



The
Federal Government



Application by the Federal Republic of Germany for the Federal City of Bonn to be the new seat of the European Medicines Agency



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THE CITY OF BONN AS AN ATTRACTIVE NEW HOME AND HEADQUARTERS

Bonn is a city with a cosmopolitan and international spirit. The City of Bonn lies in the heart of the European Rhine Region, with Cologne, Düsseldorf and Frankfurt am Main as immediate neighbours as well as France and the Benelux countries. The European Medicines Agency (EMA) and its staff will find optimum working and living conditions here. Bonn guarantees that the important work of the EMA can continue seamlessly, and that the Agency's employees and their families will feel good in their new home. Bonn means a secure, quality future for the EMA. Bonn is the ideal new location for the agency. **For this reason Germany is applying for the Federal City of Bonn to be the new home of the EMA.**

The Federal Institute for Drugs and Medical Devices (BfArM) located in Bonn, one of the most important regulatory authorities in the European Union (EU), is already actively co-operating with the EMA in all key areas relating to drug approval and safety. The BfArM in collaboration with the nearby Paul Ehrlich Institute (PEI) contributes expertise on roughly 130 scientific committees of the EMA. Being in close proximity to the BfArM would significantly benefit the work of the EMA from the very start. Bonn means an ideal environment of regulatory and scientific expertise for the EMA. Conditions are optimal here for focused work in the interest of promoting new treatment options and enhancing drug safety in Europe. Bonn is located in North Rhine-Westphalia ('NRW' for short), which is Germany's most populous federal state, and one of the most concentrated research areas in Europe, with some 70 universities and over 100 non-university research institutes. Second only to the USA, the highest number of clinical studies are conducted in Germany, almost 20% in 2015 in NRW.

The Institute for Federal Real Estate (BImA) is on hand as a strong and experienced partner to make a customised, turnkey office complex available to the EMA, either as a new building or in the form of an existing property. Bonn's Bundesviertel ('Federal District') is an attractive quarter featuring a number of suitable office locations for the EMA, each of which can be rapidly and smoothly customised to meet the specific requirements of the EMA in terms of space and technology. These are central office locations very near the BfArM and the city centre, offering excellent access to airports, railway stations and motorways.

Located in the middle of Europe, Bonn enjoys optimal transport connections, including three international airports in close proximity and links to major European roads and rail routes, which make the city easy to reach from all European capitals and from overseas.

Bonn is a safe, “green city” with rich cultural and recreational offerings. A variety of high-quality recreation facilities are available in the area, and cultural life is both rich and diverse, including theatres, concerts, cabaret, museums, fairs and traditional folk festivals. The Rhineland Carnival celebrations are known the world over as an expression of the open, fun-loving nature of the region’s people.

There is a great variety of skilled employment in science, economy, administration, and associations of civil society for the family members of EMA. There are internationally oriented education institutions and childcare facilities for children and young people.

Major national and international enterprises are headquartered in Bonn. These include Deutsche Post DHL Group and Deutsche Telekom, as well as 20 different organisations of the United Nations (UN). Many international firms and government organisations have moved their head office to Bonn in recent years as well. The city has extensive experience in attracting international and domestic organisations and helping them get settled in, and thus will be able to provide professional relocation assistance to the EMA, its staff and their families.

Bonn is a great place to live and work, combining convenience of location with a vibrant job market, housing that is inexpensive compared to other leading EU regions, and a wide range of recreational offerings. The many UN agencies, non-governmental organisations and international enterprises located here attract employees from all over the world. The people from over 170 nations who live here in Germany’s former capital are the face of Bonn today. A robust civil society and a host of media firms of broad reach contribute to the highly positive international environment found in Bonn and Cologne.

1. The assurance that the agency can be set up on site and take up its functions at the date of the United Kingdom’s withdrawal from the Union

Criterion 1

“This criterion concerns in particular the availability of appropriate office premises in time for the Agency to be able to take up its functions at the new location at the withdrawal date. This should include the necessary logistics and sufficient space for offices, meeting rooms and off-site archiving, high-performing telecommunication and data storage networks as well as appropriate physical and IT security standards.”

Bonn will ensure that the EMA quickly has the space it needs to commence or continue operations in the city without disruption of ongoing operations. In Bonn, there are suitable properties and – above all – strong partners experienced in ensuring a smooth process in relocating large government organisations. The Federal Ministry of Health (BMG), the competent national authorities and the City of Bonn offer services tailored to the EMA’s needs. If desired by the EMA, the BMG is prepared to deploy a large logistics team tasked with ensuring a smooth transfer of EMA operations. The EMA enjoys a selection of properties to choose from for its new headquarters.

There are two attractive new building projects in Bonn which are especially suitable for EMA: the sites “Bundeskanzlerplatz” (Section 1.1) and “Friedrich-Ebert-Allee” (Section 1.2). The new buildings can be tailored to the needs and preferences of the EMA, including requirements for high-performance digital infrastructure. The new building options are in an excellent central location in Bonn’s Bundesviertel district, within easy walking distance of the BfArM.

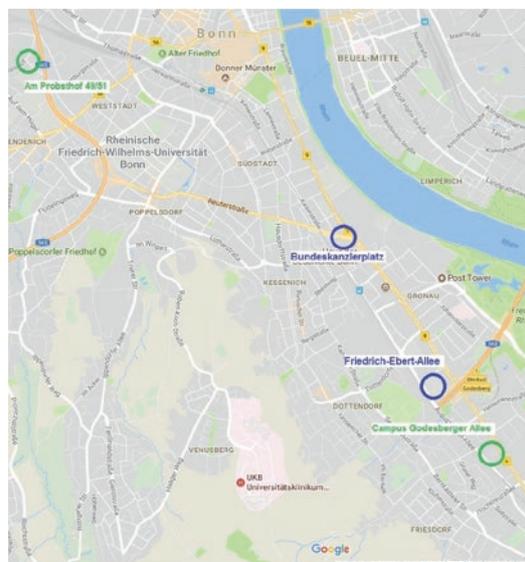
For the transition period until completion of a new building, the EMA could rent existing properties in good locations. An example for immediate occupancy is “Campus Godesberger Allee” (Section 1.3). The existing property “Am Propsthof” (Section 1.4) offers adequate premises and allows immediate occupancy. This guarantees agile work capability and superb operating conditions.

Together with the State of North Rhine-Westphalia, the Federal Republic of Germany will arrange an assumption of the costs of renting a temporary property in a Headquarters Agreement with the EMA. Such an assumption of rental costs would apply until such a time as relocation to a permanent property, albeit maximum ten years.

The new building options and the Campus Godesberger Allee are located in the high-profile Bundesviertel district directly on the Rhine river featuring many large and modern buildings. Extending from Adenauerallee south of Bonn city centre to the northern edge of the exclusive residential area Bad Godesberg district, the Bundesviertel is Bonn’s primary office market with roughly 1.2 million square metres.

The number of jobs located in the Bundesviertel is estimated at over 45,000. In addition to federal ministries and offices, 20 secretariats of the UN are located on the UN Campus, creating an international climate. The corporate headquarters of two major corporations, Deutsche Post DHL Group and Deutsche Telekom, are also located here, the former in the landmark Post Tower. The opening of the World Conference Centre (WCC) Bonn in June 2015 and the Bonn Marriott World Conference Hotel in May 2016 further enhanced the quality of the Bundesviertel as a conference location. The city's cultural scene is crowned by the 'Museum Mile', visited by millions of people from all over the world every year. And there is a wide range of restaurants in the district as well.

All buildings are particularly suitable for the EMA and can be realised to its particular needs and preferences as of November 2017 (allowing both open-plan office space and classic individual offices, auditorium, meeting rooms, and other special-purpose areas, for example). All buildings are extremely accessible (Section 2.1). Sufficient overnight accommodation is available in the surrounding area (Section 2.2). Besides, it allows creation of a high-performance digital infrastructure tailored to EMA requirements (Section 5.4).



1.1 New building option Bundeskanzlerplatz

The new building option Bundeskanzlerplatz ('Federal Chancellery Plaza') in the middle of the Bundesviertel is extremely accessible with several underground and bus stops and motorways junctions nearby. In November 2017, Deutsche Bahn (Germany's national rail service) will open a Bonn UN Campus stop right in the Bundesviertel, directly connecting the district to regional and long-distance rail lines. In a top location in Bonn, a new project will be constructed for an open and modern urban area with up to 70,000 square metres of gross floor space. Three five-storey to seven-storey buildings with a striking tower are to be constructed, with completion slated for 2020/21. As of this date, EMA could move into the new building.



The three buildings are to be grouped around a pleasant courtyard with restaurants and shops. The Bundeskanzlerplatz will be a place of unique architecture, prestigious, high-quality offices and lively urban activity. And the tower punctuates the urban topography as a landmark for the wider City of Bonn, providing unparalleled views of the Rhine and the Siebengebirge hills. At the same time, the EMA would benefit from being located in a vibrant urban quarter. And a modern underground car park will provide ample parking for cars and bicycles.

The area of the EMA headquarters would open onto the Bundeskanzlerplatz, with a connecting driveway. The distinguished building will have approximately 31,000 square metres of lettable space for the 1,300 personnel required. In principle, the EMA could lease office space in any buildings in the quarter. According to occupancy projections, there will be two floors available to expand into in addition to the 18 floors of offices. The EMA could additionally lease further office space in adjacent buildings. The Bundeskanzlerplatz is a development project, thus planning can be conducted flexibly to meet the specific needs of the EMA. The site will thus offer maximum flexibility and expansion options for the EMA.

The prestigious entrance is designed with disabled access. Sole usage of the building furthermore means there is a single connected security area. The requested conference areas, restaurant and other special-purpose areas are to be centrally located on the ground floor and first three floors above ground level. The contiguous three-level conference centre is to consist of a spacious auditorium and two levels of meeting rooms. A restaurant, an inviting café bar and other facilities are located on the third floor. The conference centre and restaurant level form a single compact unit, affording short distances and smooth operation. The two meeting-room levels on the top floors of the tower will be extremely attractive, with direct access to a luxurious roof terrace affording a unique view over Bonn and the region.



This striking single-tenant property would put the EMA's new headquarters in the midst of a modern urban area. The tower at Bundeskanzlerplatz would create a strong presence and image for the EMA as the Agency's new headquarters. All special needs and preferences of the EMA with regard to configuring the space, allowing both open-plan office space and classic individual offices, archives, auditorium and recreation rooms can completely be realised in this building.

1.2 New building option Friedrich-Ebert-Allee

Another new building option to house the European Medicines Agency (EMA) is located at Friedrich-Ebert-Allee 144. Plans are already underway for the new office complex. Located right near the Deutsche Telekom corporate headquarters, the Maritim Hotel and the Federal Institute for Drugs and Medical Devices (BfArM), the EMA's German partner, the new EMA tower will mark the southern entrance to Bonn's Bundesviertel district. It should be added that the tower offers a spectacular panoramic view, over the nearby Rheinaue park to the east and out to the Siebengebirge hills and the historic Drachenfels (Dragon's Rock), down south and then out west over the residential neighbourhoods of the city to the Venusberg area and the university hospital. When the weather is good, the view to the north from the Sky Lobby on the top floor extends over the Bundesviertel and central Bonn as far as Cologne Cathedral roughly 40 kilometres away.

Accessibility by bicycle and public transport is optimal and easy by car as well, as the new EMA building will be close to the B9 main road and Südbrücke motorway access, and have adequate underground parking.

The building structure is optimal for open-plan, hybrid and classic single-office arrangements. In addition to a predominantly open-plan arrangement, plans are for the EMA to have combined-usage areas with shared communication zones, individual offices and internal meeting rooms, plus necessary auxiliary rooms to accommodate 1,300 staff members.



The new building will have six above-ground levels around a glass-roofed atrium and the 17-storey tower rising above it.

A glass-covered forecourt leads to the entrance from Friedrich-Ebert-Allee. The entrance to the EMA building features a large reception and security area in the light-flooded atrium within the complex. As the central area, this glass-covered atrium will represent a lively venue for encounters and communication.

The EMA would move into the first of four building complexes surrounding a green urban courtyard. This new office quarter would offer expansion options and the possibility of industry-related enterprises moving in as direct neighbours. The hall leads directly to the multi-storey lift lobby and conference-centre areas of the tower (large meeting rooms on the ground floor, medium-sized and smaller meeting rooms on the 1st and 2nd floors). The conference areas have specifically designated communication and catering zones.

The ground-level auditorium and the restaurant at the back of the building open onto the atrium and can be used for a range of events. The terraces accessible by escalator in front of the Pharma and Delegates lounges on the 1st floor and the open connecting bridges positioned further up between the building sections promote a transparent and communicative atmosphere throughout the entire complex. Floors 3–16 of the building will exclusively feature offices except for the service level. The building structure is optimal for open-plan, hybrid and classic single-office arrangements.

The EMA will be involved in the further planning process to ensure that the Agency's specific requirements on office layouts, archives, recreation rooms, auditorium etc. are taken into account.

1.3 Immediate occupancy option Campus Godesberger Allee – an exemplary customised building complex

As an exemplary and attractive Campus solution, the lettable space of the property Campus Godesberger Allee totals 31,382 square metres. Consisting of the buildings Godesberger Allee 83–91, Godesberger Allee 99 and Godesberger Allee 150–154, the Campus has capacity for 1,300 staff members. Godesberger Allee is one of Bonn's main traffic arteries, connecting to the southern section of the Bundesviertel quarter, and forms part of the B9 main road.

Godesberger Allee 83–91

Godesberger Allee 83–91 is a six-storey office building located right on the B9 main road. The building was constructed between 1980 and 1985, consisting of three sections around two large green courtyards. The building has some 18,700 square metres of lettable space in total, which can be configured in consultation to meet the needs of the EMA.

Parking spaces are available in the building's underground car park. Total parking capacity is for 248 cars. Another 39 parking spaces are available for staff and visitors of EMA in the courtyard area of the property. In addition to the main entrance on Godesberger Allee, there is a second entrance to the building from the inner courtyard. The building has disabled access. Numerous meeting rooms are available on the various floors.



The building is structured to afford a wide range of possible uses. All sections of the building connect to a staircase and lift. There are kitchenettes and other common areas in all sections of the building. Currently, the individual floors feature single offices various sizes to either side of the corridors. An open-plan office format as preferred by the EMA can be implemented here without problem.



The spacious cafeteria on the top level of the building offers a panorama view of the surroundings.

Godesberger Allee 99

Godesberger Allee 99, an office building built in 1975, is located right next to the building Godesberger Allee 83–91. The building backs onto Martin-Luther-Allee. Consisting of three sections, the building affords highly flexible usage. The three building sections are connected by entrance areas with stairwells and lifts. Section A has eight storeys while sections B and C have four. On the underground level, there are additional meeting rooms, offices and storage spaces. Including those areas, the building has approximately 6,310 square metres of lettable space. The building's two-level underground car park has more than 100 parking spaces. Disabled access is available from the underground car park. The large reception area with vestibule is attractively designed and also offers disabled access to the upper floors and underground car park.



Rooms of various sizes are available for meetings. In all building sections, the offices are located on both sides of the corridor. Each section has its own function rooms. Offices are available in varying sizes from approximately 16 to 30 square metres. An open floor-plan design can be realised.

