store	UA4	4	L		150.0	1.0		150.0	1.0		150.0	1.0		300.0	300.0
252	S.4.2	Cleaning trolleys store room	UA7	4	L		50.0	3.0		50.0	3.0		50.0	3.0		150.0	150.0
253	S.5	Storage					185.0			185.0			185.0			370.0	370.0
254	S.5.1	Educational materials / games storage	UA4	4	L		350.0	1.0		350.0	1.0		350.0	1.0		700.0	700.0
255	S.5.2	Children's furniture storage	UA4	4	L		500.0	1.0		500.0	1.0		500.0	1.0		1000.0	1000.0
256	S.5.3	Non-food furniture storage	UA4	4	L		700.0	1.0		700.0	1.0		700.0	1.0		1400.0	1400.0
257	S.5.4	Car storage				1.5/coat	150.0	2.0	10 coats	150.0	2.0	10 coats	150.0	2.0	10 coats	300.0	300.0
258	S.6	Waste					40.0			40.0			40.0			80.0	80.0
259	S.6.1	Bn room	UA7	4	L		400.0	1.0		400.0	1.0		400.0	1.0		800.0	800.0
260	T	Sanitary facilities					76.0			76.0			76.0			152.0	152.0
261	T.1.1	General toilets	UA7	2B	L	3.00/toilet	56.0	1.0	1.0	56.0	1.0	1.0	56.0	1.0	56.0	112.0	112.0
262	T.1.2	Flowing staff changing rooms	UA7	3	L	1.00/person	20.0	2.0	10 people	20.0	2.0	10 people	20.0	2.0	20.0	40.0	40.0

No	Code	Functions	CONSTRUCTION PHASE 1				CONSTRUCTION PHASE 2				TOTAL						
			Col.1	Col.4	Col.5	Col.6	Col.7	Col.8	Col.9	Col.10	Col.11	Col.12	Col.13	Col.14	Col.15	Col.16	Col.17
			Type	Security level	Natural lighting	sqm UA per unit	Number of spaces	Number of units per space	UA per space in sqm	TOTAL UA in sqm	Number of spaces	Number of units per space	UA per space in sqm	TOTAL UA in sqm	Capacity (main indicators)	TOTAL UA in sqm	
Parking																	
263	U	Entrance / reception area															40.0
264	U1.1	Security post	UA2A	4	L		(according to design and number of entrances, 2 is chosen as estimation)	2.0	10.0	20.0	(according to design and number of entrances, 2 is chosen as estimation)	2.0	10.0	20.0		40.0	
265	V	Parking															
266	V.1	Parking for personal motor vehicles															
267	V.1.1	standard spaces	UA7	2A					12.5						904		
268	V.1.2	PRM spaces	UA7	2A											18		
269	V.2	Public parking															
270	V.2.1	standard spaces	UA7	2A											343		
271	V.2.2	PRM spaces	UA7	2A											7		
272	V.3	Bicycle park															
273	V.3.1	bicycle spaces	UA7	2A			(according to design)	1 space/200 sqm of floor area		400.0	(according to design)	1 space/200 sqm of floor area		400.0		400.0	
274	V.4	Bus drop-off spaces															400.0
275	V.4.1	Bus spaces	UDA	2A			1.0	4.0							4 spaces	400.0	
276	W	Sanitary facilities															
275	W.1.1	Soft mobility charging rooms	UA7	2A			(according to number of bicycle spaces)				(according to number of bicycle spaces)						
Delivery Areas																	
276	X	Entrance / reception area								600.0				420.0		1.020.0	
277	X.1.1	Security post	UA2A	4	L		(according to design and number of entrances, 1 is chosen as estimation)	1.0	10.0	10.0	(according to design and number of entrances, 1 is chosen as estimation)	1.0	10.0	10.0		200	
278	X.1.2	X-ray scanning area	UDA	1					for the record				for the record				
279	Y	Support								590.0				410.0		1.000.0	
280	Y.1.1	Unloading bays	CA	4			4.0		for the record		4.0		for the record				
281	Y.1.2	Temporary storage area	UA4	4			1.0		200.0	200.0	1.0		200.0	200.0		400.0	
282	Y.1.3	Security officer's post	UA2A	4			1.0		10.0	10.0	1.0		10.0	10.0		200	
283	Y.1.4	Waste removal bays	CA	4			1.0		for the record		1.0		for the record				
284	Y.1.5	Waste container area	UA7	4			1.0		335.0	335.0	1.0		165.0	165.0		500.0	
285	Y.1.6	Areas for organic waste from the offices	UA7	4			1.0		30.0	30.0	1.0		20.0	20.0		500	
286	Y.1.7	Areas for organic waste from the day nurseries	UA7	4			1.0		15.0	15.0	1.0		15.0	15.0		300	
Other functions																	
287	Z	Other functions (gross floor)															3.250.0
288	Z.1	Retail units															3.000
289	Z.1.1	Retail units	UDA	2A													3.000
290	Z.2	Metro															250
291	Z.2.1	Metro station	UDA	2A													250
TOTAL GFA in sqm																	

