Requirements for the exhibition and exhibits

Objectives of the contest:

The objective of the contest is to find a designer team developing the interactive exhibition design. The specifications have been drawn up to enable the designers to propose:

a) dramaturgical key to the thematic lines or, as the case may be, the exhibition as such (what specific stories or methods will be „narrated“ by the exhibition).

b) location of the specific thematic exhibition lines, forming potential visitor routes (if proposed somewhere).

c) spatial and architectonic design of the exhibition including a graphic concept.

d) design of original exhibits completing the idea of the exhibition.

General requirements for the exhibition

1. The exhibition as a whole must respect the Core Ideology Science of the centre and the ideas behind the specific thematic sections.
2. The exhibition must be well arranged and adequately accessible for the visitors. Where possible, visitor routes may be designed; however, most of the exhibition space is designed as freely accessible.
3. The exhibition must in general terms respect the thematic division and ideas behind the specific themes described under Annex Thematic Division and Composition of the Exhibition. Exhibits presenting connections between various disciplines are welcomed. These exhibits must be placed in a suitable manner to make use of their interdisciplinary potential.
4. The design of the exhibition should be based on the Exhibit Documentation (annexed). Exhibits listed in specific sections as compulsory must be included in the exhibition. As regards exhibits listed as optional, each thematic section must include a specified number of these exhibits.
5. The themes Planet, Civilisation, Man and Microworld shall contain a minimum of 220 exhibits (60 planet/60 civilisation/60 man/40 microworld). Other exhibits are presented in the Children Science-Centre. The exhibits may be combined into logical wholes and it is possible to work with their sizes (many exhibits may be manufactured as either large or small).
6. The exhibition must be designed to provide informal and safe environment for playful discovering of natural relations.
7. Exhibits must allow maximum access for all groups of inhabitants, including people with restricted mobility or perception (unless explicitly excluded by the nature of the exhibit).
8. The exhibition should invite all visitors to use the exhibits and evoke emotional reactions.
9. The exhibition must have the lowest possible operating expenditure
10. The exhibition will be surveyed by several cameras transmitting the images to the SC information panels, and then , as the case may be, to other rooms.
11. The exhibition should emphasise untraditional creative thought-provoking presentation.

Diversity of the exhibition

1. The exhibition should also offer a solution to the future and work with a futuristic view of the world.
2. The exhibition must include a minimum of 10% new exhibits that have not been used yet.
3. The exhibition must include exhibits enabling the most possible types of interactions such as:
   1. task-related, tools will be available, or instructions, potentially a quiz
   2. controlled by hands only
   3. requiring the involvement of the whole body
   4. purely multimedia
   5. requiring the involvement of more visitors- cooperating as well as competing
   6. showing the visitor successive instructions to make an experiment
   7. enabling the visitor to keep coming back and enhance the personal success thanks to the presentation of the results on networks such as Facebook and Twitter, press or via mail sending
   8. requiring mental activity (riddle solving, use of knowledge, analysis etc.)
4. Exhibits enabling methods of interaction specified above are welcomed, and exhibits with physical interaction are preferred.
5. The exhibition as a whole as well as the specific thematic sections must include sufficient number of exhibits for each age category.
6. The exhibition design must respect the visitor structure (age 6 - 15 – 31%, age 16 - 25 – 21%, adults – 36%, others – 12%)

Arrangement of exhibits

1. The exhibits should be situated in groups defined in physical as well visual terms. Each group of exhibits should feature an easily identifiable theme or idea.
2. The arrangement of the exhibits should follow a fixed scheme. At the same timey, the specific groups of exhibits must be easily identifiable by the visitor.
3. The exhibition should be understood in a comprehensive way including graphic or any other use of walls, partition walls, floors and other spaces to convey educational content. The exhibition should purposefully use the height of the SC building.
4. Some of the exhibits should be located at the entrance to the building or outdoor in front of the centre