Godesberger Allee 150–154

The Godesberger Allee 150–154 complex was built between 1997 and 2000 as a set of three square buildings of differing sizes according to plans drafted by the architect Thomas van den Valentyn. The complex at Godesberger Allee 150–154 is a four-minute walk from the buildings Godesberger Allee 83–91 and 99. 59 parking spaces are available in the building's underground car park. There are additional parking spaces in front of the buildings.



All buildings of the complex have a shared forecourt accessible by a flight of steps. The interior of the central building can be seen through a three-storey glass-walled staircase. All buildings are handi-capped-accessible. The upper levels can be reached by stairwell or passenger lift.

All of the buildings feature high-quality furnishings and fixtures. The stairs in the stairwells are finished in natural stone flooring.



The composite windows are triple-glazed with integrated sun shading. Cabling is installed in floor cavity ducts. The kitchenettes offer modern furnishings and equipment. The office doors are solid wood with glass cut-out windows and offices are partially air-conditioned. Storage and archive areas are located on the subterranean level of the buildings. Moreover, a roof terrace with a fine view of Bonn is ideal for relaxing.

1.4 Immediate occupancy option Am Propsthof in Bonn-Endenich

The buildings “Am Propsthof 49” and “Am Propsthof 51” are located in the district of Endenich, in the western part of the City of Bonn. The EMA could utilise these facilities immediately until the completion of a new building. There is a very good public transport infrastructure in Endenich, with central Bonn and other parts of the city being conveniently reachable from the stop Propsthof

Nord via several bus lines, tram lines 18 and 68, the Vorgebirgsbahn urban rail and tram lines 63 and 16. Car access is easy as well via the Bonn-Nord junction of the A565 motorway.

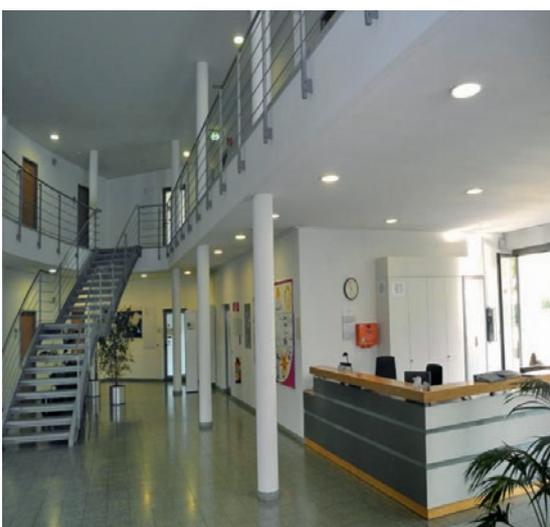


On the four upper storeys of “Am Propsthof 49,” there is total lettable space of 20,330 square metres. The EMA’s needs for total space of 32,460 square metres would be completely met by additionally utilising the building “Am Propsthof 51,” which has another 12,130 square metres of lettable space. This would be more than enough space to accommodate 1,300 staff members.

The building’s underground car park has 408 spaces for EMA employees with another 159 parking spaces available above ground on the property which could also be used by “Propsthof 51” as buildings 49 and 51 are located very close to each other. Constructed in a modern design in 2001, the two buildings have five and six floors, respectively. An appealingly designed handicapped-accessible area leads into the building interior.



The building “Am Propsthof 49” encircles a large green courtyard which also connects the offices with the in-house cafeteria.



1.5 Further relocation possibilities for organisations and businesses looking to stay close to the EMA

Further relocation possibilities exist in the area for organisations and businesses which are closely involved with the EMA. The Bonn office market is highly attractive, and has over 3.8 million square metres of space. In 2016, roughly 27,000 square metres of new office space were completed, and another 185,000 square metres are in planning, development or construction; there is additional potential for a further 185,000 square metres of space to be built. New office developments in the Bundesviertel include “Haus der Höfe” and “Bonnjour Bonn.” The “Bonn-Pützchen” office and commercial park will give the City of Bonn new space for businesses in 2018 (5.5 ha for office properties, 5.5 ha for labs and craft/manufacturing purposes).

In the surrounding Rhein-Sieg administrative district surrounding Bonn there are further attractive commercial properties available that are easily reachable by car or public transport.

1.6 Summary

Criteria/Requirements	Arguments in favour of headquarters in Bonn
Space requirements:	
min. 27,000 m ² of office space	There are two new-building options to choose from: the Bundeskanzlerplatz with 31,000 m ² of lettable space on 18 floors, and the Friedrich-Ebert-Allee, also with 31,000 m ² on 17 office floors. Both are in top Bonn locations with good accessibility. All of the EMA's requirements concerning space and technology can be taken into account in planning and construction.
min. 250 m ² handicapped-accessible reception area	
Security structures in the surrounding area	The property Campus Godesberger Allee is an example which perfectly embodies the option of a related building complex with a total of 31,382 m ² lettable space. The property's facilities and equipment meet EMA requirements.
6,000 m ² of space in meeting rooms of various sizes with 4G internet connection and audio and video conferencing equipment Transmission and recording systems One voting system unit per seat	
5 x 70–120 seats	
2 x 35 seats	
10 x 4–24 seats	
500 m ² lounge area with tables/workstations and available storage	
Lounge area for 50 people with tables/workstations and available storage	
An auditorium with capacity for approx. 300 people	
18,500 m ² of office and open-plan space, capacity for 1,300 workstations	
Internal meeting rooms	
Internal and external archive (600 m ² , height 9 metres)	The property Am Propsthof 49–51 has a total of 32,460 m ² lettable space available for immediate occupancy, which can be used for the transition period. The property accommodates 1,300 personnel as required, has the additional rooms required, and is adaptable to the EMA's needs.
Archive room, approx. 30 m ²	
Local storage rooms 7 x 5 m ²	

Criteria/Requirements	Arguments in favour of headquarters in Bonn
Technical requirements:	
High-quality IT systems	IT equipment and rooms are to be planned or adapted to meet EMA needs at all leased properties. To this end, a modern telecommunications network with digital network, high capacity and high-speed connections will be installed.
Central, non-interruptible power supply	
WiFi throughout the building	
Technical service rooms	
Rooms for primary and secondary equipment	Plans are for the backbone (main line/base network) to have a n*10 Gbit/s connection via a multiply redundant system from two different providers.
IT workshop	
IT storage facilities	
Telecommunications network with high-capacity digital network and high-speed connection	Backup power generators ensure an uninterrupted power supply. Furthermore, the second site in Hamburg/Munich guarantees that data is available at all times in case of a total data centre failure.
A primary and a fallback data centre in the event of a system failure, both of which must be accessible from the EMA site via a fast, high-performance internet or fibre optic connection	
Applicable IT security and system operation standards must be complied with.	EMA data is securely stored in the Munich and Hamburg data centres via the cloud solution.

2. The accessibility of the location

Criterion 2

“This criterion concerns the availability, frequency and duration of flight connections from the capitals of all EU Member States to the airports close to the location, the availability, frequency and duration of public transportation connections from these airports to the location, as well as the quality and quantity of accommodation facilities. In particular, the criterion implies the capacity to allow for the continuation of the volume and intensity of current meeting activities of the Agency.”

Bonn, in the European Rhine Region, is situated in the heart of Europe and at one of the major European transport nodes. With its headquarters in Bonn, the EMA would enjoy excellent connections and accessibility. The region is one of the most densely populated regions of the continent. Bonn is also very close to its European neighbours: France, Belgium, the Netherlands and Luxembourg are direct neighbours. And Bonn, as a federal city and former German capital, offers an outstanding infrastructure. The city is – across all national boundaries – a hub for air travel, rail and road traffic.

2.1 Connections

Bonn is in the immediate vicinity of three international airports: Cologne/Bonn, Düsseldorf and Frankfurt am Main. The journey times from Bonn to these airports range between half an hour and a little over one hour, with numerous direct flights providing links between Bonn and the capitals of Europe and the world at large.

Cologne/Bonn Airport with its underground ICE railway station is the fastest-growing commercial airport in Germany. In 2016 almost twelve million passengers chose to use the “airport with short routes” which offers connections to almost 130 international destinations, operated by over 25 airlines. The number and frequency of direct flights each week, as well as the short flight times, bear witness to Bonn’s excellent travel connections:

Destination	Country	Flight time	Flights per week
Berlin	Germany	1:10	160
Bern	Switzerland	1:10	4
Bucharest	Romania	2:40	4
Budapest	Hungary	1:40	7
Copenhagen	Denmark	1:25	7
Dublin	Ireland	2:00	11
Lisbon	Portugal	3:05	21
London	United Kingdom	1:15	53
Madrid	Spain	2:40	4
Prague	Czech Republic	1:10	7
Riga	Latvia	2:10	3
Rome	Italy	2:00	14
Sofia	Bulgaria	2:25	4
Stockholm	Sweden	2:10	4
Valetta	Malta	2:40	3
Vienna	Austria	1:30	31
Warsaw	Poland	1:45	5
Zagreb	Croatia	1:30	6

Table: Weekly European direct flights from Cologne/Bonn Airport

Bonn is also easily accessible via Düsseldorf Airport. The journey time from the airport to Bonn by ICE train or by car is less than an hour. Düsseldorf too offers a wide range of direct flights to destinations within and outside Europe.

Destination	Country	Flight time	Flights per week
Amsterdam	Netherlands	0:55	35
Athens	Greece	3:00	10
Basel	Switzerland	1:00	11
Berlin	Germany	1:10	123
Bucharest	Romania	3:00	5
Budapest	Hungary	1:45	12
Copenhagen	Denmark	1:20	51
Dublin	Ireland	1:55	18
Helsinki	Finland	2:20	14
Lisbon	Portugal	3:05	13
London	United Kingdom	1:25	101
Luxembourg	Luxembourg	0:45	2
Madrid	Spain	2:40	21
Paris	France	1:25	63
Prague	Czech Republic	1:30	30
Riga	Latvia	2:30	6
Rome	Italy	2:05	28
Stockholm	Sweden	1:45	22
Vienna	Austria	1:40	70
Warsaw	Poland	1:40	22
Zurich	Switzerland	1:15	79
Selected Intercontinental flights			
Tokyo	Japan	11:17	7
New York	USA	8:20	20

Table: Weekly direct flights from Düsseldorf Airport

The journey time from Frankfurt am Main Airport to Bonn Central Station is just an hour and 17 minutes by ICE train and to Siegburg-Bonn Station it is 50 minutes. The journey time from Frankfurt am Main to Bonn by car is less than 90 minutes. Frankfurt am Main is Germany's largest airport and also one of the busiest aviation hubs in the world. Thanks to this direct link, Bonn is quickly accessible by a further range of direct flights.

Destination	Country	Flight time	Flights per week
Amsterdam	Netherlands	1:12	83
Athens	Greece	2:49	35
Basel/Geneva/Zurich	Switzerland	0:45/1:10/0:55	91
Berlin	Germany	1:10	145
Brussels	Belgium	0:55	67
Budapest	Hungary	1:30	35
Copenhagen	Denmark	1:21	54
Dublin	Ireland	2:07	35
Helsinki	Finland	2:24	35
Larnaca	Cyprus	3:35	7
Lisbon	Portugal	3:05	47
Ljubljana	Slovenia	1:10	21
London	United Kingdom	1:35	175
Luxembourg	Luxembourg	0:40	28
Madrid	Spain	2:40	77
Malta	Malta	2:29	24
Paris	France	1:16	96
Prague	Czech Republic	1:04	47
Riga	Latvia	2:10	21
Rome	Italy	1:48	56
Sofia	Bulgaria	2:15	26
Stockholm	Sweden	2:00	55
Tallinn	Estonia	2:15	21
Vienna	Austria	1:23	90
Vilnius	Lithuania	2:00	19
Warsaw	Poland	1:39	49
Zagreb	Croatia	1:22	35
Selected Intercontinental flights			
Seoul	South Korea	10:20	21
Tokyo	Japan	11:25	28
New York	USA	8:32	42
Washington	USA	8:47	28

Table: Weekly direct flights from Frankfurt am Main Airport

A major advantage of Bonn is that major European destinations can be reached easily and quickly from here by train as well:

Bonn Central Station – Brussels-Midi: 2h 33 min
Siegburg-Bonn Station – Brussels-Midi: 2h 20 min

Bonn Central Station – Frankfurt am Main Airport: 1h 17 min
Siegburg-Bonn Station – Frankfurt am Main Airport: 50 min

Bonn has a direct connection to the European high-speed rail network via Bonn Central Station or the ICE train station Bonn/Siegburg. Political and economic centres such as Brussels and the Rhine-Main region can also be reached quickly.

Bonn has an excellent public transport system at its disposal. Cologne is just 20 minutes away by public transport, while the journey to Düsseldorf takes 45 minutes. Underground and metropolitan rail networks, trams and buses all run frequently. The city has a comprehensive local transport network which is constantly being optimised. A faster metropolitan railway connection to Cologne/Bonn Airport is currently under construction and the new “UN-Campus Bonn” stop will open in 2017, offering excellent access to the new EMA headquarters in the Bundesviertel.

2.2 Hotels

As former capital of the Federal Republic of Germany and as an international conference location, Bonn has many years of experience in welcoming guests from all over the world. Bonn and its neighbouring cities of Cologne und Düsseldorf offer extensive overnight accommodation and conference facilities in all price categories. These are suitable for individual guests and working groups as well as for conferences or other major events. The City of Bonn has over 100 hotels with some 9,000 beds. A further 1,000 beds will be available in hotels soon to open. The prices for a single room with three or four stars are moderate, ranging from 80 to 120 euros.

Category	Hotel name	Number of rooms
Luxury	Kameha Grand Hotel	253
4*	Maritim Hotel Bonn	410
4*	Bonn Marriott World Conference Hotel	336
4*	Hilton Hotel Bonn	252
4*	InterCity Hotel Bonn	161
4*	Derag Livinghotel Kanzler	150
4*	Günnewig Hotel Residence by Centro	144
4*	Ameron Hotel Königshof	129
4*	Günnewig Hotel Bristol by Centro	116
4*	President Hotel	98
4*	Dorint Hotel Venusberg	85
4*	Sternhotel Bonn	80
4*	Rheinhotel Dreesen	72
4*	Collegium Leoninum	70
4*	Galerie Design Hotel	53
4*	Best Western Hotel Kaiserhof	50
4*	Best Western Hotel Domicil	44
3*	Acora Hotel und Wohnen	120
3*	Bonnox	100
3*	Hotel Consul	95
3*	Insel Hotel	64
3*	Hotel Europa	60

Table: Selection of the largest hotels in Bonn's Bundesviertel and city centre

The surrounding region offers approximately 350 further hotels, with over 21,000 beds.