international restricted interdisciplinary architectural competition

Real estate complex for the European Commission in Brussels - Project Loi 130

Form B1: Key Indices

please fill in the blue boxes

code number:

Index

Competition site in sqm	23.906			
Indices urban planning (according RRUZ)	actual in sqm, m		Target	
Footprint *1)			≤ 55%	
Non - building land *2)			≥ 45%	
Height east Tower*			≤ 165 m	
Height west Tower*			≤ 114 m	
Building area and space indices	above ground *3)	under ground	total	Target
Gross Floor Area (GFA) in sqm			0	< 190.000 sqm
Net Floor area (NFA) in sqm			0	
Gross Volume (GV) in cbm			0	
Usable Area (UA)			0	
Building indices *4)				
area factor 1 (NFA/GFA)				
area factor 2 ($UA_{aboveground} / NFA_{aboveground}$)				
space area factor 1 (GV/GFA)				
space area factor 2 (GV/UA)				

If necessary, this form may extend over several pages.

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1) RRUZ chapter 1 (3) Nr. 15, and note of RRUZ point 1; competition brief E.17 - acceptable footprint area (AFA)

2) RRUZ chapter 1 (3) Nr. 28, note of RRUZ point 2 - the proportion of non-building land which can be overhung may not exceed ≤ 25%

3) according to competition brief E.15

4) according to measuring code

* according to set zero-level

international restricted interdisciplinary architectural competition
 Real estate complex for the European Commission in Brussels - Project Loi 130

Form B2: Key Indices

please fill in the blue boxes

code number:

Index

Competition site in sqm	23.906		
Indices urban planning (according RRUZ)	actual in sqm, m		Target
Footprint *1)			≤ 55%
Non - building land *2)			≥ 45%
Height east Tower*			165 m
Height west Tower*			114 m
Building area and space indices	above ground *3)	under ground	total
Gross Floor Area (GFA) in sqm			0
Net Floor area (NFA) in sqm			0
Gross Volume (GV) in cbm			0
Usable Area (UA)			0
Usable Area Offices (UA)			0
Building indices *4)			
area factor 1 (NFA/GFA)			
area factor 2 (UA _{aboveground} /NFA _{aboveground})			
area factor 3 (A _{office} /NFA _{aboveground})			
space area factor 1 (GV/GFA)			
space area factor 2 (GV/UA)			

If necessary, this form may extend over several pages.

