

International Architectural Competition

for the Architectural Design of

**the New Building of the National Library
of the Czech Republic in Prague**

PROTOCOL

International Architectural Competition

for the Architectural Design of

**the New Building of the National Library
of the Czech Republic in Prague**

Stage I.

Date of the evaluation meeting of the jury
October 23 – 26, 2006

I. Members of the jury

The following members of the jury took part in jury's deliberations:

Ms Eva Jiřičná
Ms Zaha Hadid
Ms Irene Wiese von Ofen
Ms José Grinberg – UIA representative
Mr Petr Bílek
Mr Jan Kněžínek
Mr Vlastimil Ježek
Mr Tony Mc Laughlin
Ms Bohdana Stoklasová – alternate jury member
Mr John Eisler – alternate jury member

Mr Wolfgang Tochtermann – Director of the UIA Competition Committee

II. Settlement of procedural issues of the jury's activities to be adopted for the Stage I of the international architectural competition to propose the new building of the Czech National Library

The jury

In the course of its first sitting

1. The jury elected the president of the competition jury (cf. Article IV) and delineated its working methods.
2. The jury made itself familiar with the number of entries, which joined the competition.
3. The jury was informed on the contents of the Technical Committee report.
4. The jury decided not to eliminate any of the entries on the basis of the Technical Committee report except the entry No. 355, which was eliminated from further procedures on the basis of its late arrival.
5. The jury re-evaluated the project assessment criteria and it decided not to apply them individually to their full weight but rather to subject all proposals to the assessment of their architectural value per se and the quality of each solution in general.
6. The jury decided that the first four preliminary elimination rounds were to be run according to the following selection/elimination pattern:
 - To advance from the 1st preliminary round to the 2nd preliminary round just one positive vote from the total of eight was good enough,
 - To advance from the 2nd preliminary round to the 3rd preliminary round the two positive votes from the total of eight were good enough,
 - To advance from the 3rd preliminary round to the 4th preliminary round the three positive votes from the total of eight were good enough,

- To advance from the 4th preliminary round to the 5th preliminary round the three positive votes from the total of eight were good enough,
7. During the 5th preliminary round (and in case of necessity in those to follow) the proposals to advance to the Stage II of the competition were to be selected on the basis of a simple majority of the ballots cast by the jurors.
 8. The voting of the jury was to be recorded in the official protocol having the form of a table.

III. Confidentiality issues

The President of the competition jury verified the authority of the present members and alternate members of the jury to take part in the jury's deliberations.

All the present members and alternate members of the jury were presented the competition entries subject to the jury's assessment and all the members of the jury and alternate members of the jury signed a statutory statement regarding the confidentiality of the jury's deliberations.

All the members and alternate members of the jury are obliged to maintain a strict confidentiality relative to all issues and information they may become familiar with in connection with discharging their duties of the international competition jurors.

IV. MINUTES OF THE MEETING OF THE INTERNATIONAL COMPETITION JURY

Date: **23. 10. 2006**

Venue: Mirror Chapel, Klementinum, Prague

The Jury meeting for evaluation of 355 submissions for the International Competition was opened officially by Mr. Vlastimil Ježek, Director General of the National Library of the Czech Republic in the late afternoon hours on 23.10.2006.

Ms. Eva Jiříčná was elected as President of the Jury and Mr. Petr Bílek as Vice-President during the first meeting of the Jury. Furthermore, a discussion was held regarding the non-compliant submissions and subsequently it was decided by a vote that project no. 355 would be excluded from evaluation because it had been sent and received after the deadlines laid down in the Competition Regulations. Projects with the parts of documentation missing (model, reports, etc.) were not eliminated prior to evaluation.

Date: **24. 10. 2006**

Venue: Žofin Palace, Prague

The Jury met at 8:30 a. m. in the main hall of the Žofin Palace and sufficient time was allowed for the Jury members to go through the different projects individually.

Afterwards, the Jury sat down to review briefly the Competition Conditions and to set the criteria of evaluation, i.e. aspects of

- Urban planning
- Library typology and planning
- Building architecture

Subsequently, Mr. Vlastimil Ježek, Director General of the National Library of the Czech Republic, presented a general opinion on behalf of the library to the effect that the proposed new building should be user-friendly, that it should provide good public (airy) spaces, good quality of lighting, should use the best of the current information technology and that it should be a building that related well with its park / garden setting. He further stated that the criteria of placing the National Archival Collections in the above-the-ground floors could be dropped if the architecture of the building would be sufficiently appealing.

Mr. Jan Kněžínek, Director of the Heritage Department, stated on behalf of the Municipality of Prague that they currently established no conditions at this stage.

Ms. Eva Jiříčná, President of the Jury, expressed an opinion that the Jury members must vote in conformity with their professional experience and best judgment, with no regard to the requirements and opinions of various authorities involved.

The following Jury members were appointed for the first round of voting:

Ms Eva Jiřičná – President

Mr Vlastimil Jeřek

Mr José Grinberg

Mr Petr Bilek

Mr Jan Kněžinek

Mr Tony McLaughlin

Mr John Eisler

223 submissions were eliminated in the first round; 131 entries advanced to the second round.

The following 223 submissions were eliminated from further evaluation:

001, 002, 005, 009, 010, 013, 014, 015, 017, 018, 019, 020, 021, 022, 023, 024, 025, 026, 027, 030, 032, 034, 036, 037, 038, 039, 040, 042, 043, 044, 045, 046, 047, 048, 050, 051, 053, 054, 056, 057, 058, 059, 060, 061, 063, 064, 065, 066, 067, 069, 070, 071, 072, 073, 076, 077, 078, 079, 083, 084, 085, 086, 087, 090, 091, 092, 093, 095, 096, 097, 098, 099, 101, 102, 105, 107, 108, 109, 115, 116, 117, 119, 120, 122, 123, 126, 127, 128, 129, 130, 131, 132, 135, 136, 137, 138, 140, 141, 144, 145, 147, 148, 149, 150, 152, 153, 154, 156, 157, 159, 162, 163, 164, 167, 168, 169, 170, 171, 172, 174, 175, 177, 178, 179, 180, 182, 183, 185, 186, 188, 190, 191, 192, 193, 194, 196, 197, 200, 201, 205, 206, 207, 208, 209, 210, 213, 214, 216, 217, 219, 220, 221, 224, 227, 229, 230, 233, 236, 238, 239, 241, 242, 243, 245, 247, 248, 249, 250, 251, 252, 256, 260, 261, 264, 265, 267, 268, 269, 271, 273, 277, 278, 280, 282, 283, 287, 289, 290, 292, 294, 298, 299, 300, 301, 303, 305, 306, 307, 309, 310, 311, 313, 315, 316, 317, 319, 322, 325, 326, 327, 328, 329, 330, 334, 335, 336, 338, 339, 342, 344, 346, 351, 354.

The following Jury members were appointed for the second round of voting:

Ms Eva Jiřičná – President

Mr Vlastimil Jeřek

Mr José Grinberg

Mr Petr Bilek

Mr Jan Kněžinek

Mr Tony McLaughlin

Mr John Eisler

72 submissions were eliminated in the second round; 59 entries advanced to the third round.