General requirements for the exhibits

1. Exhibits must have educative aspects that pass on to the visitor.
2. Exhibit must arouse enthusiasm.
3. Exhibits must inspire the visitors, stimulate their imagination and invite them to ask further questions.
4. Each exhibit will have a legend in Czech, English and German and in Braille writing. Where applicable, a LCD screen can be used (or a touch screen) providing sufficient information according to the visitor‘s preference.
5. Most exhibits must enable easy replacement for another exhibit.
6. If the exhibits presents a principle, its practical use and meaning should be demonstrated.
7. Exhibits should be designed so that at the end of the experiment the visitors feel that they have witnessed something important , seen something unknown and learnt facts they did not know before.
8. The visitor must not leave the exhibit with a feeling of a lack of understanding or disappointment (except for exhibits where the disappointment is induced deliberately to achieve a certain objective).
9. Exhibits reminding of furniture or purely multimedia exhibits must be represented in the lowest number possible.
10. With respect to exhibits giving successive instructions, it is necessary to bear in mind multichannel instructing (voice, text, pictograms).

Interactivity

1. Exhibits enabling interaction with the visitor are welcomed.
2. Exhibits should be in a maximum possible extent controllable by the visitor without the necessary presence of attendants or instructions
3. The method of the exhibit use should be obvious, i.e. the visitor should easily recognise what the exhibit expresses and how it is controlled.
4. Exhibits engaging simultaneously several senses are preferred.
5. Exhibits involving the moment of surprise are welcomed.
6. The exhibit’s reaction to the visitors action should be as short as possible – several seconds at most. The time needed to make an experiment should not be too long.

Design and execution

1. The exhibits must have contemporary design, only exhibits with historic connections can be of a period design.
2. Graphic design of the exhibit should be uniform within certain categories (e.g. thematic sections, age, difficulty level etc.).
3. Light should be used as one of the space creating elements.
4. Exhibits must be save and must follow all laws, regulations and standards applicable in the CR and the EU.
5. Exhibits must be able to resist being used by a large number of visitors without getting damaged, i.e. they must be practically „undestroyable“. If they are damaged, they must be easy to repair.
6. Exhibits containing computes or other similar technologies should not emphasise their presence unless it is the purpose of the exhibit.
7. Wherever applicable, the exhibit should emphasise local life and facts (city of Brno, South Moravian Region, CR).
8. Wherever applicable, the exhibit should also provide the story of the invention and the inspiration leading to it.
9. Wherever applicable, the exhibit should provide options: although we take a number of aspects in the world for granted (e.g. automobilism), in European conditions it is often a question of our option whether we decide to adopt or reject a given trend. This fact is not a matter of course, many other societies does not provide the freedom to choose (either in important or little important matters). That is why we should all the more think about the consequences of our decisions as the freedom to choose entails responsibility. The exhibition should capture such moments.
10. Wherever applicable, the exhibit should provide context information: it is interesting how opinions on addressing similar problems differ from one culture to another. Likewise, the appearance of things differs in dependence on the climate or conditions. Such comparisons are inspiring and help deeper understanding of the phenomena and looking for relations.
11. The exhibition and theme designs should be interlinked with the design of pictograms and symbols enabling better orientation at the exhibition.

**Strategy of exhibition replacement**

The exhibition will be modified in individual exhibits, or groups of exhibits, or sections. The whole exhibition should be replaced over 10 years. The exhibition will be replaced during operation – the spatial layout should therefore be quite flexible, without necessitating closing of the museum. Likewise, the replacement of a single section should not put the whole theme out of operation.

Technical specifications

1. 5 main themes: Earth, Civilisation, Man, Microworld, Children Science Centre. Total size approx, 3,100m2.
2. Available utilities - water, 230V, in selected areas 380, IT line.
3. Possibility of suspension in the ceiling: a single suspension max. 50 kg
4. The exhibition may be designed as multi-level.