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1) RRUZ chapter 1 (3) Nr. 15, and note of RRUZ point 1; competition brief E.17 - acceptable footprint area (AFA)
 2) RRUZ chapter 1 (3) Nr. 28, note of RRUZ point 2 - the proportion of non-building land which can be overhung may not exceed ≤ 25%
 3) according to competition brief E.15
 4) according to measuring code
 * according to set zero-level

International restricted interdisciplinary architectural competition
Real estate complex for the European Commission in Brussels - Project Loi 130

Form C1: Room Program - phase 1

please fill in the blue boxes

code number:

No. Room no.	Room designation	Construction phase 1			Construction phase 2			TOTAL					
		UA Target value in sqm	*UA Actual value aboveground in sqm*	UA Actual value underground in sqm	UA Target value in sqm	*UA Actual value aboveground in sqm*	UA Actual value underground in sqm	UA Target value in sqm	*UA Actual value aboveground in sqm*	UA Actual value underground in sqm	GFA Actual value aboveground in sqm	GFA Actual value underground in sqm	
1	A Entrance / reception area	1.035,0			515,0			1.550,0					
2	B Tertiary work spaces	43.743,0			24.316,0			68.059,0					
6	C Meeting centres	2.480,0			1.170,0			3.650,0					
7	D Catering	5.230,0			2.785,0			8.015,0					
15	E Support	3.384,0			1.894,0			5.278,0					
21	F Sports and cultural infrastructure	998,0			499,0			1.497,0					
22	G Sanitary facilities	1.400,0			700,0			2.100,0					
Total Offices		58.270,0	0,0	0,0	31.879,0	0,0	0,0	90.149,0	0,0	0,0	0,0	0,0	

Visitor centre

23	H Entrance / reception area	796,0						796,0					
24	I Exhibition spaces	1.636,0						1.636,0					
25	J Event spaces	1.172,0						1.172,0					
30	K Tertiary work spaces	473,0						473,0					
34	L Mass catering	340,0						340,0					
38	M Support	170,0						170,0					
44	N Sanitary facilities	187,0						187,0					
Total Visitor centre		4.774,0	0,0	0,0				4.774,0	0,0	0,0	0,0	0,0	

Day Nurseries

45	O Entrance / reception area	111,0			111,0			222,0					
46	P Children 's spaces	2.493,0			2.493,0			4.986,0					
50	Q Tertiary work spaces	221,0			221,0			442,0					
56	R Mass catering	475,0			475,0			950,0					
60	S Support	395,0			395,0			790,0					
67	T Sanitary facilities	76,0			76,0			152,0					
Total Day Nurseries		3.771,0	0,0	0,0	3.771,0	0,0	0,0	7.542,0	0,0	0,0	0,0	0,0	

International restricted interdisciplinary architectural competition
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Form C1: Room Program - phase 1

please fill in the blue boxes

code number:

No. Room no.	Room designation	Construction phase 1			Construction phase 2			TOTAL				
		UA Target value in sqm	*UA Actual value aboveground in sqm*	UA Actual value underground in sqm	UA Target value in sqm	*UA Actual value aboveground in sqm*	UA Actual value underground in sqm	UA Target value in sqm	*UA Actual value aboveground in sqm*	UA Actual value underground in sqm	GFA Actual value aboveground in sqm	GFA Actual value underground in sqm

Parking

68	U Entrance / reception area	40,0						40,0					
69	V Parking	according to design						according to design					
74	W Sanitary facilities	according to number of building users						according to design					
Total Parking		according to design	0,0	0,0	according to design	0,0	0,0	40,0	0,0	0,0	0,0	0,0	

Delivery areas

76	X Entrance / reception area	10,0			10,0			according to design					
77	Y Support	590,0			410,0			1.000,0					
Total Delivery areas		600,0	0,0	0,0	420,0	0,0	0,0	according to design	0,0	0,0	0,0	0,0	

No. Room no.	designation	Construction phase 1			Construction phase 2			TOTAL		
		UA Target value in sqm	*UA Actual value aboveground in sqm*	UA Actual value underground in sqm	UA Target value in sqm	*UA Actual value aboveground in sqm*	UA Actual value underground in sqm	GFA Target value in sqm	GFA Actual value aboveground in sqm	GFA Actual value underground in sqm

Other functions (GFA)