2.3 Summary

Criteria/Requirements	Arguments in favour of headquarters in Bonn
<p>Good accessibility (for experts from Europe and overseas)</p>	<p>Bonn enjoys excellent, direct links to Cologne/Bonn, Düsseldorf and Frankfurt am Main Airports.</p> <p>Almost 2,300 flights a week connect Bonn to European destinations.</p> <p>146 flights a week connect Bonn with Asia and North America.</p> <p>Travelling from Bonn Central Station, journey times to the three airports are between 30, 60 and 90 minutes.</p> <p>Bonn is connected to Cologne und Düsseldorf by an excellent local transport network.</p> <p>Some 1,300 national and international rail connections leave from Cologne Central Station every day.</p>
<p>Hotels – around 30,000 overnight hotel stays per year are required, with a maximum daily capacity of 350 rooms.</p>	<p>The City of Bonn itself has a total of 100 hotels with 9,000 beds in all price categories.</p> <p>The larger hotels in Bonn’s city centre offer some 3,000 beds alone.</p> <p>In the surrounding region, there are another additional 350 hotels, with over 21,000 beds.</p>

3. The existence of adequate education facilities for the children of agency staff

Criterion 3

“This criterion concerns the availability of multi-lingual, European-oriented schooling that can meet the needs for education facilities for the children of the current staff as well as the capacity to meet also the future education needs.”

With some 55,000 children and adolescents aged under 18, Bonn is a very young city and renowned for its family-friendly qualities. Correspondingly, Bonn has extensive learning and educational facilities for children and young people. With a diverse and international range of day-care centres, kindergartens and primary schools through to academies, universities of applied science and research universities, Bonn and the surrounding region offer excellent educational facilities for all age groups.

3.1 Bilingual kindergartens and day-care centres

The 215 publicly funded kindergartens and day-care centres of the City of Bonn offer more than 13,000 excellently equipped nursery places for children up to school-starting age. There are 4,000 places for children aged under three, distributed all over the city and easily accessible. The City of Bonn itself operates 70 kindergartens, and there are also eight private kindergartens with a further 850 places. For children aged between four months and six years there are eight international kindergartens as well as several bilingual company kindergartens. As a growing city with a steadily rising number of children, Bonn already has major experience in expanding the range of day-care facilities in the preschool sector.

The City of Bonn ensures that the current required 210 kindergarten places for children of EMA staff can be supplied at any time. As early as autumn 2018 a child day-care centre for 80 children can be provided as an interim solution and be maintained until the EMA has created a new, organisation-specific facility at its own location. In addition, 20 places can be offered for children aged under three.

A family office of the City of Bonn provides assistance to EMA staff with individual day-care issues, maintaining close and positive links with all kindergartens. If desired, the existing offering for the children of EMA staff can be supplemented by a public-funded organisation-specific child day-care facility that will be realised in or in the direct vicinity of the office location and run by EMA.

3.2 Schools

Besides the schools for general and vocational education, Bonn also has a number of international schools which can offer international school-leaving qualifications. With 106 schools, 89 of which are state funded and 17 privately funded, Bonn has a very diverse spectrum of educational institutions that can offer an individual, tailor-made solution for each school career. More than 55,000 pupils from Bonn and the region currently attend school in Bonn. All school types have plenty of bilingual options, both in the primary sector and beyond.

In addition, there are several state-recognised international primary schools and grammar schools in Bonn which also offer tracks leading to educational certificates such as the International Baccalauréat or the Baccalauréat Français. Bonn International School (BIS), situated right by the Rhine, has an international reputation and currently accommodates some 700 pupils from 74 countries – taught by teachers from 17 countries. It was formed by a merger of the American High School, American Elementary School und British High School and continues a tradition reaching back 70 years. The motto of BIS: “Any new face from any old place will find a welcome here.”

Bonn International School teaches Classes 1 to 12, supplemented by an international kindergarten which means that in practice the school teaches children from the ages of three to 19. The curriculum of the “International Baccalauréat Organization” is applied here at all levels, including the kindergarten. The teaching language is English, while German is taught as a second language. French and Spanish are offered for native speakers from Class 6 onwards. This school alone can incorporate up to 200 additional pupils.

Besides this, the City of Bonn has a transregional network of links along the Rhine corridor, meaning that the international school facilities of neighbouring cities are also available to children and teenagers who are required to attend school, as well as their families. An overview of the international schools in Bonn and the surrounding area is attached as an appendix.

3.3 University education in Bonn and the surrounding area

Bonn has a reputation as a major international location for science and is one of Germany’s leading locations for research and innovation. The University of Bonn, which was founded in 1818, has some 36,000 students and a wide range of currently 200 courses. A focus is on health and life sciences, which are among the research emphases in North Rhine-Westphalia, including in non-university educational and research institutions. Non-university research institutions, mainly funded by the Max Planck Society, the Helmholtz Association, the Fraunhofer Association and the Leibniz Association, complement the research activities in the universities. The research institutes located in North Rhine-Westphalia primarily gain findings in the area of health: oncology, neurosciences, cardiovascular diseases, genetics and epidemiology.

The Universities of Aachen, Cologne and Düsseldorf, and the University of Applied Sciences Bonn-Rhein-Sieg complement the range of courses and degrees offered by the University of Bonn. All also offer special bachelor’s and master’s degree courses for international students. These courses are bilingual or in English, some leading to a double degree.

3.4 Summary

Criteria/Requirements:	Arguments in favour of headquarters in Bonn
<p>The following current requirement exists for the 648 children of EMA staff aged between 0 und 18:</p> <p>117 places at a child day-care centre</p> <p>96 places at a preschool centre</p>	<p>There are 215 state-funded and private kindergartens and day-care centres with more than 13,000 childcare places up to the start of school.</p> <p>8 international kindergartens (English, French or bilingual)</p> <p>As of autumn 2018, the City of Bonn can provide a child day-care centre for an additional 80 children.</p> <p>Places for 20 children aged under three can also be provided.</p> <p>A day-care centre can be integrated into the new EMA headquarters.</p>
<p>231 places at primary schools</p> <p>149 places at secondary schools</p>	<p>There are 106 state-funded and private schools with a wide range of schooling, ranging from primary school to grammar school.</p> <p>The “International School” with an international reputation has 700 pupils from 74 countries and teachers from 17 countries.</p> <p>This school can immediately incorporate 200 additional pupils.</p> <p>International school-leaving qualifications are possible.</p>
<p>55 places at a tertiary educational institution/university</p>	<p>The Universities of Aachen, Bonn, Cologne and Düsseldorf offer an extensive range of degree courses.</p>

4. Appropriate access to the labour market, social security and medical care for both children and spouses

Criterion 4

“This criterion concerns the capacity to meet the needs of the children and spouses of the current as well as of future staff for social security and medical care as well as the availability to offer job opportunities for these.”

4.1 Access to the region’s attractive and diverse job market

The Cologne/Bonn area at the heart of the European Rhine Region is one of Europe’s strongest regions in economic terms. The region is in the top league as regards knowledge-intensive service sectors with a promising future such as health, IT, business or finance consultancy, as well as in sectors such as automotive and mechanical engineering, chemicals, logistics and media. An above-average proportion of the workforce in the Cologne/Bonn area is engaged in the services sector: no less than 79.2 per cent. The health economy forms a particular area of focus. It is a growth engine with a high innovation and networking potential and has over 200,000 employees in the health economy region of Cologne/Bonn alone. Some three-quarters of these employees are involved in the medical and pharmaceutical sectors as well as nursing and care for the elderly. There are large, internationally active companies and, in part, highly-specialised medium-sized companies, particularly in the fields of pharmaceuticals, life sciences and medical technology. Notable examples here include 3M, Bayer HealthCare and Janssen-Cilag Ltd.

In the City of Bonn alone, an average of around 2,500 new jobs were created annually over the past years. The low level of unemployment in Bonn, with an annual average of 3.9 per cent and almost full employment, points to the special attractiveness of the job market here. The national average level of unemployment was 6.1 per cent in 2016. Bonn offers a very good job market for academics who account for more than 26 per cent of all workers, catapulting Bonn to the top of the German ranking.

The region offers a very good job market for academics who account for more than 26 per cent of all workers, catapulting Bonn to the top of the German ranking. North Rhine-Westphalia as a whole has one of the densest and most productive research landscapes in Europe: some 70 universities and more than 100 non-university research institutes are engaged in academic education and research in NRW. The Universities in Aachen, Bonn, Cologne and Düsseldorf, as well as non-university research facilities such as the Max Planck Society, the Helmholtz Association, the Fraunhofer Society and the Leibniz Association offer over 40,000 highly-qualified research and teaching posts.

The strong economic structure prevailing in the European Rhine region offers excellent working conditions for EMA staff spouses and family members.

4.2 Social security

The staff of the EMA and their families enjoy extensive social protection. Statutory social insurance in Germany comprises five insurance segments: health insurance, pension insurance, accident insurance, unemployment insurance and nursing care insurance. EMA staff and their families can take advantage of the very good German social insurance system and have access to excellent medical care. Where family members are not insured through EMA staff in the EU Health Insurance Scheme (GKFS), all people who are permanent residents in Germany receive reliable health care under the statutory or private health insurance systems.

Statutory health insurance:

- free choice of statutory medical insurance company
- extensive uniform catalogue of services
- high-quality health care
- free choice of doctor and no additional charges for visits to the doctor
- free choice of hospital
- quick access to innovative medicines
- low additional charges for health services
- free health care for children and spouses without their own income
- inexpensive health care for pensioners.

Private health insurance:

- broad individual range of possibilities in the catalogue of services
- high-quality health care
- quick access to innovative medicines
- special tariffs if the insurance premium becomes a financial burden.

4.3 Medical care

Bonn offers an unusually broad range of inpatient and outpatient medical care. The city has a total of more than 20 hospitals, outpatient services and day clinics, enabling the full spectrum of modern medical diagnostic and therapeutic resources to be provided. The provision of hospital beds is outstanding: there are more than 1300 beds available per 100,000 inhabitants. Moreover, with its four university clinics in Aachen, Bonn, Düsseldorf and Cologne, the region has a high level of competence in clinical care.

In the outpatient sector, Bonn and the surrounding area are home to over 1,000 practices of registered doctors, dentists and psychotherapists as well as more than 10 medical care centres or medical specialist centres for almost all medical disciplines. These include almost 50 specialists in paediatric and adolescent medicine. Bonn offers an above-average level of medical care and excellent facilities for the care of international patients.

4.4 The housing market in Bonn and the region

A pleasant and suitable home is an important element in social security and in creating a sense of well-being. Bonn and the surrounding region offer apartments and houses for all requirements – from urban to rural. An urban apartment or an idyllic residence in a picturesque wine village, anything is possible. Rents and purchase prices for owner-occupied apartments and houses are roughly at average levels compared to other international conurbations and cities. In Bonn the rental prices per square metre range from 5.30 euros for a normally equipped apartment in a standard location to 14.80 euros for an apartment in a very good location with very good furnishings (source: current Bonn rent index). When purchasing an owner-occupied home in Bonn, one can expect to pay on average, depending on the residential location and the floor area (in square metres), between 1,250 euros/square metre and 3,350 euros/square metre (source: real estate market report). The following table provides an overview of the rental prices in Bonn as compared to other European cities:

City	Rent per square metre
London	28.31 euros, in prime locations up to 82.77 euros
Copenhagen	23.36 euros
Amsterdam	22.39 euros
Paris	21.64 euros
Stockholm	19.80 euros
Dublin	19.16 euros
Rome	16.58 euros
Vienna	13.56 euros
Brussels	13.56 euros
Berlin	12.27 euros
Bonn	11.10 euros

Table: Comparison of European rental prices

Source: www.nested.com/research/rental/2017/global

Source for Bonn: www.wohnpreis.de/mietspiegel/bonn

The City of Bonn has extensive experience in assisting skilled international and management employees and their families. Services include English-language welcome packages and events for all new employees. Specially for the EMA, the City will set up a central, multilingual service offering assistance to EMA staff and their families and dependents when finding a home and dealing with other important issues on their arrival in Bonn (Welcome Service). On request, this service can also be offered within EMA office premises. Services will include:

- Regional residential service for identifying real estate offers
- General advice on real estate and finding a home
- Finding places in schools and kindergartens
- Assistance in registering accommodation and vehicles, driver's licence queries
- Establishing contact with other facilities capable of providing advice and assistance in individual cases
- General tips on relocating to Bonn.

4.5 Summary

Criteria/Requirements	Arguments in favour of headquarters in Bonn
Availability of employment offers	<p>Stable and attractive job market</p> <p>Very low average annual unemployment rate of 3.9 per cent</p> <p>213,000 jobs in the health sector</p> <p>High service rate of 79 per cent</p> <p>Broad job market for academics and scientists</p>
Social security	<p>Access to the social security systems available in Germany</p>
Medical care	<p>Long tradition of medical care for people from all over the world</p> <p>High quality of care</p> <p>Short waiting times</p> <p>1,000 registered doctors, dentists and psychotherapists in and around Bonn</p> <p>More than 10 medical care centres or medical specialist centres for almost all medical disciplines</p> <p>Around 50 specialists in paediatric and adolescent medicine</p> <p>More than 1,300 hospital beds per 100,000 inhabitants</p>
Residential market	<p>Attractive residential market at reasonable prices:</p> <p>Rent per m²: 5.30 euros – 14.84 euros</p> <p>Ownership price per m²: 1,250 euros – 3,350 euros</p> <p>Bonn offers a Welcome Service.</p>

5. Business continuity

Criterion 5

“This criterion is relevant given the critical nature of the services provided by the Agencies and the need therefore to ensure continued functionality at the existing high level. The criterion relates to the timeframe required to fulfil the four criteria above. It concerns amongst other things the ability to allow the Agencies to maintain and attract highly qualified staff from the relevant sectors, notably in case not all current staff should choose to relocate. Furthermore, it concerns the capacity to ensure a smooth transition to the new locations and hence to guarantee the business continuity of the Agencies which should remain operational during the transition.”

The EMA can rely on support from experienced partners when it comes to relocation logistics. The city of Bonn has already demonstrated strength and flexibility both in executing the moving of the seat of national government from Bonn to Berlin. And through the support provided by numerous national and international organisations settling there in the post-move era. It has years of experience in planning and implementing relocation measures and knows what people need when they arrive in a strange city and a foreign country.

The BMG and BfArM are also experienced and competent in moving major government organisations and in collaborating across greater distances. Add to this the experience of the Institute for Federal Real Estate (BImA) which the EMA can also benefit from. The BImA has nationwide responsibility for the uniform property management of real estate owned by the German federal government. It owns nearly all of the domestic real estate utilised by federal government operations (approximately 4,700 properties) as well as managing and administering the UN Campus and the international child day-care centre in Bonn, to name but two.

5.1 Security and continuity ensured by special expertise offered by BfArM and PEI

In the interest of pharmaceutical treatment and patient safety, the highest priority in the relocation phase must be to ensure the EMA's continuing ability to operate at the same high level without interruption or compromise. In its own move from Berlin to Bonn, the BfArM gained extensive experience in ensuring a smooth relocation for a large regulatory authority. There will be staffing and logistical challenges to be overcome, and the uninterrupted performance of information technology must be assured. The BfArM will gladly share its experience of its own successful relocation and will provide valuable support to facilitate the EMA's move. The high-level expertise of BfArM staff in Bonn is thus available to effectively mitigate issues relevant to European drug regulation that may be expected to arise in connection with the date of the United Kingdom's withdrawal from the European Union and relocation.