The following 72 submissions were eliminated from further evaluation:

007, 011, 016, 028, 031, 033, 035, 055, 080, 089, 094, 100, 111, 112, 114, 124, 133, 139, 142, 143, 146, 151, 155, 166, 173, 176, 189, 195, 202, 204, 211, 212, 215, 218, 223, 225, 232, 234, 235, 244, 246, 257, 258, 259, 263, 266, 274, 275, 279, 284, 285, 286, 288, 293, 295, 296, 302, 308, 318, 321, 323, 324, 331, 332, 333, 337, 340, 341, 343, 345, 347, 350.

The following Jury members were appointed for the third round of voting:

Ms Eva Jiřičná – President

Ms Irene Wiese-von Ofen

Mr Vlastimil Jeřek

Mr José Grinberg

Mr Petr Bilek

Mr Jan Kněžínek
Mr Tony McLaughlin
Mr John Eisler

23 submissions were eliminated in the third round; 36 entries advanced to the fourth round.

The following 23 submissions were eliminated from further evaluation:

003, 006, 008, 052, 062, 075, 081, 088, 106, 110, 134, 158, 184, 198, 226, 228, 231, 253, 254, 270, 272, 291, 353.

Date: **25. 10. 2006**

Venue: Žofín Palace, Prague

The Jury met at 8:30 a. m. and started to study in detail the submitted designs.

The fourth evaluation round was opened and a discussion was held on the individual designs.

The following Jury members were appointed for the fourth and fifth round of voting:

Ms Eva Jiříčková – President
Ms Zaha Hadid
Ms Irene Wiese-von Ofen
Mr Vlastimil Ježek
Mr José Grinberg
Mr Petr Bílek
Mr Jan Kněžínek
Mr John Eisler

The following 36 designs were evaluated in the fourth round:

004, 012, 029, 041, 049, 068, 074, 082, 103, 104, 113, 118, 121, 125, 160, 161, 165, 181, 187, 199, 203, 222, 237, 240, 255, 262, 276, 281, 297, 304, 312, 314, 320, 348, 349, 352.

The following 20 submissions were eliminated from further evaluation:

004, 012, 068, 074, 082, 104, 113, 118, 160, 165, 181, 187, 222, 255, 276, 281, 304, 312, 320, 352.

The following 9 entries were eliminated in the fifth round:

029, 041, 049, 103, 121, 199, 203, 348, 349.

The following 7 designs advance to the Stage II:

125, 161, 237, 240, 262, 297, 314.

Date: **26.10. 2006**

The process of finalizing the total number of 8 entries for the Stage II and agreeing on the final report continued on Thursday in the presence of the following members of the Jury appointed for the sixth round of voting:

Ms Eva Jiřičná – President

Ms Irene Wiese-von Ofen

Ms Bohdana Stoklasová

Mr Tony McLaughlin

Mr Petr Bílek

Mr John Eisler

Two of the members proposed to re-consider the inclusion of project No. 199 in the final number of 8 entries. A lengthy discussion took place in the presence of the above mentioned and Mr. Wolfgang Tochtermann, UIA observer. The present members of the Jury expressed a variety of differing opinions. The jury voted as follows: number of votes for the entry 5, against 1.

Design 199 has been consequently included in the final 8 designs advancing to the Stage II.

The following persons attended most of Jury sessions as well:

Mr. Wolfgang Tochtermann, Observer for UIA

Mr. Václav Králíček, Architect, Expert

Mr. František Formánek, Architect, Expert

Concluding its final session, the jury would like to state the following:

It is included in the competition conditions that if the final decision of the jury is inconclusive and two or three projects obtain the same number of votes, the jury may award up to three ex-aequo prizes, in which case it may lift anonymity and request an interview with the winners in order to designate the outright winner of the competition. The competitors are required to be ready for such an eventuality and be ready to send a responsible person on a very short notice – 16 hours - to represent them in such a circumstance at an interview during the final meeting of the jury on Friday March 2, 2007.

The jury would like to remind the competitors that the winner of the competition will have to give, by the documentation presented in the second stage of the competition, the assurance to the jury of his professional competence to realize the winning entry. Please read carefully the Evaluation Criteria of the Jury and be aware of the relationship of the proposed building to the historical context of the City of Prague, especially as the site is situated in the immediate vicinity of the listed World Heritage Site. It is up to the author of each design proposal to consider carefully the feasibility of the proposal as well as the feasibility of obtaining a Planning Approval for a project on such a sensitive site.

In addition to the above, please take into consideration the issue of maintenance of the external skin and propose a cleaning manual at least in its basic principles.

The anonymity has been maintained and carefully guarded and any communication with the organizers, advisers, members of the jury and/or any other involved persons such as the experts involved with the competition organization or assessment will not be accepted.

The Jury feels that the teams should reconsider the public entrances onto the site and to the building. The competitors are requested to evaluate the vehicle entrance and exit sequence for the project in such a way, that exiting is by the western service road toward Badeniho Street.

It is expected that the competitors will include the advice and direction of other design consultants during the second stage. All the competitors should make provisions in their proposal for the entire collection of 10 million volumes, which have to be accommodated in the new building of the National Library. The 3.6 million volumes of the National Archival Collections, as stated in the Program, are to be situated in above ground levels. There was a request in the brief not to place the entire archival collection underground; it is recommended that an alternative be considered. If an automated storage system is proposed it should guarantee that containers used for the National Archival Collection and other collections will not change their location during use. All items should maintain the same address within the storage system at all times.

The Jury in the final session of the Stage I proceedings also concluded that in Stage II there **will not be a Questions and Answers phase**.

Recommendations to the 8 entries advancing to the Stage II

125 – The Jury recognized the sculptural quality of the design. They did however have concerns about materials and color. Furthermore, the Jury expressed a concern regarding the degree of permeability of the external skin. The Jury recommends that the teams pay particular attention to the Old City and The Castle and other important landmarks. The Jury requests that in the second stage the design team give consideration and comment on buildability and maintenance of the roof, especially its glass portion.

161 – The Jury is concerned regarding the under provision of storage area compared to the specified requirements of the program. The Jury considers the proposed idea of a translucent skin interesting, but requests that the team reconsider the implications of a totally transparent facade in particular from the point of view of the building environmental conditions. It has been suggested that the building would profit from a lower height and reduced overall bulk by possibly incorporating more space below grade.

237 – The Jury selected the scheme for its originality and visionary quality; on the other hand, the Jury recommends a serious reappraisal of the total buildability, feasibility and functionality of the building and its skin as a library. The Jury would like a further clarification and explanation of the second skin as the Jury is intrigued by its applications as a shading structure, a solar collector, and as a canopy and rain protection device.

240 – The Jury recognized the courage of the team to propose a high-rise scheme assuming it is fully aware of the fact that to achieve acceptance and approval for such a scheme will be very difficult. The Jury requests and appeals to the competitors that they give further consideration to the height and volume (massing) especially of the high-rise component of their proposal.

262 – Contrary to what is shown on the drawings and section, the model shows the walls of the first below ground floors to be opaque. The Jury is concerned about the acoustic properties of ETFE air cushions, in particular “rain noise”. The Jury also requests further clarification of the structural concept in particular of the perimeter cantilever walls. The Jury also feels that it is hard to justify the overall volume in comparison with the total area of built area within.