78	Z Other functions												
70	Z.1 Retail units							3.000,0					
71	Z.2 Metro							250,0					
Total Other functions								3.250,0			0,0	0,0	

International restricted interdisciplinary architectural competition
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Form C2: Room Program - phase 2

please fill in the blue boxes

code number:

No.	Room no.	Room designation	Construction phase 1			Construction phase 2			TOTAL					
			UA Target value in sqm	*UA Actual value aboveground in sqm*	UA Actual value underground in sqm	UA Target value in sqm	*UA Actual value aboveground in sqm*	UA Actual value underground in sqm	UA Target value in sqm	*UA Actual value aboveground in sqm*	UA Actual value underground in sqm	GFA Actual value aboveground in sqm	GFA Actual value underground in sqm	
1	A	Entrance / reception area	1.035,0			515,0			1.550,0					
2	B	Tertiary work spaces	43.743,0			24.316,0			68.059,0					
3	B.1	Office spaces	33.380,0			18.551,0			51.931,0					
4	B.2	Collaborative spaces	5.831,0			3.241,0			9.072,0					
5	B.3	Support spaces	4.532,0			2.524,0			7.056,0					
6	C	Meeting centres	2.480,0			1.170,0			3.650,0					
7	D	Catering	5.230,0			2.785,0			8.015,0					
8	D.1	Food court restaurants	3.245,0			1.680,0			4.925,0					
9	D.2	Banqueting	320,0			270,0			590,0					
10	D.3	200-seat cafeterias	555,0			545,0			1.100,0					
11	D.4	100-seat cafeterias	610,0						610,0					
12	D.5	Sandwich Bar	60,0			30,0			90,0					
13	D.6	Vending machine	200,0			100,0			300,0					
14	D.7	Catering staff quarters	240,0			160,0			400,0					
15	E	Support	3.384,0			1.894,0			5.278,0					
16	E.1	Support	1.500,0			650,0			2.150,0					
17	E.2	Maintenance	200,0			200,0			400,0					
18	E.3	Cleaning	430,0			290,0			720,0					
19	E.4	Contractors' area	254,0			254,0			508,0					
20	E.5	Storage	1.000,0			500,0			1.500,0					
21	F	Sports and cultural infrastructure	998,0			499,0			1.497,0					
22	G	Sanitary facilities	1.400,0			700,0			2.100,0					
Total Offices			58.270,0	0,0	0,0	31.879,0	0,0	0,0	90.149,0	0,0	0,0	0,0	0,0	

International restricted interdisciplinary architectural competition
Real estate complex for the European Commission in Brussels - Project Loi 130

Form C2: Room Program - phase 2

please fill in the blue boxes

code number:

No.	Room no.	Room designation	Construction phase 1			Construction phase 2			TOTAL					
			UA Target value in sqm	*UA Actual value aboveground in sqm*	UA Actual value underground in sqm	UA Target value in sqm	*UA Actual value aboveground in sqm*	UA Actual value underground in sqm	UA Target value in sqm	*UA Actual value aboveground in sqm*	UA Actual value underground in sqm	GFA Actual value aboveground in sqm	GFA Actual value underground in sqm	
23	H	Entrance / reception area	796,0						796,0					
24	I	Exhibition spaces	1.636,0						1.636,0					
25	J	Event spaces	1.172,0						1.172,0					
26	J.1	Multipurpose room for 150 people	323,0						323,0					
27	J.2	Multipurpose room for 100 people	423,0						423,0					
28	J.3	Multipurpose room for 50 people	246,0						246,0					
29	J.4	Multipurpose room for 30 people	180,0						180,0					
30	K	Tertiary work spaces	473,0						473,0					
31	K.1	Office Spaces	365,0						365,0					
32	K.2	Collaborative spaces	46,0						46,0					
33	K.3	Support spaces	62,0						62,0					
34	L	Mass catering	340,0						340,0					
35	L.1	Coffee Lounge	220,0						220,0					
36	L.2	Coffee stations	80,0						80,0					
37	L.3	Banqueting	40,0						40,0					
38	M	Support	170,0						170,0					
39	M.1	Support	10,0						10,0					
40	M.2	Maintenance	40,0						40,0					
41	M.3	Cleaning	20,0						20,0					
42	M.4	Storage	80,0						80,0					
43	M.5	Waste	20,0						20,0					
44	N	Sanitary facilities	187,0						187,0					
Total Visitor centre			4.774,0	0,0	0,0				4.774,0	0,0	0,0	0,0	0,0	