As one of the most important regulatory authorities in the EU and with approximately 1,100 experts, the BfArM is already actively supporting the EMA in all key areas of drug approvals and safety. Together with the PEI, the BfArM integrates the expertise offered by its experts in approximately 130 scientific bodies of the EMA. In centralised marketing authorisation and risk assessment procedures, the BfArM has been taking a leading position as a (co-)rapporteur for years. In addition, in 2016 the BfArM was directly responsible as Reference Member State in 233 procedures for the

mutual recognition and decentralized marketing authorisation procedures of medicinal products throughout the European economy. For the staff of the BfArM, close and successful collaboration with its European colleagues is therefore already a matter of course.

The BfArM has already promised the management of the EMA concrete support for when co-operation with the British regulatory authority ends, taking on additional procedures. The EMA and BfArM have already stepped up their co-operation on important developments, moving forward with intensity on matters like the new regulations on clinical trials and related requirements such as setting up EU data bases. The BfArM Executive Director, as Management Board Chairman of EU Telematics, has been working with the BfArM experts to ensure the implementation of innovative IT solutions for the drug approval process. The enormous untapped potential from this already close co-operation can be even better realised for the good of Europe if the EMA moves to Bonn.

5.2 Retaining and recruiting highly-qualified human resources

Personnel is a key factor in the seamless maintenance of operations at the EMA with employee expertise representing a major asset. The German application has the objective of preserving this asset and persuading as many employees as possible of the attractiveness of Bonn as a place to live and as headquarters for the EMA. The “www.closer-to-europe.eu” website and the “EMA in Bonn” brochure show how good life is in Bonn and the advantages the city offers for employees, their spouses and families. The essential arguments in favour of Bonn are outlined in detail in Chapters 3 and 4: a strong economic site with wide-ranging job opportunities, access to social security systems, excellent medical care, a comprehensive range of international school and day-care offerings for children and adolescents as well as a wide range of university options and a real estate market marked by affordable prices.

This strong health sector site with its experts in pharmaceuticals and medical technology is of major significance when it comes to long-term and sustainable recruitment of staff. Experts in the areas of registration and quality assurance are available as possible human resources for the EMA. The range of personnel available is complemented by graduates from the surrounding universities whose ranges of teaching and studies comply with EMA staff requirements. Apart from law and business administration, life sciences such as pharmacy and medicine also play a key role. And special areas such as the Institute for Patient Safety and courses such as “Drug Regulatory Affairs” or “Global Health” train the ideal experts for the EMA.

5.3 Safeguarding smooth relocation of material and personnel to the new headquarters

Once the EMA has opted for a property in Bonn, Germany will offer its help in forming a project team handling the entire planning and implementation of the relocation logistics. A professional removals firm with international expertise must be involved as a project partner. Germany is also offering to prepare the corresponding tender invitation and apply its own technical expertise. These tasks will include:

- Planning and organising the inventory in the new headquarters building
- Planning and organising any necessary structural modifications
- Operational and management concept for the new headquarters building
- Relocation planning and organisation
- Support with tendering and procurement measures

I. Project management	II. Operation & management concepts	III. Planning, organisation and management of the physical relocation	IV. Procurement tender support
1. Formation of a project team incl. BMG/EMA	1. Operator concept	1. Detailed task and deadline planning	1. Furniture needs analysis
2. Definition of project objectives, responsible parties & action plan	2. Tender invitation documents and work specifications	2. Stock-taking	2. Preparation of work specifications
3. Project monitoring over the project term	3. Tendering and award procedures in line with European law	3. Relocation plan	3. Evaluation of tendered offers and contract award proposal
4. Information throughout the entire project term	4. Review, evaluation & contract award recommendation	4. Physical relocation	

Figure: Overview of relocation-related services

These processes are to be completed by August 2018 to allow the EMA sufficient time for the relocation and to ensure that operations can commence at the new site on 30 March 2019.

These preparations will be followed by the actual move. The concept also entails work being implemented by a project team charged with the following tasks which would also need to be co-ordinated with plans for IT relocation:

- Prepare list of occupied space in London
- Review London space list vis-a-vis space requirements in Bonn
- Prepare an optimised occupancy plan for staff at the Bonn headquarters
- Room-by-room furniture planning
- Occupancy planning can be revised as necessary to factor in organisational changes affecting work structures to a greater extent
- Moving contents of functional rooms such as archives, mail room, scanning room etc.

The relocation plan will include the scheduling of and preparation and follow-up work for regularly scheduled meetings involving all parties. Regular deadline and performance reviews of the removals firm will be necessary as part of work progress monitoring which is to be concluded by January 2019 at the latest.

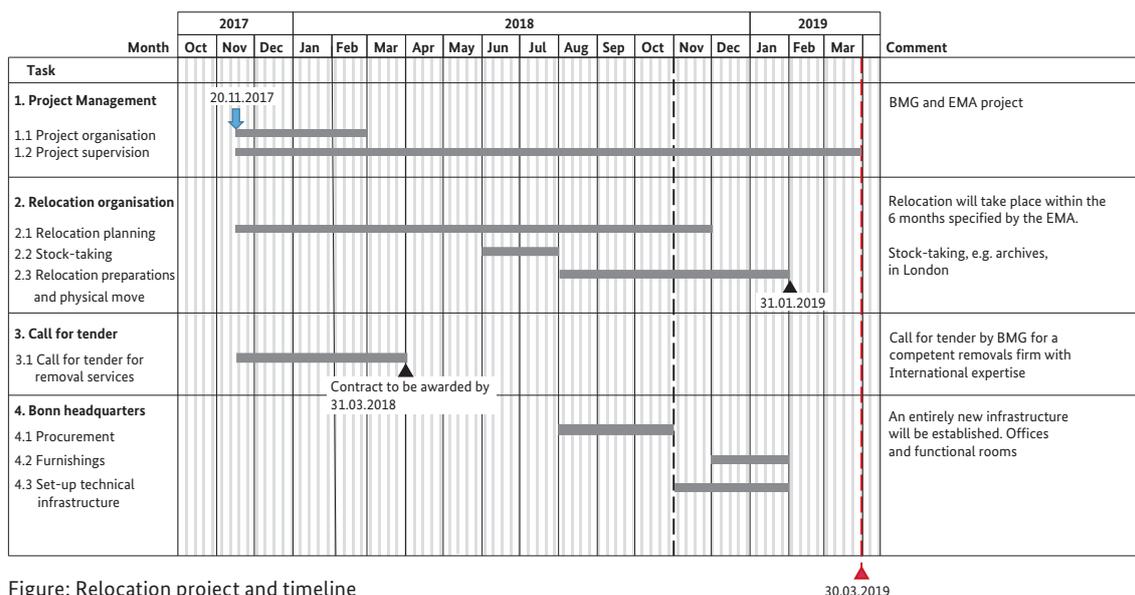


Figure: Relocation project and timeline

The BMG offers to conduct procurement for the entire infrastructure at the new office in Bonn including furniture, and to have functional rooms (conference rooms, lounges, restaurants etc.) fully equipped by January 2019. At the EMA’s request, the BMG will provide support with the following procurement-related matters:

- Pre-planning
- Defining the work content of the invitation to tender
- Determining the mode of tender invitation and threshold values
- Announcement of the invitation
- Preparation of tender invitation documents
- Evaluation of tendered offers
- Preparation of pricing benchmarks and scoring models
- Contract award recommendation
- Briefing the operator

Until such a time as the EMA commences its operations, an infrastructure can therefore be established in the new headquarters which complies with all of the requirements of the EMA. Thanks to the complete setting-up of the new headquarters, operational capability is ensured for the EMA during the entire relocation process, with the relocation volume reduced to a minimum. Only subsections such as the EMA file archives, possibly some works of art and personal items belonging to staff will need to be brought to Bonn.

5.4 High-performance IT environment ensuring operational capability

A high-performance IT environment is of critical importance to ensure immediate operational capability for the EMA. Bonn has an excellent and extremely high-performance IT infrastructure which is used by IT companies, ministries, federal agencies, UN secretariats and research institutes. Extensive practical experience and technical competence in digital communication are offered by the BMG, BfArM and PEI, and can be utilised for developing corresponding structures at the EMA. The BMG has already prepared plans for setting up an IT infrastructure for the EMA that meets all desired standards for security, functionality and data storage.

Once the final decision on the future location has been made, a project team involving BMG and EMA is to be put together, if so requested by the EMA. The project team is to be managed by a competent IT firm with proven international expertise. IT staff at the EMA will be part of the project team and plans, and their expertise will safeguard smooth technical operations. EMA support is to take a project-oriented approach to the core activities in the planned relocation, applying risk management, serving to reduce the workload for the EMA, and keeping project risk at a minimum.

Together with the EMA, this project structure will involve stock-taking and specifying the new IT target architecture. A concept for IT relocation will need to be devised which guarantees operational capability on the part of the EMA at all times during the relocation process. A cloud solution is favoured by the BMG in view of time criticality. In parallel to the IT stock-taking phase, the design and migration of the EMA's specialised applications will be examined. The process owners in the departments of the EMA are to be identified and involved in the project.

To save time, the BMG has already collaborated with experts to outline two innovative migration scenarios for the EMA's IT relocation. Both guarantee unrestricted and immediate operational capability on the part of the EMA in each of its selected properties. One scenario is for the IT relocation to occur on a fixed date. The other option is for the IT relocation to occur over multiple dates in "waves". The EMA is free to choose the option it wishes to take, ensuring maximum flexibility in the relocation process.

IT planning provides for a back-end structure to be implemented as early as November 2018, i.e. five months prior to the EMA's move on 30 March 2019, that allows working in London and/or mobile working in Bonn and the surrounding area. Location-independent working could be enabled earlier in co-ordination with the EMA if services are temporarily provided from London and a network connection is established at an earlier point. The primary element of the technical solution involves realising a backbone between London, Hamburg (temporarily) and the Bonn location.

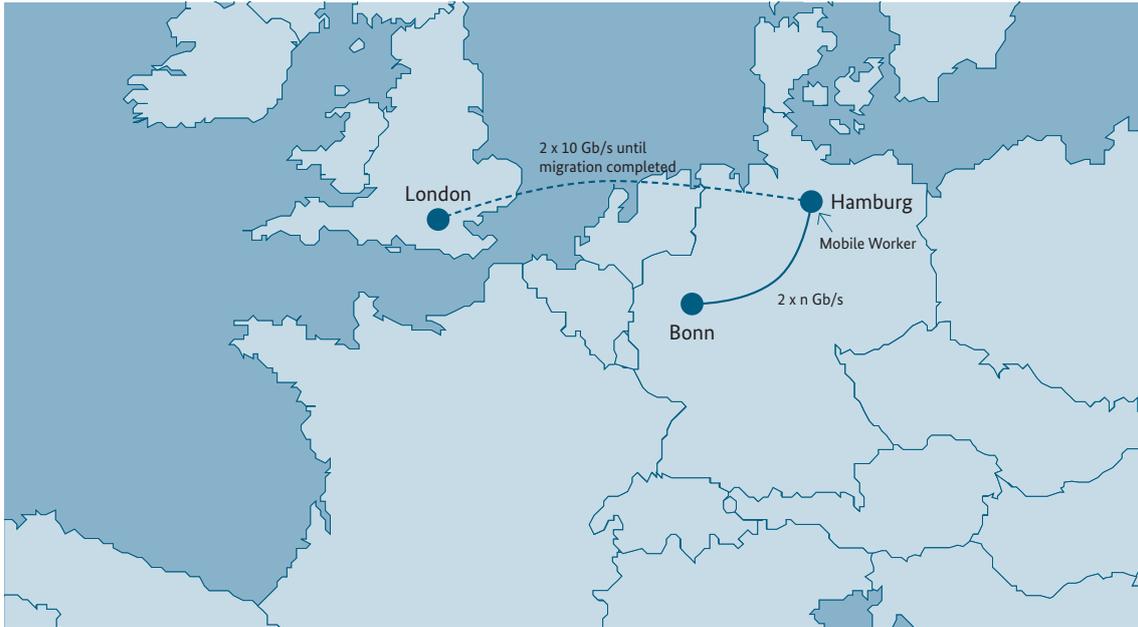


Figure: Network architecture for migration and location-independent working

As shown in the above figure, the London location and the future location in Bonn are to be networked via Hamburg to allow EMA staff access to their data and technical applications throughout the relocation process. This flexibility is guaranteed by continuous operational capability even outside the London headquarters. The BMG plans involve connecting the EMA redundantly (i.e. with the same practical resources in addition to the networks available in Hamburg and Munich) to the broadband backbone shown in the diagram, thereby ensuring that even in case of failure of one connection or network provider, the EMA’s operational capability will not be affected.

n *10 Gbit/s Germany-wide, multiple redundant backbone via redundant e.g. 1 Gbit/s uplinks from two Tier 1 German network providers

Redundant Data Centre Locations (Primary Hamburg)

- to be protected against disasters
- Tier 3,
- ISO 27001, ISO 9001, ISAE 3402-Type 2, PCI-DSS
- Green Energy: DC provider has an environment partnership with the city of Hamburg
- DC Provider awarded for its excellent Green IT Strategy

High secure and performant Internet Access

- Managed Firewall
- Intrusion Prevention System (IPS)
- Denial of Services (DoS) Detection and Protection

Redundant network gateway to EUNetworks

Amazon Web Services in Germany

- Data Centres in Frankfurt
- AWS Direct Connect

Microsoft Cloud Germany

- Data Centres in Frankfurt and Magdeburg
- Microsoft ExpressRoute



Figure: High-availability backbone with two data centres in Hamburg/München: Access to EMA’s Private and Public Cloud Service

6. Geographical spread

Criterion 6

“This criterion relates to the agreed desirability of geographical spread of the agencies’ seats, and to the objective set in December 2003 by the representatives of the Member States, meeting at Head of State or Government level and confirmed in 2008.”

The Federal Government of Germany upholds the goal of geographical spread when designating the location of new authorities, as agreed by the Heads of State or Government of the Member States in 2003. However, it should be also considered that the present case involves the relocation of existing authorities. In the view of the Federal Government, the need to maintain the EMA’s operations and to ensure a smooth transition are criteria of particular importance and should be given priority above the goal of geographical spread.

In order to guarantee continued operations of the EMA and the smooth relocation of the EMA, intensive preparations will be needed at the new location, and large-scale, dependable working structures and institutions will be required which have already proven themselves in the relocation of large agencies. Since the EMA relocation potentially affects European patient safety, these factors must be considered as well.

Additionally, the aspect of the accessibility of the new EMA location has to be underlined. Hardly any other EU agency is so dependent on exchange with its national and international partner authorities and experts. The annual figure of 36,000 visitors calls for a central location which is easily accessible from all European countries.

7. Headquarters agreement

By submitting this application for the Federal City of Bonn to be the new seat of the EMA, the Federal Government commits to concluding a Headquarters Agreement with the EMA, incorporating the offers outlined in this dossier. The Agreement between the Federal Government and the European Aviation Safety Agency (EASA) in Cologne can serve as a basis for the agreement to be concluded with the EMA. The EASA Agreement grants the Executive Director of EASA full diplomatic immunity, as enjoyed by the directors of diplomatic representations in accordance with the Vienna Convention on diplomatic relations signed on 18 April 1961. All provisions contained therein can be applied to the Headquarters Agreement with the EMA.

8. Appendices

8.1 International schools

Type of School	Languages / Extras	Hours / day	Location
Primary Schools / Elementary Schools			
State Schools (49)			
49 German elementary schools www.bonn.de	English is a regular subject from the 2nd half of grade 1 upwards	The half-day school is the traditional form of teaching. Possibility of day care in the afternoon: all elementary schools in Bonn are so-called "open all-day schools", providing a non-compulsory afternoon program, mainly with the help of voluntary teachers, parents, students, senior citizens and sports trainers. Parents are required to pay a modest fee.	in every district of the city
Erich-Kästner-Schule www.eks-bonn.de	<ul style="list-style-type: none"> • Emphasis on English tuition – more English tuition than in the regular curriculum • A French exchange teacher teaches French once a week for grades 1 to 4 (optional). • No tuition fees 	Open all-day school; 7.45 am to 6.00 pm	near the UN-Campus
Stiftsschule www.stiftsschule-bonn.de	Offers Spanish/German tuition; no tuition fees	Open all-day school	Bonn-Centre
Ennertschule www.ennertschule.de	<ul style="list-style-type: none"> • Certified European School (Europaschule NRW): www.europaschulen.nrw.de • Since the school year 2007/2008 a French exchange teacher teaches French once a week for grades 1 to 4 • No tuition fees 	Open all-day school	Bonn-Beuel (Küdinghoven)
Grundschulverbund Marienschule – Nordschule www.grundschulverbund-marienschule-nordschule.de	Certified European School (Europaschule NRW): www.europaschulen.nrw.de	Open all-day school	Bonn-Nord, Bonn-Castell
Bodelschwingh-Schule www.bodelschwingh-schule-bonn.de	<ul style="list-style-type: none"> • A French exchange teacher teaches French once a week for grades 2 to 4 (optional) • No tuition fees 	Open all-day school	Bonn-Friesdorf

Type of School	Languages / Extras	Hours / day	Location
Private Schools (5)			
Rudolf Steiner (Waldorf) School www.fwsbonn.de	<ul style="list-style-type: none"> • Alternative school; grades 1 to 13 • English and French tuition from grade 1 upwards 	Open all-day school	Bonn-Tannenbusch
École de Gaulle-Adenauer www.ecole-bonn.de	<ul style="list-style-type: none"> • Alternative school plus nursery • German/French bilingual • English classes as of grade 2 	all-day school	Bonn-Mehlem (South, residential area)
Independent Bonn International School e. V. (IBIS) www.ibis-school.com	<ul style="list-style-type: none"> • Grade 1 to 4 as an alternative school • German/English bilingual • Grade 5 to 7 as an additional school (Pupils need an exemption permit to attend these grades) 	all-day school	Bonn-Heiderhof (South, residential area)
Bonn International School (BIS) www.bonn-is.de	<ul style="list-style-type: none"> • Additional school • Primary School, Secondary School, High School, IB Exam 	all-day school	Bonn-Plittersdorf (residential area near the UN-Campus)
Libysch-Arabische El-Fateh-Schule	<ul style="list-style-type: none"> • Additional school, usually grades 1 to 12 • Arab Primary and Secondary school for pupils of the Arabic language, who are temporarily resident in Germany 	9.00 am to 2.30 pm	Bonn-Plittersdorf (near the UN-Campus)
Secondary Schools (high schools, grammar schools, vocational colleges)			
Secondary general schools (4 state run schools)			
Hauptschulen www.bonn.de	English from grade 5 upwards	of which 3 all-day schools; the 4th school offers an optional afternoon program for pupils of grade 5 to 6	Bonn-Endenich, Bonn-Auerberg, Bonn-Hardtberg, Bonn-Bad Godesberg
Intermediate secondary schools (7 state run schools, 1 alternative school – Ersatzschule)			
Realschulen www.bonn.de	<ul style="list-style-type: none"> • English from grade 5 upwards • Second foreign language (in Bonn French) in grade 6, with the possibility to continue from grade 7 upwards • many feature special projects or partnerships (e.g. Schools Partnership to improve the Conservation of Energy (SPICE) between Emilie-Heyermann-Realschule Bonn and school in Buchara, Uzbekistan) 	of which 3 all-day schools; others offer optional afternoon programs	in every district of the city
Comprehensive schools (5 state run schools) Grades 5 to 13 (German Abitur after 13 years)			
Gesamtschulen www.bonn.de	<ul style="list-style-type: none"> • 4 comprehensive schools are fully operational at this time, the 5th school will be fully built up til schoolyear 2019/2020 • several languages, optional Chinese for the upper level at Bonn-Beuel • Bertolt-Brecht-Gesamtschule is an UNESCO-Project School 	all-day schools	Bonn-Tannenbusch, Bonn-Castell, Bonn-Kessenich, Bonn-Beuel, Bonn-Bad Godesberg
Rudolf Steiner (Waldorf) School (1) Grades 1 to 13 (German Abitur after 13 years)			
Rudolf Steiner (Waldorf) School www.fwsbonn.de	<ul style="list-style-type: none"> • Alternative school, grades 1 to 13 • English and French tuition from grade 1 upwards 	Open all-day school	Bonn-Tannenbusch

Type of School	Languages / Extras	Hours / day	Location
Grammar schools (10 state run schools, 9 alternative schools – Ersatzschulen) Grades 5 to 12 (German Abitur after 12 years)			
Gymnasien www.bonn.de	<ul style="list-style-type: none"> • Several schools offer bilingual subject tuition, some of them qualified international leaving certificates • some place a special emphasis on foreign languages, natural sciences, sports or music • abundance of workshops, partnerships, international projects and programs available (energy-saving measures, joint research, international cooperation, new technologies etc.) 	Several Gymnasien are boarding schools or offer partial boarding, all-day or half-day courses, or afternoon programs	in every district, Gymnasien in various districts, easily accessible
Grammar schools (10 state run schools)			
Friedrich-Ebert-Gymnasium www.feg-bonn.de	<ul style="list-style-type: none"> • bilingual branch and curriculum with subject tuition in German/French and bilingual subject tuition in German/English: <ul style="list-style-type: none"> • bilingual subject lessons in French from grade 7 upwards in geography, history, politics • English-language modules – several weeks per school year from grade 8 upwards – in minor subjects • bilingual subject lessons in English from second stage of secondary education: biology, physics, history, philosophy, social sciences • from grade 8 on, Chinese as a workshop • qualifications: German Abitur, French Baccaauréat, International Baccalaureate Diploma (IB) • CertiLingua-School (www.certilingua.net) 	partly afternoon tuition	Bonn-Centre
Hardtberg-Gymnasium www.hardtberg-gymnasium.de	<ul style="list-style-type: none"> • bilingual branch and curriculum with subject tuition in German/French: <ul style="list-style-type: none"> • bilingual subject lessons from grade 7 upwards: geography, history, politics • qualifications: German Abitur, French Baccaauréat • CertiLingua-School (www.certilingua.net) • Optional qualifications <ul style="list-style-type: none"> • DELF Diploma (French) • Cambridge English Certificate 	partly afternoon tuition	Bonn-Hardtberg
Helmholtz-Gymnasium www.helmholtz-bonn.de	<ul style="list-style-type: none"> • bilingual branch and curriculum with subject tuition in German/English: <ul style="list-style-type: none"> • bilingual subject lessons from grade 7 upwards: geography and history • bilingual subject lessons from second stage of secondary education: biology (physics, additionally planned from 2018/2019) • Chinese tuition (upper secondary level) • qualifications: German Abitur, International Baccalaureate Diploma (IB) • Optional qualifications: <ul style="list-style-type: none"> • DELF Diploma (French) • Cambridge English Certificate 	all-day school partly afternoon tuition	Bonn-Hardtberg

Type of School	Languages / Extras	Hours / day	Location
Nicolaus-Cusanus-Gymnasium www.ncg-bonn.de	<ul style="list-style-type: none"> • bilingual branch and curriculum with subject tuition in German/English: • bilingual subject lessons from grade 7 upwards: geography, history and politics • bilingual subject lessons from second stage of secondary education: social sciences • CertiLingua-School (www.certilingua.net) • Optional qualification: DELF Diploma (French) 	partly afternoon tuition	Bonn-Bad Godesberg
Ernst-Moritz-Arndt-Gymnasium www.ema-bonn.de	<ul style="list-style-type: none"> • single bilingual subject lessons during second stage of secondary education: • biology in English • physics in English (school year 2017/2018) • Optional qualifications: • DELF Diploma (French) • Cambridge English Certificate 	partly afternoon tuition	Bonn-Centre
Grammar schools (9 alternative schools – Ersatzschulen)			
Erzbischöfliches St. Adelheid-Gymnasium www.sag-bonn.de	<ul style="list-style-type: none"> • bilingual branch and curriculum with subject tuition in German/English: • bilingual subject lessons from grade 7 upwards: geography, history and politics • CertiLingua-School (www.certilingua.net) • Optional qualifications: • DELF Diploma (French) • Cambridge English Certificate 	partly afternoon tuition	Bonn-Beuel
Kardinal-Frings-Gymnasium www.kardinal-frings-gymnasium.de	<ul style="list-style-type: none"> • single bilingual subject lessons during first stage of secondary education, grade 8 and 9, alternating per semester: geography, history, politics in English • single bilingual subject lessons during second stage of secondary education – if a teacher is available: catholic religious education in English • Optional qualification Cambridge English Certificate 	partly afternoon tuition	Bonn-Beuel
Ernst-Kalkuhl-Gymnasium www.kalkuhl.de	<ul style="list-style-type: none"> • single bilingual subject lessons during first stage of secondary education, grade 8 and 9: history in English • Optional qualifications: • DELF Diploma (French) • Cambridge English Certificate • TOEFL (English) 	partly afternoon tuition all-day school boarding-school	Bonn-Beuel

Type of School	Languages / Extras	Hours / day	Location
Vocational colleges (5 state run schools)			
Berufskollegs www.bonn.de	For upper grades only (aiming at the German Abitur or qualification for universities of applied sciences)	mainly all-day	Bonn-Nord (3), Bonn-Hardtberg, Bonn-Bad Godesberg
Friedrich-List-Berufskolleg www.flb-bonn.de	LCCI English for business www.lcci-duesseldorf.de	all-day school	Bonn-Bad Godesberg
Heinrich-Hertz-Europakolleg www.hhek.bonn.de	<ul style="list-style-type: none"> • Certified European School (Europaschule NRW): www.europaschulen.nrw.de • additional qualification “Europe Assistant in Crafts” • single bilingual subject lessons: politics/ social studies in English in all IT occupations 	all-day school	Bonn-Nord
Ludwig-Erhard-Berufskolleg www.leb-bonn.de	<ul style="list-style-type: none"> • Optional qualifications: <ul style="list-style-type: none"> • DELF Diploma (French) • Cambridge English Certificate • Telc – language test (Spanish) • European-oriented student projects 	all-day school	Bonn-Nord
Robert-Wetzlar-Berufskolleg www.rwb-bonn.de	UNESCO-Project School www.unesco.de/bildung/ups.html	all-day school	Bonn-Nord
Berufskolleg des Rhein-Sieg-Kreises in Bonn-Duisdorf www.berufskolleg-bonn-duisdorf.de	<ul style="list-style-type: none"> • single bilingual subject lessons: social studies in Spanish at the vocational grammar school for economy and administration • additional qualification “Advanced Business Communication (ABC) for Office Management (C1)” (from 2017/2018) in the dual training occupation “Office Manager” 	all-day school	Bonn-Hardtberg
Private Schools (Additional schools – Ergänzungsschulen)			
Independent Bonn International School e. V. (IBIS) www.ibis-school.com	<ul style="list-style-type: none"> • German/English bilingual • Grade 5 to 7 as an additional school (Pupils need an exemption permit to attend these grades.) 	all-day school	Bonn-Heiderhof (South, residential area)
Bonn International School (BIS) www.bonn-is.de	<ul style="list-style-type: none"> • Additional school • Primary School, Secondary School, High School, IB Exam 	all-day school	Bonn-Plittersdorf (residential area near the UN-Campus)
Libysch-Arabische El-Fateh-Schule	<ul style="list-style-type: none"> • Additional school, usually grades 1 to12 • Arab Primary and Secondary school for pupils of the Arabic language, who are temporarily resident in Germany (Pupils need an exemption permit to attend this school) 	9.00 am to 2.30 pm	Bonn-Plittersdorf (near the UN-Campus)

Further international schools in the region

St. George's School, Cologne
www.stgeorges-school.de

Lycée Français de Düsseldorf
www.lfdd.de

Gymnasium Kreuzgasse Cologne
www.kreuzgasse.de

The Japanese International School in Düsseldorf
www.jisd.de

Instituto Italo Svevo Cologne
www.italo-svevo-koeln.de

Montessori-Gymnasium Cologne
www.monte-koeln.de

Attachment

to the

application of the Federal Republic of
Germany for hosting
the European Medicines Agency

Real Estate (Copyright)

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New Building Option (Chapter 1.1) Bundeskanzlerplatz

Art-Invest Real Estate Management Cologne JSWD Architects Cologne

-

New Building Option (Chapter 1.2) Friedrich-Ebert-Allee

Oezen-Reimer+Partner Architects – Engineers Bonn Black Bucket Dortmund

-

Immediate Occupancy (Chapter 1.3) Campus Godesberger Allee

Godesberger Allee 150–154 Van den Valentyn Architecture Cologne
Godesberger Allee 83–91, 99 STRABAG Property and Facility Services Bonn

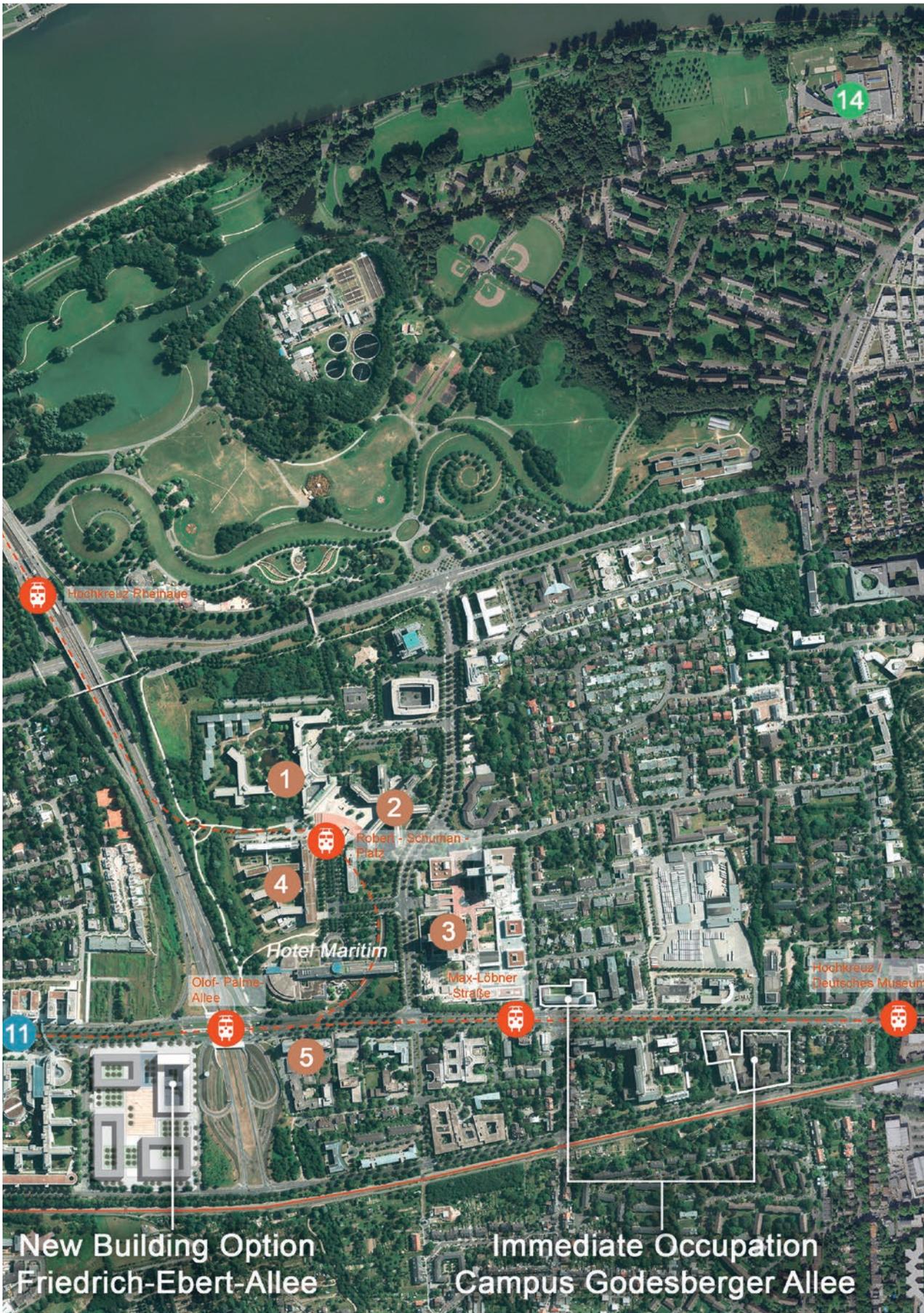
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Immediate Occupancy (Chapter 1.4) Am Propsthof

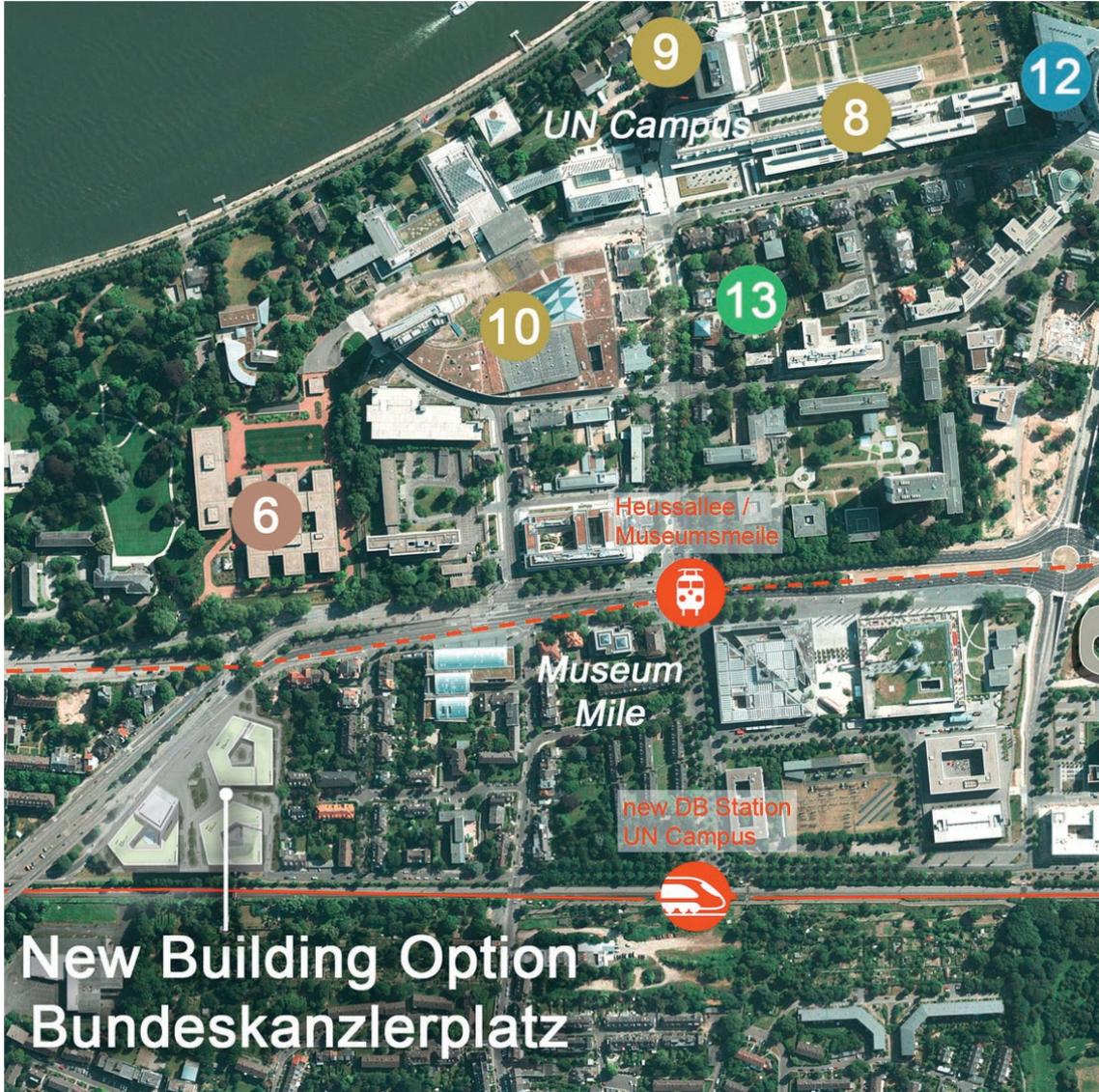
STRABAG Property and Facility Services Bonn

8.2 Real estate

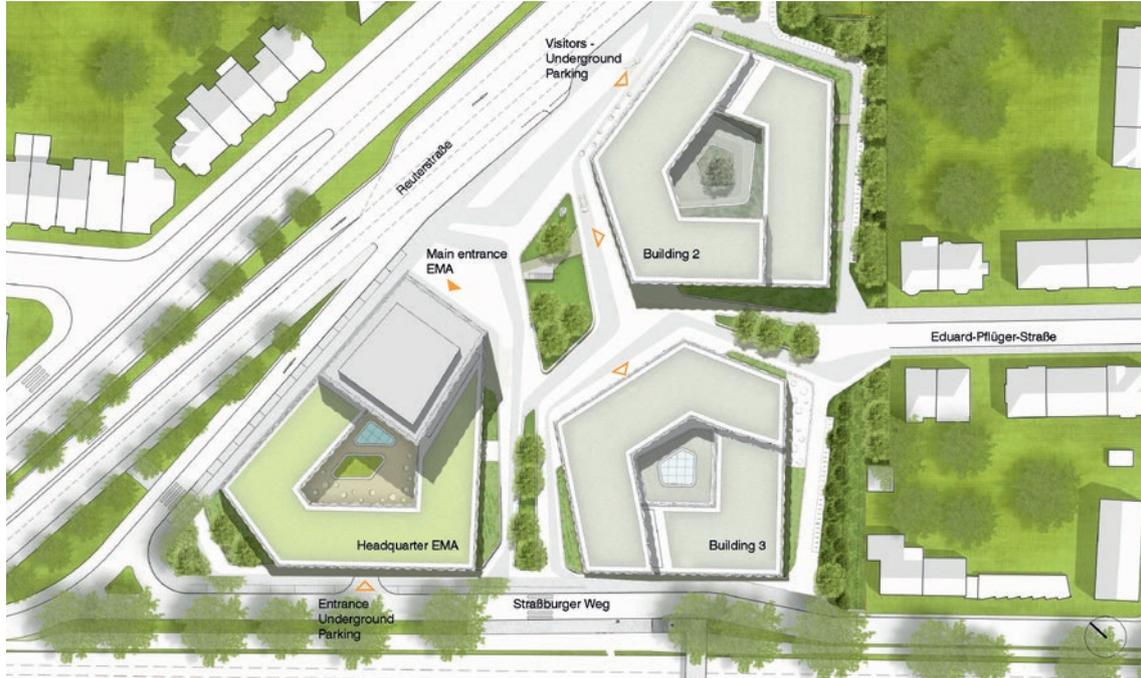




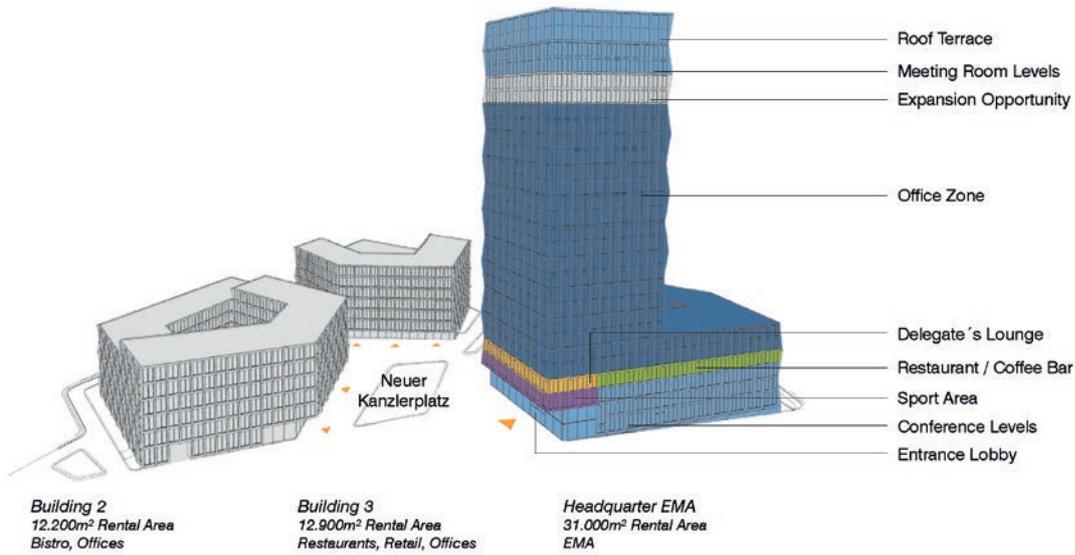
8.2.1 New building option Bundeskanzlerplatz



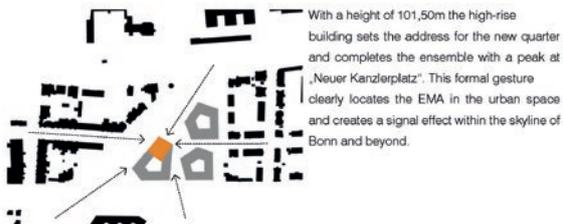




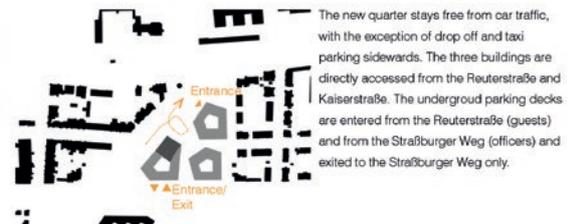
Site Plan | 1:1000



Visibility

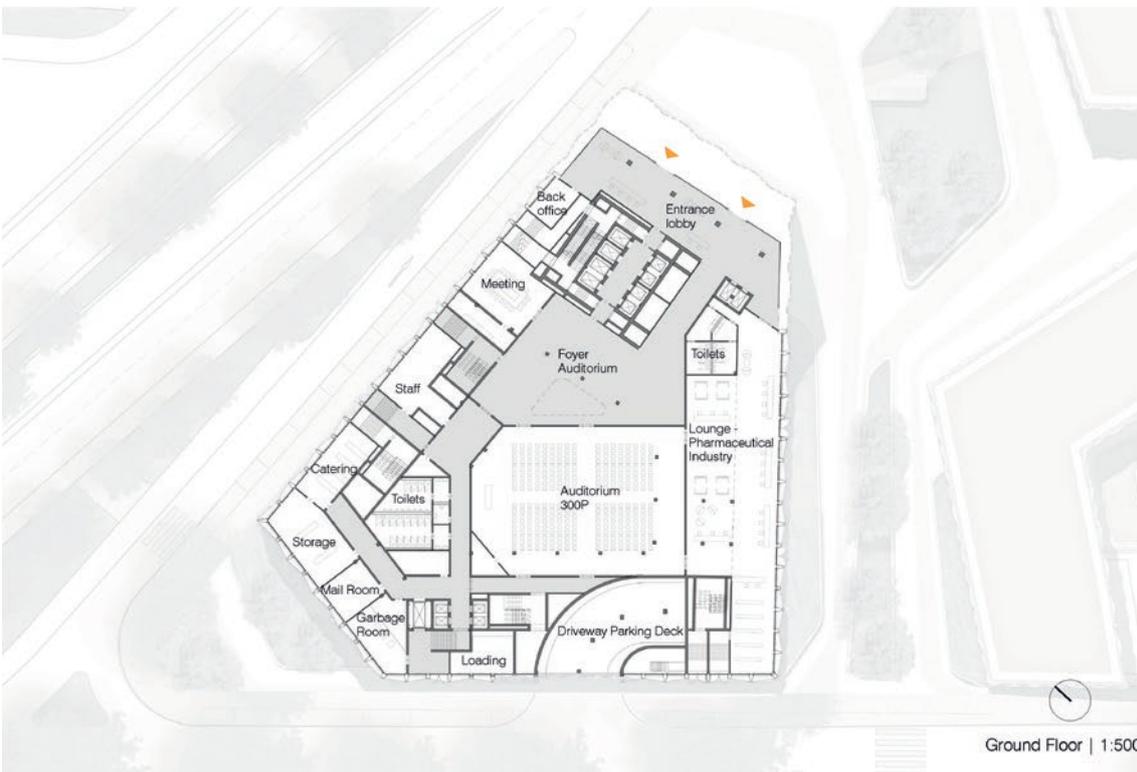


Accessibility





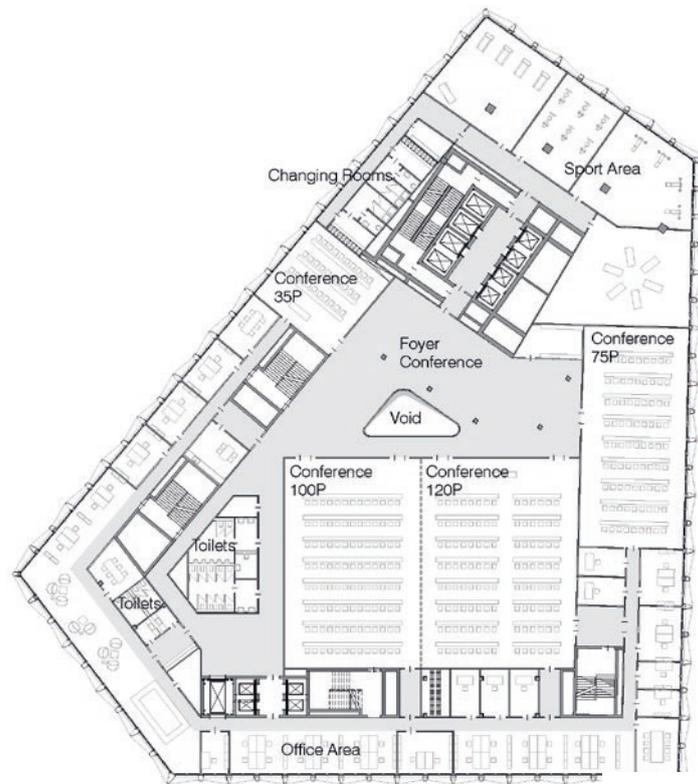
Atmosphere at the Entrance



Ground Floor | 1:500



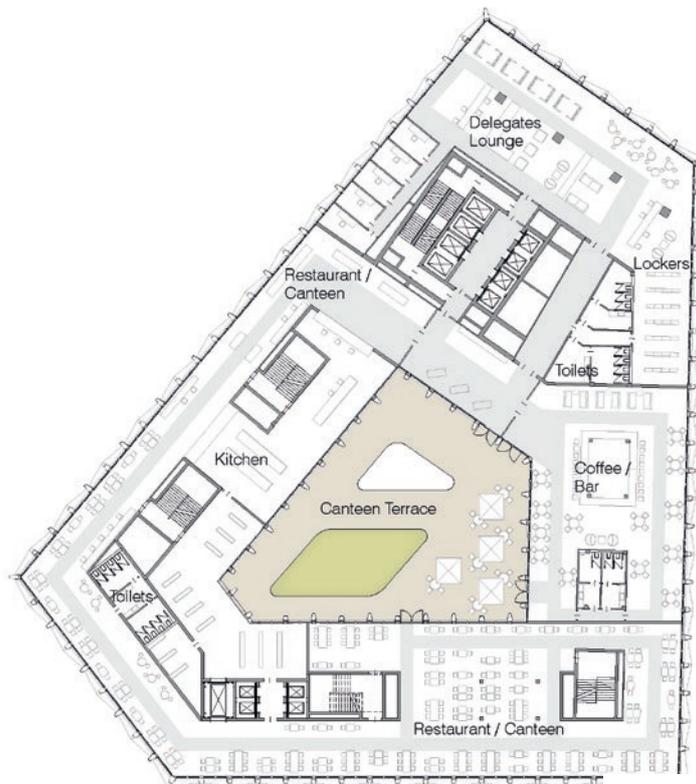
Atmosphere at the Conference Area



1st and 2nd Floor | 1:500

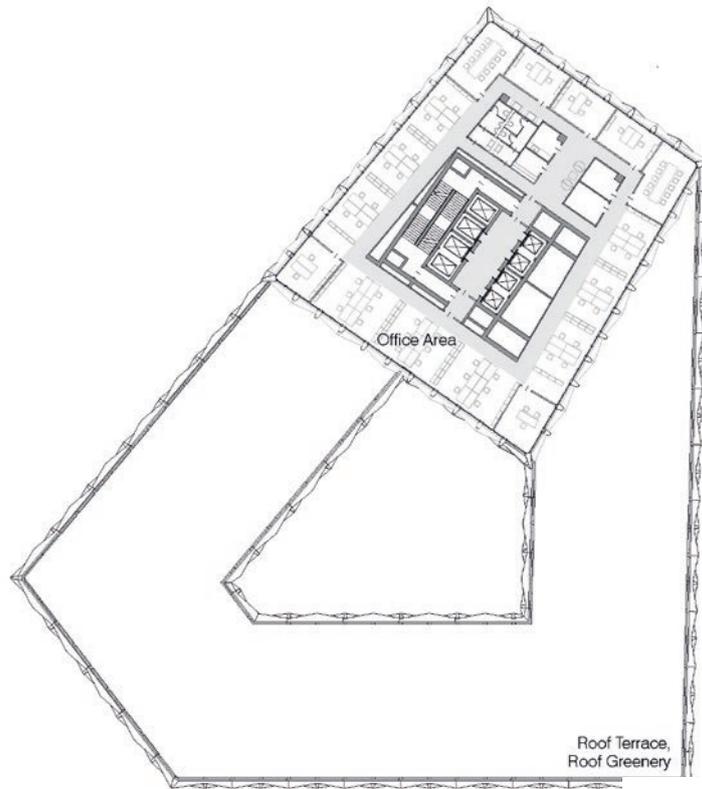


Atmosphere at the Canteen Terrace





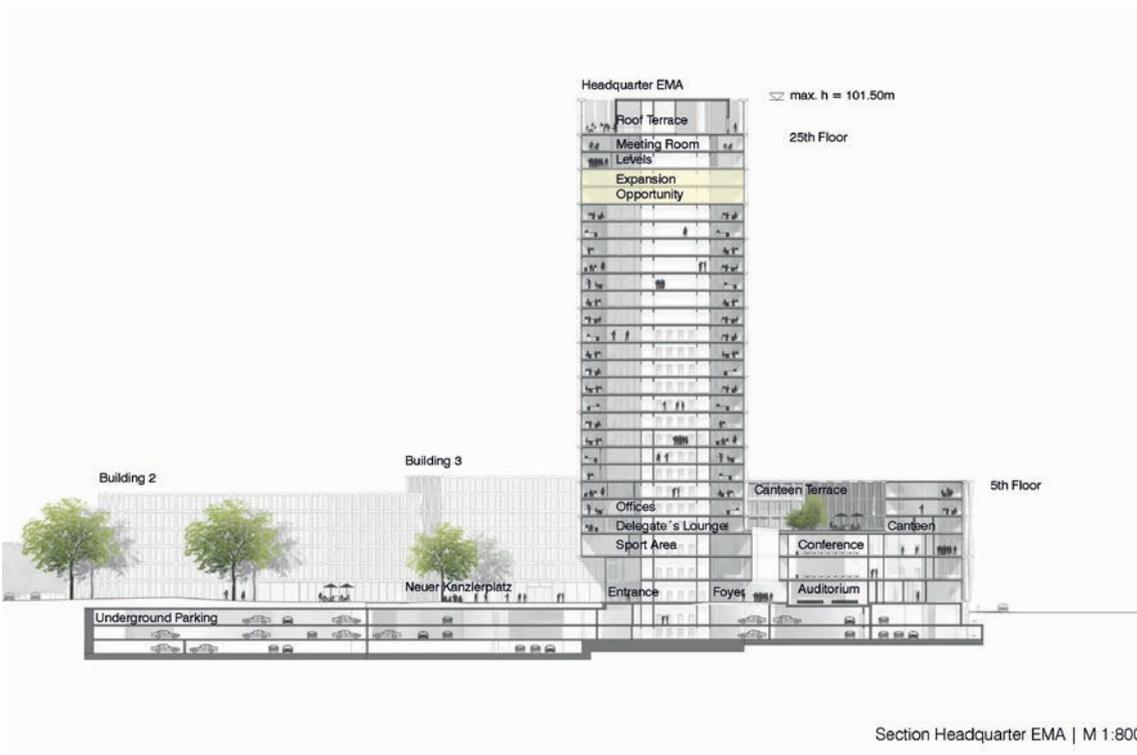
Atmosphere at the roof terrace



Typical Office Floor | 1:500

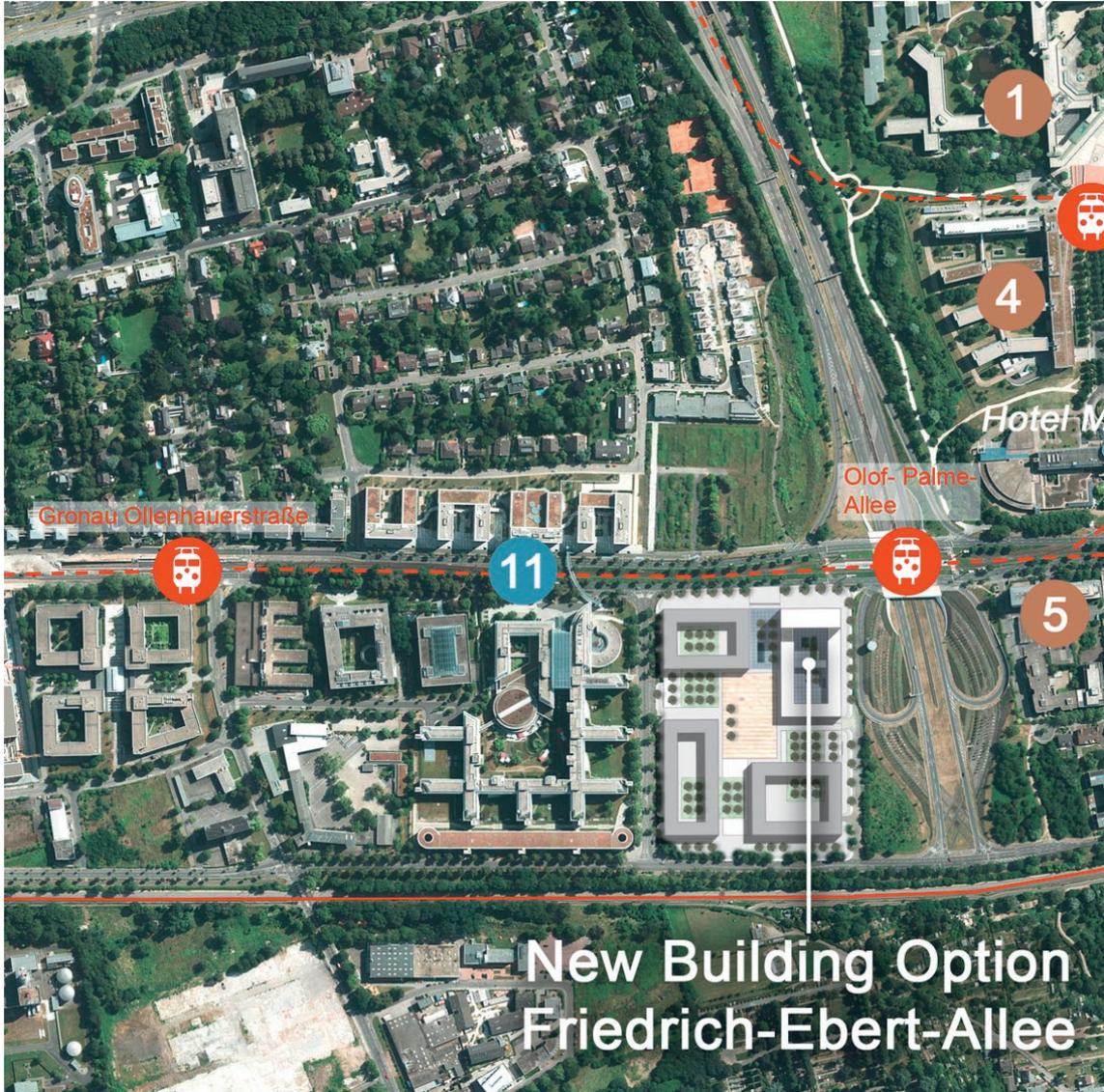


View from the Reuterbrücke

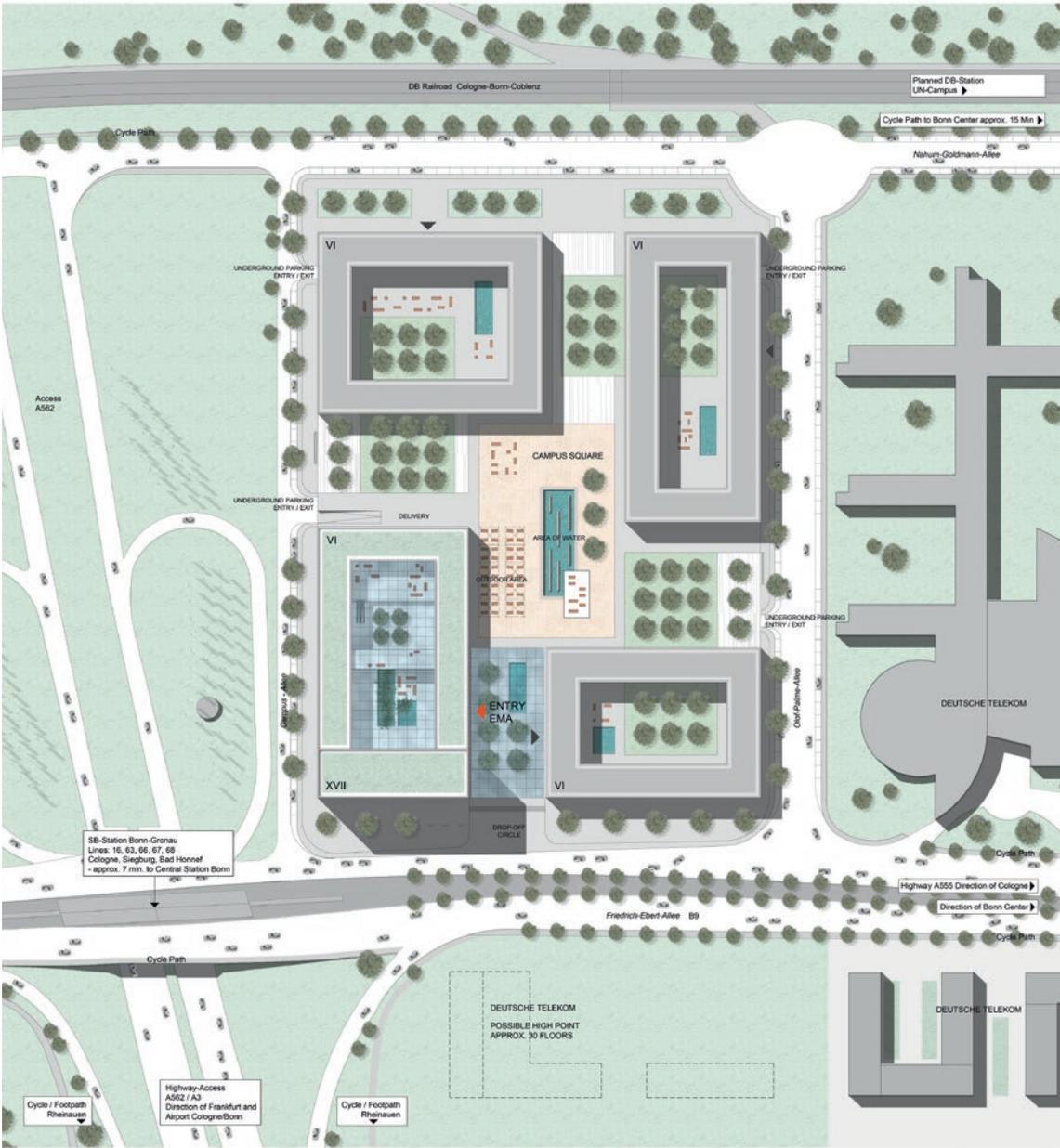


Section Headquarter EMA | M 1:800

