

Variation according to Section 222 (5) of Public Procurement Act 134/2016 Sb.

Project:
LED Projection system II.

Variation number:
04

The Parties to the Contract for the execution of the aforementioned Project concluded on the 08th of December 2023:
Employer: Hvězdárna a planetárium hlavního města Prahy, Královská obora 233, 170 21 Praha 7
Contractor: Evans & Sutherland Computer Corporation, 770 South Komas Drive, Salt Lake City, Utah, 841 08 USA

Attachments:

- (a) Overview of Variations
- (b) Variation proposal
- (c) Approval of Variation
- (d) Justification to Variation proposal no. 1
- (e) LED Module Specification - original version
- (f) LED Module Specification - high temperature
- (g) Technical report - HVAC system
- (h) Architect's statement - LED modules area adjustment

Copy no.

Recipient

- | | |
|---|---------------------------|
| 1 | Employer's Representative |
| 2 | Contractor |
| 3 | Engineer |

Variation description:

This Variation is based on the necessary modification of the LED modules in order to withstand higher temperature conditions.

Initially, the LED modules intended for use in the project allowed working temperatures up to 25 °C. This design was based on the tender documents, which did not specify the operating temperature, as the project's unique nature meant it was not known in advance to the Employer that specific LED modules for projection systems would operate only within such a narrow temperature range.

The need for the module change was identified during the preparation of the detailed project documentation when the Contractor provided the information regarding the LED modules' temperature range. Temperature measurements taken at the top of the dome showed that, even with an effective HVAC system, maintaining temperatures below 25°C was not feasible (see Attachment g)). Already in the draft version of the attached Technical report, i.e. before April 2024, when the final clean copy was issued, it was determined that, with the HVAC system operating, it is feasible to maintain a temperature of no more than 35°C at the top of the dome.

Based on the aforementioned information, in his letter titled *Variation proposal* from the 5th of April, 2024 (see Attachment (b)), the Contractor informed that they consulted with the LED supplier and manufacturer, confirming that the existing modules could be modified to operate under higher temperature conditions. A potential comprehensive modification of the HVAC system to ensure the required operating temperature does not exceed 25°C would not be feasible due to the technical complexity associated with such an adjustment.

The Contractor stated that the design of the modules had been modified to accept higher temperature conditions (up to 35 °C).

During the preparation of the detailed design documentation, it was further established that the originally proposed dimensions of the outer lowered areas fitted with LED modules encroach upon the zone where barrier-free access must be provided (specifically the required ramp length) and where a sufficient width of the escape route must likewise be maintained, as set out in the architect's statement (see Attachment h).

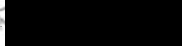
Classification according to the PPA: This Variation is classified under Section 222(5) of the Public Procurement Act as the modification described above, consisting in adjusting the originally intended LED modules, is necessary to ensure the proper functioning of the projection system under the temperature conditions identified above. The modification concerning the adjustment of the dimensions of the outer lowered areas fitted with LED modules is necessary to ensure barrier-free access and an adequate escape route. A change of supplier to implement the aforementioned modifications is technically unfeasible, given the project's unique nature and the specialized technology integrated into the entire projection system. Such a change would therefore impose considerable difficulties on the Employer.

It is concluded that this change in the contractual obligation does not alter the overall nature of the public contract. Furthermore, the value of the Variation is below 30% of the original contract value. The statutory condition pursuant to Section 222(5) of the Public Procurement Act 134/2016 Sb. is fulfilled.

Data in CZK without VAT

Impact of Variation on lump sum:	Total cost of proposed Variation
	17 568 663,06 CZK

The signature expresses approval of the Variation and the record of the Variation of the Commitment:

Employer's Representative	name	Jakub Rozehnal	date	2 JUNE 25	signature	
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Engineer	name		date	26 MAY 2025	signature	
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The Employer and the Contractor have agreed on changes to the Works in accordance with Section 222 of the Public Procurement Act which are detailed, justified, documented, and priced in this Variation Sheet. This Variation Sheet is also a record of the variation to the commitment for record purposes. It shall be witnessed by the respective signatures of the persons authorized to act on behalf of the Employer and the Contractor.

Contractor	name	Kirk Johnson	date	6 MAY 2025	signature	
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