International restricted interdisciplinary architectural competition
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Form C2: Room Program - phase 2

please fill in the blue boxes

code number:

No. Room no.	Room designation	Construction phase 1			Construction phase 2			TOTAL				
		UA Target value in sqm	*UA Actual value aboveground in sqm*	UA Actual value underground in sqm	UA Target value in sqm	*UA Actual value aboveground in sqm*	UA Actual value underground in sqm	UA Target value in sqm	*UA Actual value aboveground in sqm*	UA Actual value underground in sqm	GFA Actual value aboveground in sqm	GFA Actual value underground in sqm
Day Nurseries												
45	O Entrance / reception area	111,0			111,0			222,0				
46	P Children 's spaces	2.493,0			2.493,0			4.986,0				
47	P.1 Nursery units	1.594,0			1.594,0			3.188,0				
48	P.2 Kindergarten units	584,0			584,0			1.168,0				
49	P.3 Play and learning areas	315,0			315,0			630,0				
50	Q Tertiary work spaces	221,0			221,0			442,0				
51	Q.1 Offices for administrative staff	58,0			58,0			116,0				
52	Q.2 Offices for psycho-educational staff	24,0			24,0			48,0				
53	Q.3 Collaborative spaces	25,0			25,0			50,0				
54	Q.4 Spaces for nursery nurses	50,0			50,0			100,0				
55	Q.5 Medical office	64,0			64,0			128,0				
56	R Mass catering	475,0			475,0			950,0				
57	R.1 Restaurant	455,0			455,0			910,0				
58	R.2 Logistics area							0,0				
59	R.3 Infant feeding bottle room	20,0			20,0			40,0				
60	S Support	395,0			395,0			790,0				
61	S.1 Support	40,0						40,0				
62	S.2 Linen Room	70,0			70,0			140,0				
63	S.3 Maintenance	30,0			30,0			60,0				
64	S.4 Cleaning	30,0			30,0			60,0				
65	S.5 Storage	185,0			185,0			370,0				
66	S.6 Waste	40,0			40,0			80,0				
67	T Sanitary facilities	76,0			76,0			152,0				
Total Day Nurseries		3.771,0	0,0	0,0	3.771,0	0,0	0,0	7.542,0	0,0	0,0	0,0	0,0

International restricted interdisciplinary architectural competition
Real estate complex for the European Commission in Brussels - Project Lot 130

Form C2: Room Program - phase 2

please fill in the blue boxes

code number:

No. Room no.	Room designation	Construction phase 1			Construction phase 2			TOTAL				
		UA Target value in sqm	*UA Actual value aboveground in sqm*	UA Actual value underground in sqm	UA Target value in sqm	*UA Actual value aboveground in sqm*	UA Actual value underground in sqm	UA Target value in sqm	*UA Actual value aboveground in sqm*	UA Actual value underground in sqm	GFA Actual value aboveground in sqm	GFA Actual value underground in sqm
Parking												
68	U Entrance / reception area	40,0						40,0				
69	V Parking	according to design						according to design				
70	V.1 Parking for personal motor vehicles	according to design						according to design				
71	V.2 Public Parking											
72	V.3 Bicycle park											
73	V.4 Bus drop-off spaces	400,0						400,0				
74	W Sanitary facilities	according to number of building users						according to design				
Total Parking		according to design	0,0	0,0	according to design			440,0			0,0	0,0