8.2.2 New building option Friedrich-Ebert-Allee







Site Plan



North - East Elevation

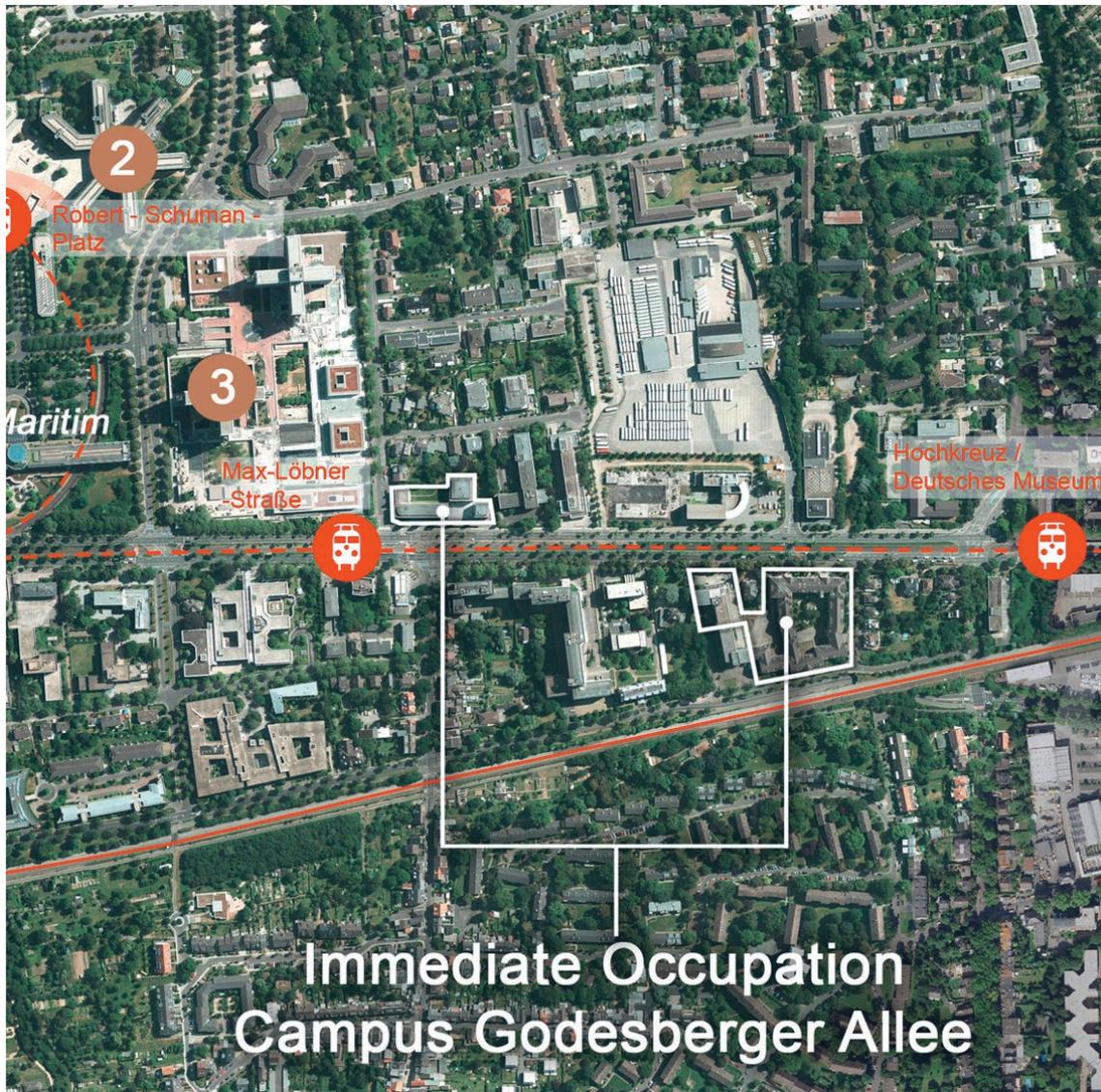


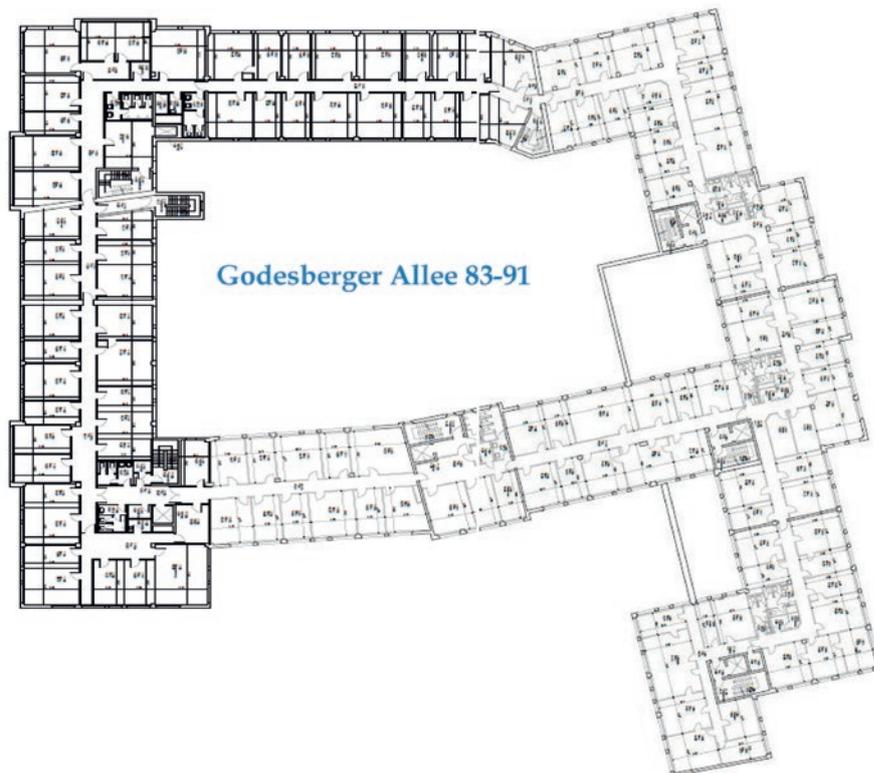
Ground Floor

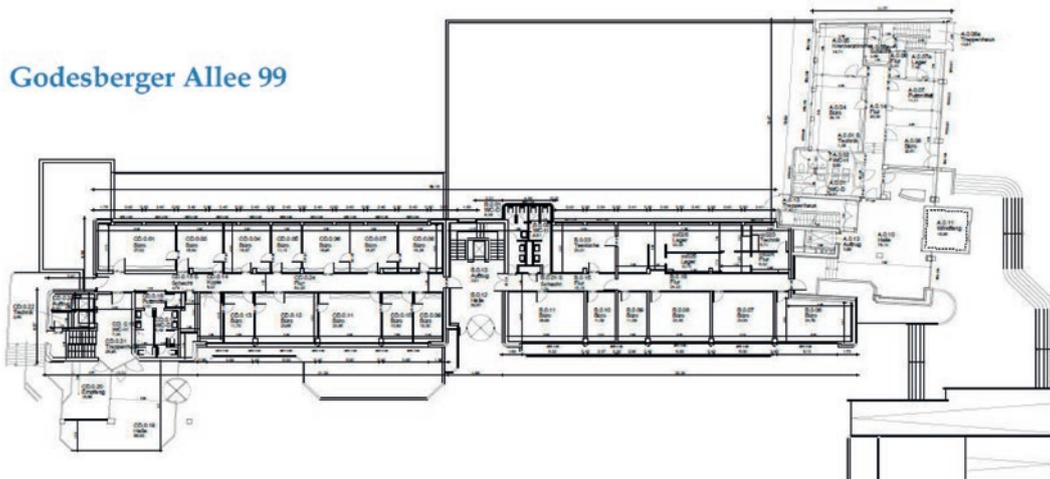




8.2.3 Immediate occupancy option Campus Godesberger Allee – an exemplary customised building complex

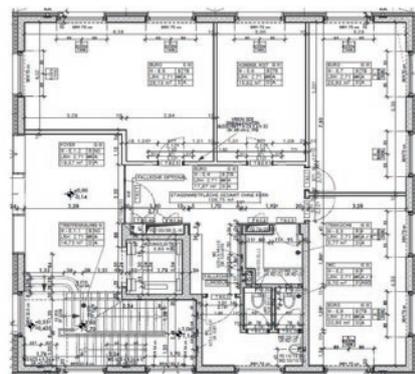
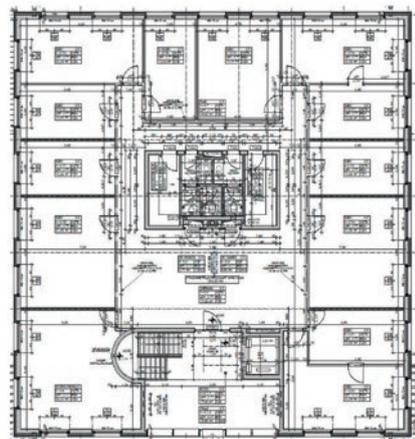
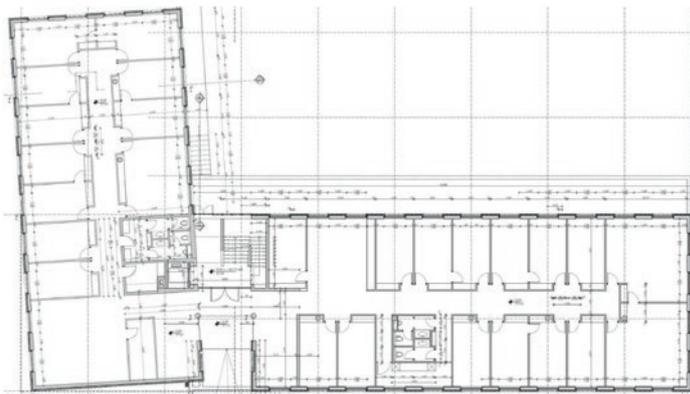






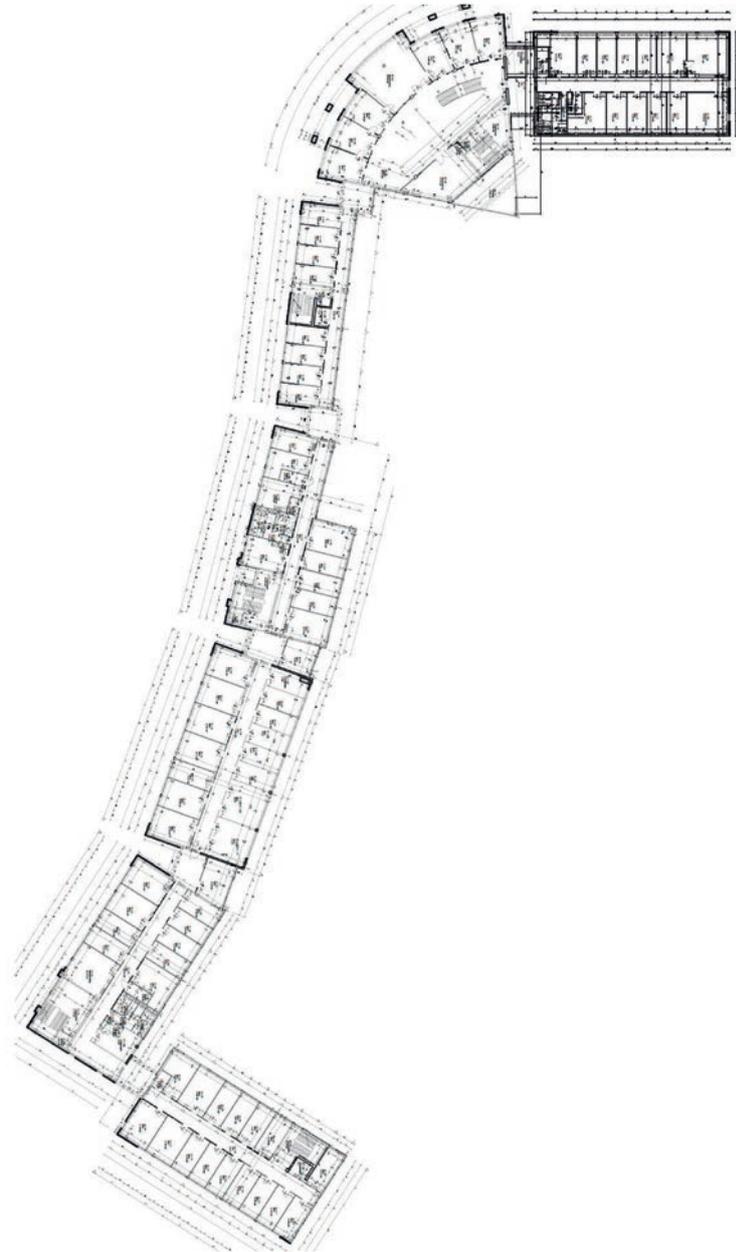


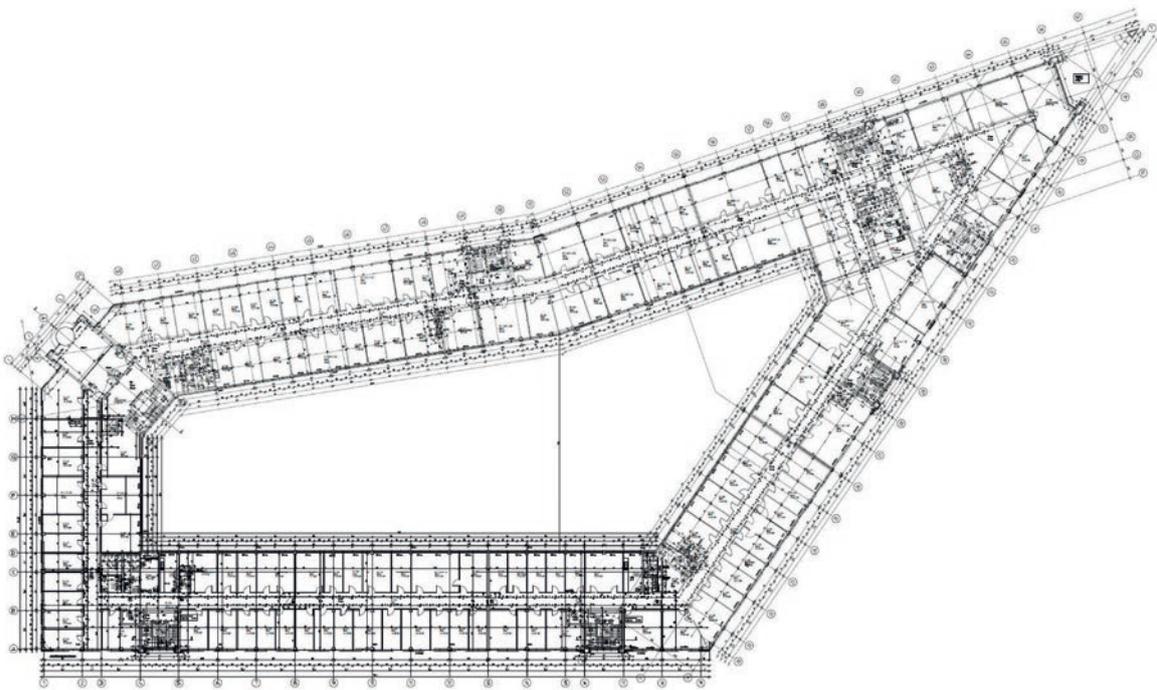
Godesberger Allee 150-154



8.2.4 Immediate occupancy option Am Propsthof in Bonn-Endenich







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Bucket Dortmund
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