297 – The Jury liked the internal organization and functionality of the building and its orientation of public spaces relative to Prague Castle. However, the building should be more open to the neighboring park. There was a request in the brief not to place the entire archival collection underground; it is recommended that an alternative be considered. The Jury also recommends that the team should reconsider the color of the external skin. The Jury requests that the team shows provision for the required number of parking spaces. The proposed automated storage system should guarantee that containers used for the National Archival Collection and other collections will not change their location during use. All items should maintain the same address within the storage system at all times.

314 – The Jury would like an explanation of the environmental quality of the external skin in relation to the open stack space at level 243.5. The Jury did not find the team’s technical report and requires that the team provides this report in the second stage to comply with the brief.

199 – The Jury respects the rigor of the organization of the stacks and the reading spaces; however, it strongly recommends that the team give consideration as to how they would introduce an informal atmosphere in particular to the public spaces, which should have a more generous nature, especially in relationship to the park and to the exterior of the building. The Jury also finds the service module on the west side of the building to be rather austere. The Jury is also concerned about the environmental impact of the roof as represented in the model and the plans and recommends that the team reconsiders alternate day-lighting systems.

International Architectural Competition

for the Architectural Design of

**the New Building of the National Library
of the Czech Republic in Prague**

Stage II.

Date of the evaluation meeting of the jury
February 28 – March 3, 2007

I. The Jury

The deliberations of the Jury were attended by the following jurors:

Ms Eva Jiříčná – President of the Jury
Ms Zaha Hadid
Ms Irene Wiese von Ofen
Mr José Grinberg
Mr Petr Bílek – Vice-president of the Jury
Mr Jan Kněžínek
Mr Vlastimil Ježek
Mr Tony Mc Laughlin
Ms Bohdana Stoklasová – alternate member of the Jury
Mr John Eisler – alternate member of the Jury

Mr Wolfgang Tochtermann – Director of the UIA Competition Committee

II. The Stage II assessment of the proposals of the new building of the Czech National Library taking part in the international architectural competition there of

The list of entries to be assessed:

Proposals Number – Identification Code
262 - 111789SC
240 - 110505SG
237 - 130655DR
297 - 180495XY
125 - XQ3374
314 - 192837AZ
199 - 291501YO
161 - 598726PR

To make the situation of the jurors easier, the assessed proposals were entered into the Stage II of the selection process under the same identification numbers as they were bearing during the Stage I. of the competition.

The jury evaluated the individual entries in compliance with the assessment criteria set forth in the competition's conditions.

III. Assessment criteria:

- A. The quality of the general disposition of the proposed solution relative to the location of the construction site and its relation to its wider environs
- B. The overall architectural quality of the solution including the solution of the interiors of the building
- C. The functional, dispositional and operational quality of the proposal
- D. Degree to which the program requirements were met by the proposal
- E. Economical adequacy and operational frugality of the building

IV. The assessment procedure:

In the Stage II of the international architectural competition, the following assessment procedure was agreed upon:

The proposal selected to be the best of all would be the one, which meets in general best the above-enumerated criteria, i.e. the proposal that the jury evaluates as being the best general solution of **The New Building of the National Library of the Czech Republic**.

The assessments of the individual entries will be itemized relative to the individual assessment criteria and the pros and cons of each proposal will be pointed out to indicate to what extent the authors of the proposal in question met the challenge of the developer's program.

The best proposal will be the one, which will obtain from the voting jury the maximum number of pros and the minimum number of cons.

V. Assessments of the individual proposals

240

1. The overall quality of the solution; emplacement of the building into its surroundings
The regulations required appear to be met by the submitted proposal. Amongst all the entries, this proposal represents the solution placed nearest to the edge of Letná plateau and the slope of Vltava River valley. Thus, the building will be most visible from the riverbank of the Old Town. The shaping of the structure is very convincing. There exists a critical crossing of the public transport flow and the exit driveway from the parking area. The professionally prepared presentation is appreciated by the jury.
2. General architectural quality of the proposal, including the solution of the interiors
The geometry of the high-rise mass of the building (20 storied aboveground structure) turned towards the Prague panorama has been handled with a considerable bravura in this proposal. The high-rise building of the library has cleverly beveled edges of its basic shape of a rectangular block whereby the required relief of the volume is accomplished as well as a better visual perception of the mass from all possible directions of observation. The high-rise part of the building rests on the compact four-storied plinth representing room for all the studies, reading rooms and offices. There are very interesting interiors proposed for the public sections of the floor levels dedicated predominantly to observation purposes.
3. Quality of the solution from the point of view of functionality, dispositions and operability
There is a well-founded system of vertical communication cores having unequivocally assigned their respective specific functions. This feature is replicated also in the good operational schematics of the library per se. There are minor shortcomings found relative to the horizontal flow of library materials at the 3rd and 4th floor. Operation of the individual departments appears to be economical. The larger areas were assigned to the public space located at the 19th and 20th floor, i.e. the lecture hall, exhibition area and restaurant.
4. Degree to which the program requirements are met
The proposal exceeds the total floor area as stipulated by the building program.
5. Economical adequacy and operational frugality
The standard skeleton structure is used both in the basement and in the sections above grade. For the high-rise part of the building the dense raster of façade columns is proposed, which facilitates the economies of this solution. Some columns are missing at the 1st floor and they should be included in the project. The jury assumes that the external envelope of the building is made from the layer of cast glass and insulating double-glazed panes. This solution brings into the building a large thermal gain and therefore the energy requirements of the building will be high, making the operating costs of the building high as well.

1. The overall quality of the solution; emplacement of the building into its surroundings
Location of the building at the building site is at a sufficient distance and it avoids the tunnel protected area; proposal meets the requirements stated in the regulations. The jury views with favor the solution of the entrance space for public, which is accessible from all directions of the Letná plain. The access and exit driveways for vehicles are free of any conflict.
2. General architectural quality of the proposal, including the solution of the interiors
The simple, droplet-like shape of the building is, thanks to its simple form, sufficiently neutral not to dominate its surroundings and interfere with views of the Prague castle, and yet strong enough to state its unique personality. However, by using the reflexive surface – mercury droplet – the visual impression of the building becomes seemingly larger than it in fact is and the overall impression becomes oversized and bulky. A little bit greater transparency of the façade would be accepted more positively by the jury. The interior of the building is sufficiently interesting; the studies located on the galleries and the escalators in the hall create a futuristic space.
3. Quality of the solution from the point of view of functionality, dispositions and operability
Operational regime of the building is based on the three public and three internal transport verticals, which appear to be quite sufficient for the building to function well. By locating the book storage areas into the storage rooms situated one above the other inside the central reinforced concrete cylinder facilitates the shortest possible routs of material flow inside the building. The apparent shortcomings of the transport system using “telelift” can be remedied. The height of ceilings in the individual rooms seems to be insufficient bearing in mind the presence of horizontal transportation of books plus distribution piping of the air-conditioned air.
4. Degree to which the program requirements are met
The floor area of the building as stipulated by the building program appears to be met by the presented project.
5. Economical adequacy and operational frugality
The central circular storage section and the whole of the basement are filled with an economical skeleton. The galleries are created using pre-tensioned boxed bridge beams and their use would certainly reflect itself in the procurement costs. The design represents the peripheral shell – i.e. 3D steel rafter with dual covering (metal-coated glass laminate and dual ETFE foil). From this arrangement follow unreasonably high thermal gains of the interior part of the building representing large volume space, and therefore quite high requirements relative to the air conditioning and ventilation; hence, the operational expenses and costs of the building can be expected to be rather large.

1. The overall quality of the solution; emplacement of the building into its surroundings
Regulation conditions were met by the submitted project. There is an erroneous solution of the exit route from the parking area towards the M. Horákové Street. The height of the building will be manifest in the Prague panorama (viewed from the riverbank). The mockup of the building, being worked out to a considerable detail and relating to the model of wider relationships with the surroundings of the library made a favorable impression on the jury. The depth of the graphic rendering of the project remained unchanged at the level of detail required for the 1st Stage of the competition. The jury was disappointed by the lack of details presented by the proposal in question.
2. General architectural quality of the proposal, including the solution of the interiors
Interesting and articulated architecture with a dual peripheral canopy – the internal made of glass and the external comprising corrugated shield of the fixed shading structure. The interior views into the glass-paned hall where the visitors and transported books are moving along the catwalks.
3. Quality of the solution from the point of view of functionality, dispositions and operability
The presented conception of the three functionally different towers under the lace-like covering shell of sunlight scattering elements and lamellas failed to solve the vertical and in particular the horizontal transportation to a satisfaction from the throughput point of view. The staircases are not sufficiently dimensioned and the hygienic facilities are missing altogether. The level of detail available to the jury prevented any assessment of various important operational aspects of the proposed building.
4. Degree to which the program requirements are met
The same reasons as those aired above prevented jury to check whether the conditions of the program were met or not. The only thing that can be stated to some degree of confidence is the fact that the overall requirements of the individual departments relative to the floor area were, roughly speaking, met.
5. Economical adequacy and operational frugality
The basic load-carrying structure is of the skeleton type and it appears to be optimal from the economical point of view. Rather demanding (both in terms of the quality and ease of implementation) external envelope of the building, i.e. the spatial rafter carrying the glazed façade and shading lamellas will bring about the elevated developer's costs (procurement, building phase). As far as the internal environment is concerned, the higher costs can be expected relative to the heating and cooling machinery and equipment. On the other hand, the operating costs of the building should stay within expected normal limits. The thermal inertia of the building, as required by the regulations does not seem to be wholly satisfactorily solved by the project.

1. The overall quality of the solution; emplacement of the building into its surroundings
The emplacement of the National Library complies with the conditions of the competition's program. The distances from the surrounding buildings and from the engineering networks are compliant with the stated requirements. The sculptured building will manifest itself by its height in the Prague panorama (view from the riverbank). The link to the public traffic does not meet the requirements of the building program. The driveway from the parking area terminates in the M. Horákové Street. The proposal captivates by its suspended heart enclosing the National Archives Collection.
2. General architectural quality of the proposal, including the solution of the interiors
There is a general strong spiritual dimension emanating from the project; inventive treatment of the mass of the building, i.e. the sculpture made of concrete and glass. The interior is divided into a multifaceted space with views towards various levels of both interior and exterior.
3. Quality of the solution from the point of view of functionality, dispositions and operability
Complicated handling of both the visitors' and the librarians' traffic; there are some mistakes in this sense. The variations of the elevations of the floors may appear as being beneficial from the point of view of a creative interior, but in its suggested form it is quite unacceptable if assessed from the point of view of a daily movement of books. The various departments are not linked to the traffic routs and with each other, which is indispensable feature of the building dedicated to a work with books. The solution of sanitary equipment for the public is quite unsuitable.
4. Degree to which the program requirements are met
Bearing in mind the current degree of detailed preparation of the project one can say that the requirements relative to the floor area are roughly met.
5. Economical adequacy and operational frugality
The basement section of the building is proposed to meet requirements of economy; the above grade part of the building is covered by an irregular tent-like steel superstructure, which is to bear enormous load due to National Archives Collection. All this can be implemented only at a considerable cost. The peripheral envelope is made from the stainless steel sheets and large glazed windows. The project does not meet the requirement of economical operation and it would be necessary to adopt rather severe measures to remedy this shortcoming.

1. The overall quality of the solution; emplacement of the building into its surroundings
Emplacement of the NL building on its site corresponds to the required criteria. The regulation lines have been observed by the project. The height of the four-storied building can be considered as a favorable factor relative to existing structures in the neighborhood. Transport/traffic issues have been solved in accordance with the requirements of the program. Jury appreciated simple and clear operational arrangements proposed by the project. However, the jury expected extension of the architectural expression from the authors on occasion of the 2nd round of the competition, which unfortunately never took place.
2. General architectural quality of the proposal, including the solution of the interiors
There is a quality in this proposal in terms of solving the operational issues in the absolutely least possible above-ground volume of the building. This goal was achieved at the expense of a rather dull rectangular shape of the building. Unfortunately, the horizontal saw-tooth shaped glazing of the facades did not bring about expected improvement of the visual quality of the building. The adopted system of design creates interesting interior tectonics.
3. Quality of the solution from the point of view of functionality, dispositions and operability
This competition entry chose a simple conception of chaining the individual operating units (administration, storage, public space for visitors) into the blocks placed one above the other. Despite this solution, there are certain shortcomings of medium severity in this project.
4. Degree to which the program requirements are met
The proposal meets all the floor area requirements stipulated by the program.
5. Economical adequacy and operational frugality
The load carrying structure is of the wide-spaced kind; this will manifest itself in higher construction costs. The peripheral envelope of the building is all-glazed surface with insulation panels within. The horizontal saw-tooth arrangement of the façade makes the overall glazed area even larger and thus, it will increase the procurement costs of the building. The good thermal stability of the building facilitates economical operation of the building. In general, just standard expenses can be expected relative to providing the building with necessary machinery regulating internal environment of the building.

1. The overall quality of the solution; emplacement of the building into its surroundings
The spatial conditions (regulation lines) are not observed by this proposal in its basement section located on the side towards the future tunnel. The project, as opposed to other entries, makes use of just one basement floor level for both parking and supplies handling. The high-rise section of the stores is sufficiently distant from the existing surrounding structures. As far as the panorama is concerned, the building must be, due to its specific context, considered as the high-rise building.
2. General architectural quality of the proposal, including the solution of the interiors
The shaping of the structure makes use of a flat rectangular block from which rises conspicuous axially twisted tall tower. However, the glass block section leaves a rather heavy impression. The entire appearance of the structure suffers from a lack of lightness and this flaw applies on only to the exterior of the building but thanks to technology used also to its interior.
3. Quality of the solution from the point of view of functionality, dispositions and operability
Operation of the library manifests shortcomings of a medium severity. The employees' section handling library's collection, administration and operation of stores are all rational and clear to understand. The shortcomings, which can be remedied, are found in the public section of the library, in particular in the book borrowing zone, where in an attempt to make operation as simple as possible the space became overfilled with people and the transparency of the organization of operations became quite blurred.
4. Degree to which the program requirements are met
The floor areas standards are nominally met; however, the communications' share is larger than that, which could be considered rational. This results in a lack of room in the study areas.
5. Economical adequacy and operational frugality
The above-grade flat part of the building uses an expensive superstructure of the steel rafter grille. The external envelope is mostly glazed (insulating double-glazing), shielded by Venetian blinds with obvious impact on the procurement costs. On the other hand, it can be expected that operational costs of the building will be lower than average.

1. The overall quality of the solution; emplacement of the building into its surroundings

The building makes use of the construction site in full. The regulation lines in the west, south and east are observed by the project. The northern façade of the building is anchored to the cantilevered console plate situated above the body of the tunnel; this solution does not respect the recommendation of the materials issued for the organization of the competition. The proposed solution is technically feasible, but it will have to be consulted and coordinated with the team working on the tunnel project. The project has its own transparent conception. However, the jury is of the opinion that the building does not create the image of the contemporary idea of the national library and appears to be too monotonous in its surroundings. The jury appreciated professional preparation of the project supported by numerous external expert consultations.

2. General architectural quality of the proposal, including the solution of the interiors

From the outside, the simple orthogonal glazed cubic shape with a slanted northern façade, offers much more in its internal arrangement. Above the walk-through entrance hall – serving as a meeting point – the closed transparent boxes of different coloring representing individual dedicated study rooms are freely hovering in space and are mutually linked by lightweight catwalks. There is an interesting solution of the lighting conditions in the study rooms by a scattered light provided by a specially designed ceiling and its respective panel. The external appearance of the building is enlivened on its southern façade where is rising the observation ramp, terminated by a terrace with a coffee house and observation restaurant at the top floor.

3. Quality of the solution from the point of view of functionality, dispositions and operability

The visitors' and employees' traffic is solved in an acceptable manner. There are minor modifications required in locations of checkpoints. Other operational relationships were upheld by the project. The books are proposed to be stored in two separate robot-operated stores. It is claimed that by adopting this solution it is possible to save floor area in comparison to that demanded by the building program. Following the expert-made calculations, it is necessary to state that the proposed floor areas are not sufficient in this design arrangement using the technology proposed. The transport of books is proposed to terminate at the central service desk; the links to the study rooms are missing. The positive aspect of the proposed project is the insertion of the intermediate technical floor level to take care of distribution of media.

4. Degree to which the program requirements are met

The floor area standard was met by the project. However, there is a shortage of floor area in the stores of books.

5. Economical adequacy and operational frugality

Basement section of the building represents a reinforced concrete structure. The above-grade section is the rigid box connected with the rafter-held roof plate; this represents a bit more expensive than a standard solution. The external envelope of the building is the totally double-glazed surface shaded by metallic print. This will manifest itself in large thermal gains projecting themselves in procurement as well as operational costs relative to the air conditioning, heating and cooling.

1. The overall quality of the solution; emplacement of the building into its surroundings
The basement partially oversteps the regulation line in contact with the tunnel. The regulation lines applicable to the above-grade part of the building are met by the basic volume of the structure. The jury appreciates integration of the building into its park environment and considers the architecture of this proposal as unique and modern not only from the visual point of view but also due to the technologies proposed by the project. The mass growing smoothly from the Letná plain does not represent a disturbing but rather a natural element, which by its shape evokes impression of a natural component of a landscape (a hill). The resulting perceived height of the building becomes optically lower than that perceived in the buildings having firmly delineated socket.
2. General architectural quality of the proposal, including the solution of the interiors
In view of the jury the original solution and shape of the building best represents and meets the requirement of the originator of the competition to obtain a unique building with a widely open accessibility for the public visitors of the library. The building of the National Library according to this proposal stands a chance to become yet another icon of Prague. Interiors are composed to form a calm landscape with a considerably large potential of possible variations. The coffee house at the top floor with the step-wise floor and view of the City of Prague promises to become a magnet not just for the visitors of the library but to a wider public.
3. Quality of the solution from the point of view of functionality, dispositions and operability
The stores with books are served by the automatic stacking systems. They are all located in one volume, which can be hermetically closed. Using the most up-to-date technologies for handling of books makes possible significant savings of space and hence savings of costs. Important issue to be dealt with is to finalize the design of the transport system between the store and the book borrowings service desk. Open and free concept of ground view of the individual floor levels makes possible to adopt numerous flexible variations of space and operational links.
4. Degree to which the program requirements are met
The project does not quite meet the floor area requirements stated in the program. The decisive spaces, i.e. storage area and reading space are met OK.
5. Economical adequacy and operational frugality
Both the underground and above-ground parts of the building are proposed to form a large-span skeleton structure. The façade of the building appears to be more expensive in terms of procurement costs; it is formed by the system pre-tensioned steel cables anchored to the peripheral structures of the basement section of the building. The canopy proper is made for glass and metallic panels, i.e. the low thermal load can be expected. Operating costs are adequate and they correspond to the type of building in question and its purpose.

IV. MINUTES OF THE MEETING OF THE INTERNATIONAL COMPETITION JURY

Stage II.

The Jury members have arrived on 27. 2. 2007:

Ms Eva Jiříčná, President of the Jury

Ms Zaha Hadid

Ms Irene Wiese von Ofen

Mr José Grinberg

Mr Petr Bílek, Vice-president of the Jury

Mr Vlastimil Ježek

Mr Jan Kněžínek

Mr Tony McLaughlin

Mr John Eisler, alternate member of the Jury

Ms Bohdana Stoklasová, alternate member of the Jury

Mr Wolfgang Tochtermann, director of UIA Competition Committee

Date: **27. 2. 2007**

The Jury members Ms Jiříčná, Ms Hadid, Ms Wiese von Ofen, Mr Bém, Mr Bílek, Mr Ježek, Mr Kněžínek, Ms Stoklasová have met in the National Library, Klementinum building after 5 p. m. The competition was opened officially by the Director General of the National Library Mr. Vlastimil Ježek. The Jury members were informed about 8 project designs of the 2nd stage. The project designs were discussed in the office of the Director General of the National Library. Mr Pavel Bém, Lord Mayor of the Capital City of Prague has participated in this discussion as a regular member of the Jury; Mr Jan Kněžínek shall act as his deputy in the future days.

Date: **28. 2. 2007**

The session of the Jury was held in English.

2nd stage of the international competition was opened by the Jury President, Ms. Eva Jiříčná at 9.30 a. m. in the Small Lounge of the Žofín Palace, Slovanský ostrov, Prague who welcomed other Jury members as follows:

Ms Zaha Hadid

Ms Irene Wiese von Ofen

Mr José Grinberg

Mr Petr Bílek, Vice-president of the Jury

Mr Jan Kněžínek

Mr Vlastimil Ježek

Mr Tony McLaughlin

Ms Bohdana Stoklasová, alternate member of the Jury

Mr John Eisler, alternate member of the Jury

Mr Wolfgang Tochtermann, director of UIA Competition Committee

After an introductory word by the President, the Vice-president of the Jury Mr Petr Bílek was invited at 9.45 a. m. to present the individual project designs. Mr Petr Bílek presented the project designs in the following order: 262, 240, 237, 297, 125, 314, 199, 161. These are nicknames of the designs used to facilitate the Jury's work. Mr Bílek highlighted the pros and cons of the individual design projects, from the point of view of typology, structural design and internal environment. Furthermore, it was stated that each project design had certain weaknesses and since none has met fully the 2nd stage requirements, all of them would be assessed primarily for the architectonic and urbanism aspects.

The President of the Jury invited all present Jury members at 10.45 a. m. to study the individual design projects; the Jury members were asked to discuss them at 12.15 p. m. It was decided during the discussion that the preliminary design project ranking 5th – 8th would be determined by secret ballot. Mr Wolfgang Tochtermann announced the result of voting upon receiving voting sheets from all eight Jury members.

Project design no. 237 and no. 314 were equally ranked 7th and 8th , the project design no. 199 x was ranked 6th and the project design no. 262 was ranked 5th.

Lunch break for the Jury started at 1 p. m.

At 2.15 p. m., voting on 3rd and 4th ranking between the project design no. 161 and the project design no. 125 has started.

Ms Irene Wiese von Ofen has opened a discussion on the context and on a possible impact on the World Heritage site in the vicinity and the future development of the Letna area – generally how to justify a selection of the winning project to the public. The President of the Jury has opened a discussion on the Jury roles and on reconsidering the project design no. 125, i.e. the following project designs were further discussed: project design no. 125, no. 161, no. 240, no. 262 and no. 297. The representative of the Municipality, Director of the Heritage Department Mr Jan Kněžínek was asked to present the opinion on construction of the National Library within this area: Prague expects a modern architecture, adequately corresponding to the idea of importance of the building; he highlighted that architects in the last regime had no opportunity to construct appealing structures of world importance in Prague. The Director General of the National Library highlighted within the discussion that the National Library is the promoter of the competition and that the Library expects that the new National Library building shall be operational, striking and contemporary, which is possible to build. The National Library also realizes that the entire process of project approval leading to the construction permit issuance is usually not easy. The National Library prefers a project, which will be striking and unique.

Mr Petr Bílek then joined the discussion emphasizing that the National Library is the promoter of the competition on the basis on the UIA approval according to the UNESCO international competition requirements. He also stressed that each member undertook to abide by the competition terms and conditions by accepting his/her assignment and underlined that each member is bound and responsible to select a winner.

The UIA representative Mr Wolfgang Tochtermann invited the Jury to discuss the remaining 5 project designs in such manner that a winner of this competition could be selected.

A new vote was taken at 4.30 p. m. on project designs ranking 5th and 4th:
 Project design no. 262 placed 5th.
 Project no. 125 placed 4th.

The Jury further decided on the 3rd ranking of the project design: no. 161.
 This was followed by a discussion on the issues and strengths of the remaining 2 projects: no.240 and no.297.
 The Jury decided on the 2nd ranking of the project design no.240.
 The Jury decided on the 1st ranking- the winner of the project design no.297.

A final vote on the project designs total ranking was initiated at 5 p. m.

Identification code	Design no.	Ranking	Votes in favor	Votes against
192837AZ	314	6. - 8.	8	0
130655DR	237	6. – 8.	8	0
291501YO	199	6. – 8.	8	0
111789SC	262	5.	7	1
XQ3374	125	4.	6	2
598726PR	161	3.	7	1
110505SG	240	2.	7	1
180495XY	297	1.	8	0

In compliance with competition regulations the jury decided to award 1st-3rd prizes for 1st-3rd places, 1st honourable mention for 4th place, 2nd honourable mention for 5th place, and to divide 3rd honourable mention for 6th-8th places.

The assessment results – Ranking of the individual proposals

On the basis of the deliberations of the Competition Jury, the following ranking of the individual entries was arrived at:

Resultant ranking of the proposals	
Rank of the proposal on the basis of the Jury's assessment	Entry's number – Identification code
1.	297 - 180495XY
2.	240 - 110505SG
3.	161 - 598726PR
4.	125 - XQ3374
5.	262 - 111789SC
6. – 8.	199 - 291501YO
6. – 8.	237 - 130655DR
6. – 8.	314 - 192837AZ

After validating the above ranking of the proposals, the sealed envelopes marked with the “identification” label were opened in the presence of Mr. Wolfgang Tochtermann – Director of the UIA Competition Committee and the individual proposals were identified.

Resultant assessment – ranks of the individual entries including the identity of the respective authors

Resultant ranking of the proposals	
Rank of the proposal on the basis of the Jury's assessment	Proposal's number Authors of the proposal
1.	297 Jan Kaplický, Volkan Alkanoglu, Maria Jose Castrillo, Misha Kitlerova, Filippo Previtali, Georg Roetzl FUTURE SYSTEMS United Kingdom
2.	240 Kevin Carmody, Andy Groarke Carmody Croarke Ltd. United Kingdom
3.	161 Petr Burian, Petr Hájek, Tomáš Hradečný, Jan Šépka HŠH architekti, s. r. o. Czech Republic
4.	125 Tom Wiscombe, Mona Marbach EMERGENT Tom Wiscombe, LLC, Mona Marbach Architect USA, California
5.	262 John Reed, Peter Coombe, Jennifer Sage John Reed Architecture, PC, Sage and Coombe Architects, LLP USA, New York
6. – 8.	199 Michael Viktor Müller, Sonja Starke, Inga Bolik, André Omar, Cordula Weisser MVMarchitekt + Starkearchitektur Germany
6. – 8.	237 Dagmar Richter DR_D Germany
6. – 8.	314 Barbara Holzer, Tristan Kobler Holzer Kober Architekturen GmbH Switzerland

Signatures of all jurors confirming the course of conduct as well as the final result of the competition are deposited with the developer of the project.

In Prague, March 1st 2007

VII. Final evaluation

8th - 6th place

199

Motto: Proposal for the new building of the National Library essentially consists of two elements – the “pages” and the “spine”.

The more secluded functions comprising the National Archival Collection, Acquisition Division, national Bibliography Division, Collections Management and the other administrative functions are situated on the “spine”, the opaque facade conveying this seclusion. Parking, delivery and other technical service areas are situated underground. The back of the more public areas is formed by the National Archival Collection, present on every floor of the building.

The pages actually form one great space, in which the varying functions can either blend into one another or can be separated by transparent or semi-transparent walls, as necessary.

The transparent facade has the dual function of looking outside, enjoying the view, but making visible to all visitors and passers-by the library and the activities taking place inside.

Operational and dispositional solution concerning parking area, supplies in/out, visitors’ circulation, employees and flow of material suffer from some inconsistencies of medium significance.

Public areas (cafeteria, restaurant, etc.) are neither designed properly as to supplies in/out nor is their independent functionality ensured.

The project design generally complies with the requirements of the building program.

Structural proposal: Reinforced concrete skeleton construction in the below-ground (basement) section of the building. Steel construction of unusually large span in the study/reading rooms on the above-ground levels. Dimensioning of the horizontal structural components complies with the floor area planning and the loading requirements. Large span horizontal structures are also used in the storage and car parking areas. It seems to be more convenient from economical point of view to consider using a standard reinforced concrete skeleton construction with span up to 8 m in this section of the building.

The architectural and technical design will allow economic operation of the building from the point of view of energy requirements of the building and its overall operational sustainability.

The requirement of the building program concerning high level of thermal resistance in the event of breakdown of heating or air-conditioning system has been complied with for all of the library spaces and, particularly, the archives.

It would be appropriate in the project design to optimize glazing of the facades and adjust the floor plan (i.e. change the location of the restaurant).

Motto: The National Library, formed by the ascending tower of the National Archive and the floating horizontal volume of the Universal Collection, is enwrapped in a dynamic skin housing all public spaces. The architectural and spatial concept of the new library is generated through the interaction of three prime elements: 1) the ascending tower of the National Archive, 2) the volume of the Universal Collections and 3) the exterior membrane enveloping the first two elements and defining the public spaces. The tower of the centrally located National Archive forms the heart of the National Library.

Operational and dispositional solution concerning parking area, supplies in/out, visitors' circulation, employees and flow of material suffer from some inconsistencies of medium significance.

The project meets (or rather approximates) the area requirements stipulated by the building program.

There are well-founded doubts about the rational usage of floor areas (the area standards are met; however, the area-wise share of communications is greater than that of the functional areas dedicated to the building program). This applies in particular to the entrance level (redundant floor areas) and to the study zones (insufficient floor areas).

The lavatories for visitors are located in the basement, which is not very convenient since the visitors are circulating on the 3rd floor most of the time (about 90%).

The basement levels cross over the perimeter line delineating the future tunnel.

Structural proposal: In the basement is the standard reinforced concrete skeletal structure; in parts above ground is the steel superstructure of the trussed grille. In proportions and dimensions as proposed, the overall structure of the building can be implemented.

The presented architectural and technical solution quite rationally puts to use the current technical knowledge and methods and therefore it offers the guarantee of achieving the economical operation of the building from the point of view of energy requirements of the building and its overall operational sustainability. The requirement of the building program to have enough accumulated heat and sizeable thermal inertia at hand in case of power failure or malfunction of the heater and/or air conditioning is met in relation to all the operational important parts of the building. The technical part of the proposal is worked out in a great detail and it represents a balanced counterpart to the architectural concepts brought forward by this proposal.

It would be desirable to carry out some needed changes in dispositions, in particular to enlarge the floor area of the machine rooms.

Motto: The authors wanted to create a dazzling, slightly mysterious, symbol. The outer lower structure would be attached by diagonal multiple steel members to the different slabs and provide for shading, emergency outdoor staircases leading directly to the ground outside of the curtain wall and cleaning as well as lighting scaffolding.

Operational and dispositional solution concerning parking area, supplies in/out, visitors' circulation, employees and flow of material suffer from some inconsistencies. From the operational point of view, the proposal is marred by serious and hard to remedy shortcomings.

The project roughly meets the area requirements stipulated by the developer's building program.

The graphic documentation (the layouts) do not respect the requirements of the 2nd round of the competition: the individual operating areas were not divided in accordance with the developer's building program and the principal operations were not provided with the corresponding furnishings. Therefore, it is impossible to assess objectively the operational linkages between the individual departments. In general, the depth of detail in this proposal appears to be very small and quite insufficient. The traffic load does not seem to be reflected in the design of the interconnecting catwalks: the catwalks are only 1.5 meters wide.

From the maintenance point of view, the entire project appears to be a very costly affair.

Structural proposal: The standard skeletal structure in the basement; above ground the structure calls for additional measures to improve the stability of the individual self-standing parts of the building (the internal cores are not good enough due to their insufficient footprints). The most likely solution appears to be either to introduce the mutual interconnection of the three structures or by inserting additional elements for greater rigidity.

The project of the HVAC has no obvious links in a system as the whole. The functionalities of technical equipment are not clearly specified. The requirement of the building program to arrange for an adequate heat accumulation capacity and thermal inertia of the building is not fully met.

5th place

262

Motto: The design of the NKJČR integrates an urban concept of social space with climate-sensitive and responsive architectural form. Though the architecture of the building derives from park structures of glass and iron construction, the public space, garden terraces and the urban array of volumes echoes an ancient forum with the collections and reading rooms as temples, creating a truly urban environment for discussion and exchange.

Operational and dispositional solution concerning parking area, supplies in/out, visitors' circulation, employees and flow of material suffer from some less important inconsistencies.

The project meets the area requirements as stated in the building program with exception of storage space, where the floor areas are not large enough.

The total count of public lavatories seems not to be sufficient; this is particularly true relative to the study rooms in the individual boxes. The barrier-free access within the individual study room is limited due to internal stairs leading to the boxes not served by the elevators.

The area standards as required relative to the individual storage spaces are not met by the proposal and the area will have to be extended. Other operational areas meet the requirements stated in the building program.

Structural proposal: In the basement is the standard reinforced concrete skeletal structure; in the above-ground part of the building there is the steel-made skeletal structure with a rather unusual arrangement (linkage of all vertical structures via the roof plate having in its center the rigid “box” of National Archives). The stability of the whole building should be verified.

The proposed architectural and technical solution appears not to be very economical from the point of view of energy requirements of the building and its overall operational sustainability. With the exception of basement structures the required high heat accumulation capacity and thermal inertia for the building to cope with emergencies stemming from heating and/or air conditioning failures was not dealt with in sufficient detail. In case of the failure of air-condition in the hot summer day, the inside temperature in the given building rises up within few hours high above required standard.

4th place

125

Motto: A building on the edge of the Letenská Pláň has the potential to become overwhelmed by the sheer horizontality of the situation, and so inherent in our scheme is a desire for verticality, for difference. The design is therefore based on a delicate balance of simultaneously relating to the Pláň and differing from it.

The building is composed of 4 components – the Box, the Library Landscape, the Archive and the Mountain. Together, these elements constitute a simultaneously public and private building, a simultaneously micro-contextual and macro contextual building.

The National Archive is the heart of the design. It contains the entire collection of most delicate and irreplaceable volumes and is therefore located above any potential flood level. Suspended inside the Mountain, it is visible from everywhere in the building but not accessible.

While the Box relates to the local urban scale and the wide-ranging Letenská Pláň, the Mountain reaches upward to a height of 60 meters.

Operational and dispositional solution concerning parking area, supplies in/out, visitors’ circulation, employees and flow of material suffer from some inconsistencies of medium significance.

The project meets most of the requirements of the building program as far as the floor areas are concerned with the exception of the floors for the OSOF Dept., which is smaller in comparison with the program.

The material flow is not properly solved along the line of its treatment. There are no provisions given relative to the public areas supplies, waste disposal, etc.

Structural proposal: the underground part represents a standard reinforced concrete skeletal structure. The above-ground of the load bearing structure appears to be difficult to implement if arranged as proposed; the large deformations can be expected at the extremities of the load carrying elements and hence resulting complicated and difficult solution of interfacing these with the no-load elements of the structure of the building.

The presented architectural and technical solution appears not to be quite suitable from the point of view of energy requirements of the building and its overall operational sustainability. The required sufficient heat capacity and heat inertia of the structure in order to cope with emergency situations of power loss appears to be met by the proposal in relation to all important spaces and areas. It would be necessary to modify the design of the peripheral envelope of the building as the whole and in particular the kind and size of the glazing used. In addition, the use of natural ventilation of the offices will have to be included as well as the use of nighttime pre-cooling by natural ventilation.

3rd place

161

Motto: Proposed design sticks to the principle of emphasized otherness, the unusualness of the form. The ground floor of the building is open in its layout and accessible from various sides. The load-bearing core of the entire structure is the depository with the conservation collection, which is surrounded by a layer of service offices, workshops and laboratories. The operational arrangement is based on a theme of concentric rings (directly arising from the circular layout of the assignment) in the core. The supporting structure of the shell is designed as a light, irregular egg-shaped structure.

Operational and dispositional solution concerning parking area, supplies in/out, visitors' circulation, employees and flow of material suffer from some inconsistencies of medium significance. The project meets the area standards as stipulated by the developer's program.

Structural proposal: The structure represents a standard design solution using reinforced concrete both underground and above ground. It will be desirable to place some additional supports in certain parts of the building (garages and stores) to eliminate excessive drooping. In the above-ground section of the building, the ceiling plates outstretching as far as 6 meters out from their supports appears to be unrealistic and calls for installation of additional supports.

The presented architectural and technical solution appears not to be quite suitable from the economical operation point of view and from the point of view of energy requirements of the building and its overall operational sustainability. The required sufficient heat capacity and heat inertia of the structure in order to cope with emergency situations of power loss appears to be met by the proposal in relation to all important spaces and areas. However, the space between the inner cylinder and the external envelope will behave quite uncontrollably in case of power failure and/or the air conditioner's malfunction.

2nd place

240

Motto: The intention is to embrace the mass of books as the architectural representation of the building rather than suppress their expression by burying them in the ground or secreting them deep in the plan.

The external public ground floor is formed by interconnecting funnels of circulation from the city-square and part into the heart of the library. At the confluence of these approaches, the library has one entrance off a large external courtyard. The departmental administration floors and reading rooms all have direct access to the bookstores. The form of the sculpted tower is orientated to acknowledge views over historic Prague, and whilst much lower than the nearby spires of St. Vitus Cathedral, its height gives symbolic significance to its public function and geographical location within the city. The vertical archive, horizontal reading and study spaces are consolidated into a singular form by sheathing the entire volume in layers of clear and cast glass. Beneath the layers of glass, a robust concrete frame envelopes both the tower and workspace volumes reinforcing the singularity of the structure. The archive and reading spaces are supported on a massive granite podium.

Operational and dispositional solution concerning parking area, supplies in/out, visitors' circulation, employees and flow of material suffer from some inconsistencies of medium significance.

The project exceeds the building program's requirements as far as the floor area is concerned.

The manner of drawing the furnishings of the individual rooms (furniture and other gadgets) often manifests some shortcomings and/or a lack of understanding of the very nature of the building program.

Structural proposal: the standard skeletal design both in the basement and above ground. Hard to implement omission of the façade load carrying columns at the ground level of both the high-rise and four-storied parts of the building.

The proposed project does not promise its economical operation from the point of view of energy requirements of the building and its overall operational sustainability. The requirement of the building program to arrange for an adequate heat accumulation capacity and thermal inertia of the building is met in relation to all operationally important spaces.

1st place

297

Architecture of proposed building is three-dimensional volume touching the ground. Simple, modern, exciting, progressive, colorful and unique. Minimal volume protruding above trees level.

Podium is finished in polished white marble. With perimeter edges lifted up in certain areas. Sloping surfaces covered with mirrored, finished stainless steel Building is reflected in these "mirrors" from different angles. Whole building is visually elevated over the podium. Day lit, naturally ventilated car park.

"Street" is a public space elevated above the podium with direct connection to the street and park via ramps and staircases. Street is main architectural element. Link of outside and inside. Main volume of reading on one street level. Offices and administration are on levels 3, 4, 5 and 6. Eye space is on the top floor. Three functions: observation deck, café, periodical reading room. The storage of books is fully automatic. The storage and retrieval system is designed to guarantee the return of any book to its original location. High-density volume storage, minimizing land footprint. The superstructure is designed as a structural steel frame with internal columns on a 12 m x 9 m grid, supporting a composite floor made up of steel beams and concrete floor slabs. Due to the reduction of floor area at each level, perimeter

columns will be inclined to support slab edges allowing for a 3 m perimeter cantilever zone. Lateral stability of the frame will be provided by internal concrete cores working in combination with the facade of the building. The facade itself will consist of tension cables supporting insulated aluminum cladding panels. The skin will be connected to the internal framework by a ring beam located at level 7. The ring beam is a key structural element, which not only supports the “hung” facade but also supports a series of steel arches at the top of the structure. Substructure will be used as the principle book storage and archive area. The perimeter retaining walls are conceived as 1.2 m thick diaphragm walls, stiffened by buttresses and intermediate whaling beams, which are designed to resist the large earth pressures resulting from the depth of basement. On the inside face of the diaphragm wall, a 300 mm reinforced concrete lining wall will be cast to form a second barrier against water ingress. A 1.2 m thick raft slab will form the bottom of the basement box.

In terms of operation aspects, the design presented shows medium serious shortcomings, which could be remedied by adding on more floor area in the above-ground section of the building.

A structural proposal is represented by a standard skeleton construction of large span in the below-ground section of the building and a steel skeleton construction in the above-ground section. The requirement of the building program concerning sufficient thermal resistance in the event of breakdown of heating or air-conditioning system has been complied with for most of the important operating/working areas.

VII. SUMMARY ASSESSMENT

The new National Library of the Czech Republic

Jury’s comments:

- 8. 199; In the first round the jury were impressed by the simplicity, clarity and unassuming arrangement of the proposal but were ultimately disappointed that the architectural expression was not developed satisfactorily in the final submission.**
- 7. 314; Despite the dynamism of the twisted tower form that houses the National Archive Collection the jury was not convinced that this function justified a high - rise volume; the jury felt that the scheme lacked a clear conceptual solution in particular of the massing and form of the podium structure; that it lacked architectural clarity and unity between the vocabulary of the exterior form and internal planning.**
- 6. 237; This is a complex project combining three vertical architectural elements within a sunscreen with a woven quality; however the jury was disappointed by the naiveté of the internal spatial organization and the underestimation of the need for defined levels of interconnection between these three architectural elements; the jury was also very concerned about the buildability and complexity of the project;**
- 5. 262; This project has clear conceptual and functional diagrams; it is a project, which in the jury’s opinion could be economically realized and well executed. However, the jury felt that the building’s relationship with the street and park was not persuasive enough; there was**

also concern that the building did not project the image of a contemporary national library. It was felt that in the urban situation of the park the base/plinth was unduly aggressive.

4. 125; This is a formally very intriguing proposal that, however, in the jury's opinion offers little flexibility for future use by the library; the structure, especially that of the "hanging heart" storage vault was considered to be overly complex and not resolved sufficiently to give the jury a level of confidence; ultimately the jury felt that the building perimeter was hard and defensive.
3. 161; The jury were impressed by the beauty and sculptural singularity of the external form, albeit recognizing that this form had been influenced by other architectural and sculptural precedents. The overall planning responded well to the library's functional requirements, however the overall scale of the scheme was felt to be inappropriate for the site and the volume of the public spaces in the building was found to be excessive.
2. 240; The jury was fascinated by the geometry and presence of the faceted form of the tower, in particular its relationship with the sky line of Prague and with Letna Plain; functionally the building could work as a national library but ultimately the jury felt the justification of the tower for book storage was not a strong enough argument for a high-rise volume. The external renderings were very persuasive but not adequately supported by the internal planning and internal views; the jury was very impressed by the professional level of presentation.
1. 297. The jury finds the architecture of this proposal unique, exciting, progressive and inviting. It is representative of the best of modern technology and the flexibility of the building fulfils the library's future needs; it is unique and in contrast to the existing library, it is open and sociable. It is truly a building of the 21st century. The jury was very impressed by the gentle relationship of the building with its park surroundings. It was in their opinion the only proposal that really dealt successfully with the park; putting the book storage and National Archive Collection in the basement structure reduces the above ground mass. The building addresses the importance of views from the site to the city with its "eye" onto the historical core of Prague and Prague Castle; its compact volume should represent in its final resolution a very environmentally appropriate building that fits the site.