Delivery areas

76	X Entrance / reception area	10,0			10,0			according to design				
77	Y Support	590,0			410,0			1.000,0				
Total Delivery areas		600,0			420,0			according to design			0,0	0,0

No. Room no.	designation	Construction phase 1			Construction phase 2			TOTAL		
		UA Target value in sqm	*UA Actual value aboveground in sqm*	UA Actual value underground in sqm	UA Target value in sqm	*UA Actual value aboveground in sqm*	UA Actual value underground in sqm	GFA Target value in sqm	GFA Actual value aboveground in sqm	GFA Actual value underground in sqm

Other functions (GFA)

78	Z Other functions											
70	Z.1 Retail units							3.000,0				
71	Z.2 Metro							250,0				
Total Other functions								3.250,0			0,0	0,0

international restricted interdisciplinary architectural competition
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Form D1: Building Specifications

please fill in the blue boxes

code number:

Component		Description of construction materials, styles, surfaces, colours, sustainability aspects, strategies	
<small>(Items could be enlarged if necessary, if position not applicable leave field empty)</small>			
Structure	Foundations		
	Load-bearing structure		
Building construction, constructive elements	Exterior		
	Facade		
	Roof truss / Roof covering		
	Stairs and lifts		
	Windows		
	Partitioning walls		
	Ceilings		
	Interior	Interior finishes: floors, walls, doors	
Open space	Surface coverings		
	Vertical elements (e.g. open space furniture)		
	Planting		
Sustainability and Systems	Energy	Architectural and construction strategies	
		energy efficient building services (HVAC, MEP, BMS etc.)	
		On-site renewable energy	
	Health and well-being	Thermal comfort	
		Visual comfort	
		Acoustic comfort	
	Water management	Water management	
		General strategy on resource-efficient construction	
		Land use, ecology and biodiversity	
	Operation	Flexibility	
Operation and maintenance (systems, accessibility, interchangeability and replacement, etc..)			
	Purpose-made structures (building or open space)		

International restricted interdisciplinary architectural competition
Real estate complex for the European Commission in Brussels - Project Lot 130

Form D2: Building Specifications

please fill in the blue boxes

code number:

Component		Description of construction materials, styles, surfaces, colours, sustainability aspects, strategies	
<small>(where possible be detailed, if necessary, if position not applicable leave field empty)</small>			
Structure	Foundations A detailed analysis of the proposed foundation system should be developed, including groundwater levels and peripheral walls.		
	Load-bearing structure		
Building construction, constructive elements	Facade		
	Roof truss / Roof covering		
	Stairs and lifts		
	Windows		
	Exterior	Partitioning walls	
	Interior	Ceilings	
Open space	Interior finishes: floors, walls, doors		
	Surface coverings		
	Vertical elements (e.g. open space furniture)		
Sustainability and Systems	Planting		
	Energy	Architectural and construction strategies building envelope, solar gains, air-tightness, etc. and thermal inertia	
		energy efficient building services (HVAC, MEP, BMS etc.)	
		On-site renewable energy	
	Health and well-being	Thermal comfort	
		Visual comfort	
		Acoustic comfort	
	resource management	Water management	
		Resource-efficient construction indication of material use, construction waste management, materials with low environmental life cycle impacts, design for durability and resilience	
		Land use, ecology and biodiversity Development of biodiversity and ecosystems, flood resilience	
Operation	Flexibility		
	Operation and maintenance (systems, accessibility, interchangeability and replacement, etc.)		
	Purpose-made structures (building or open space)		

international restricted interdisciplinary architectural competition
 Real estate complex for the European Commission in Brussels - Project Loi 130

Form E: Building dimensions

please fill in the blue boxes

code number:

Part I Area per building part				Architectural form factors						Notable architectural and technical characteristics
Building parts				Architectural form factors						Notable architectural and technical characteristics
Building/landscaping Part number	Levels (number)	Building height from ground floor to roof (m)	Construction phase (1 or 2)	Total area (m ² GFA) or (m ² landscaping)	Total facade area (m ² facade)	Window facade area (m ² facade)	Building volume (m ³)	Roof area (m ²)	Building footprint area (m ²)	
A Above ground building parts (including ground floor)				-						
1	6 levels (including ground floor)	24	1							
2	7 levels (including ground floor)	28	1							
3	10 levels (including ground floor)	40	1							
4	8 levels (including ground floor)	32	1							
5	22 levels (including ground floor)	88	1							
6	8 levels (including ground floor)	32	2							
7	13 levels (including ground floor)	52	2							
8	10 levels (including ground floor)	40	2							
9	30 levels (including ground floor)	120	2							
B Under ground building parts				-						
10	3 underground floors		1							
11	3 underground floors		1							
C Landscaping parts				-						
12	landscaping area		1							
13	landscaping area		1							
14	landscaping area		2							
15	landscaping area		2							

international restricted interdisciplinary architectural competition
 Real estate complex for the European Commission in Brussels - Project Loi 130

Form E: Building dimensions

please fill in the blue boxes

code number:

Part II Area per functional entity				Architectural form factors						Notable architectural and technical characteristics
Building/landscaping Part number	Functional unit	Construction phase (1 or 2)	Total area (m ² GFA) or (m ² landscaping)	Total facade area (m ² facade)	Window facade area (m ² facade)	Building volume (m ³)	Roof area (m ²)	Building footprint area (m ²)		
Construction phase 1 total area				-						
Construction				-						
Above ground building parts				1						
	Offices	1								
	Visitor Centre	1								
	Day Nurseries	1								
	Parking	1								
	Retail units	1								
	Metro	1								
Under ground building parts				1						
	Offices	1								
	Visitor Centre	1								
	Day Nurseries	1								
	Parking	1								
	Retail units	1								
	Metro	1								
Landscaping										
Total landscaping area				1						
Construction phase 2 total area				-						
Construction				-						
Above ground building parts				2						
	Offices	2								
	Visitor Centre	2								
	Day Nurseries	2								
	Parking	2								
	Retail units	2								
	Metro	2								
Under ground building parts				2						
	Offices	2								
	Visitor Centre	2								
	Day Nurseries	2								
	Parking	2								
	Retail units	2								
	Metro	2								
Landscaping										
Total landscaping area				2						

The data currently filled in the blue boxes is indicative as an example and should be replaced by the candidates project data

Form E: Building dimensions

Instructions for using Form E in the "Project Area" worksheet

- In Part I of the form, the candidate is required to detail the total built area in multiple building parts according to the following rules:
 - the underground areas must be separated from above ground areas
 - the areas must be split in separate building parts for each building part with a different height or particular form factors
 - the landscaping area must be separated from the other building parts
 Under ground and above ground are defined according to PRAS measuring rules
- The candidate is required to list the different building parts in the form. The following information must be specified for each building part:
 - a sequential number allowing to identify each building part
 - the number of levels (including ground floor)
 - the building height from ground floor to rooftop (or depth for underground building parts)
 - the construction phase (1 or 2)
 - the Gross Floor Area (or landscaping area for landscaping building parts) and other architectural form factors as required in the various columns
 - notable architectural and technical characteristics of each building part allowing us evaluate the building cost
 A few rows are currently created as an example, the candidate must edit the data in these rows and may add as many rows as necessary.
 The totals are calculated automatically.
- Except for adding rows for building parts, the candidate is not allowed to alter the structure of the worksheet in any way.
- In part II of the form, the candidate is required to specify the Gross Floor Areas per functional entity per construction phase. The candidate is not allowed to add any rows or columns in this part of the form.
- The candidate is required to provide A3 schematic plans and sections referencing each building part listed in the "Project Area" worksheet which clearly indicate the delimitation of each building part in the project (example to the right).
- The candidate is required to rename the "Project Area #Code number#" tab using his Code number and append the current workbook in digital format (.xlsx) to his proposal.

An example of building parts definition:



