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Evaluation of the Planetarium

Final Report: management summary
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Summary

This evaluation report presents the final results of the evaluation of the Planetarium of the Royal Observatory of Belgium (ROB). Technopolis Group performed the evaluation in the period November 2016 - March 2017 upon commission by the Belgian Federal Science Policy Office (BELSPO). The evaluation covers the period 2005-2016.

The objective of the evaluation was to assess the Planetarium’s past performance and to provide input and formulate recommendations for its future activities and strategy. The current evaluation report of the Planetarium complements a previous evaluation report by Technopolis Group on the scientific activities of the ROB.

The report is based on various sources of information, including desk research, interviews, media data and a mystery review. A key component of the evaluation was a peer review which took place on March 15, 2017.

Background

Within the current federal government the responsibility for science policy lies with the State Secretary for Combating Poverty, Equal Opportunities, Disabled People and Science Policy, in charge of Larger Towns, attached to the Minister of Security and Internal Affairs. A separate administration, the Federal Science Policy Office (BELSPO), is responsible for coordinating science policy at the federal level.

The Planetarium serves as the provider of the public services of the ROB. The building of the Planetarium consists of a large dome to display astronomy videos, a lobby where exhibitions are presented and a room for educational activities. The Planetarium receives 45,000 visitors annually, of which about 50% are students. This large number of students is a consequence of many educational activities the Planetarium organises.

The mission of the Planetarium is to “contribute to the development of a well-informed general public and a well-educated youth in the field of astronomy.” Furthermore, the Planetarium aims to ensure there are sufficient scientifically and technologically educated people in Belgium and that the general public has basic knowledge of the scientific process and supports the importance of astronomy, aerospace and related sciences.

Institutional Strategy

The various tasks of the Planetarium are meant to fulfil three strategic objectives: ensuring a good quality education, making the Planetarium attractive to visitors and promoting the visibility of the institute. Because the Planetarium assures the public services of the ROB, its strategy also depends on that of the institute. Nonetheless, the Planetarium enjoys some freedom regarding its tasks, most notably in the choice of the movies shown in the dome.

Infrastructure and location

The Planetarium should be the showcase of the field of astronomy and its advanced technology in Belgium. However, the building of the Planetarium dates back to the ’70s and suffers from water leaks, poor insulation and old equipment and therefore is not as attractive as it should be. There have been demands from the Planetarium to the Building Agency of the Federal Government for renovation, but these have not yet been answered. Private fundraising has not been possible thus far due to a lack of personnel to organise it.

The Planetarium is located outside the city centre of Brussels, rather isolated with a lack of signalling to it. The area where it is located is currently being redeveloped, which provides an opportunity for the Planetarium to gain visibility.
The Planetarium is one of the largest planetariums in Europe. The large dome therefore requires customised shows and set up, which is expensive.

Fairly recently, new projectors were acquired for the Planetarium dome, however further renovation is needed before the building meets the needs of the staff and the expectations of the visitors. Plans for renewal of the building cover the dome, the seats, the exhibition hall, the shop, the offices and the outside of the building, but financing has not yet been realised.

**Governance structure**

As part of the ROB, the Planetarium is (part of) a Federal Scientific Institute (FSI). FSIs must follow the rules for federal organisations, which are designed for government administrations and not for museums or scientific institutes. They have a relatively high administrative burden and low flexibility. Obstacles are found in financial rules, rules in relation to housing and rules in relation to HRM. Although the federal government announced changes that will increase the autonomy of the institutes, these changes have not yet been implemented and it is unknown how these will affect the functioning of the FSIs (including the ROB and, thus, the Planetarium).

The Planetarium is led by one manager who is dedicated to the management of the Planetarium. He works directly under the management of the Director of the ROB.

**Budget and human resources**

The ROB is fully in charge of the budget of the Planetarium. This makes the financial management of the Planetarium rather complicated, especially since the Planetarium staff and management have no insight in the income (e.g. return from ticket sales) and the budget available. This should be changed, and at the same time an explicit financial strategy for the Planetarium should be developed and multi-annual budgets should be provided.

The main source of income for the Planetarium is the ticket sale. To increase income, opening hours were recently extended.

The Planetarium has 16 full time staff members. Because of limited human resources, the staff needs to be highly flexible in term of the tasks to handle and their schedule. Like at other FSIs, the recruitment opportunities at the Planetarium are constrained. Recruitment is a prolonged process that causes organisational trouble every time an employee leaves the organisation.

In general, employees are satisfied with their responsibilities, and with the clear guidelines and encouragement to increase their competences that is given by the management. Nonetheless, there is some anxiety about the continuity of the Planetarium.

A more inclusive policy of the ROB towards the employees of the Planetarium could improve the relationship.

**Shows/films**

The attractiveness of the Planetarium relies on their shows with images/3D. As a consequence of the change of strategy towards a more modern and dramatic display of the content about the universe, a full-dome system has been installed in 2009. The shows and their content were improved, which had a positive impact on the number of visitors.

The shows are educational, providing information about the universe, while being impressive to watch. New, spectacular shows are acquired annually. These are not specifically chosen to align with the current scientific work done at the ROB, especially because this would further complicate the choice of the shows.

**Educational activities**

The Planetarium organises lessons with live animators, workshops and educative content. Different educational activities are offered by the Planetarium in consultation with the teacher and depending on the age of the group. Children with a disability are given customized lessons. The educational activities aim at completing the school curriculum but also to make children feel more passionate.
about studying STEM. The lessons of the Planetarium are not only about astronomy, but for example also about mythology or Latin.

The educational activities mainly take place in the dome. The educational offer is not limited to the dome though sometimes the educational team also engages in school visits and outreach activities. Most educational activities are developed by the team of educators in line with the school curricula. External actors are often involved in the development of activities. The workshops provide new teaching resources or improve the current lessons.

The dome allows for about five classes (~150 seats) to join a lesson. To increase the use of the room, the offer has recently been simplified: whereas previously groups always used to receive different lessons, groups may now be received together.

Between 2010 and 2016, the Planetarium welcomed 100,316 participants for its educational activities. Families with children and students visiting with their school are the dominant visitor groups for the Planetarium. Because of its location, a majority of the visitors is from Brussels. Visitors are generally highly educated. A lot of visitors come with children, aged between 6 and 12 years old. Overall, the visitors of the Planetarium are satisfied with their experience, even more so in the past few years.

Furthermore, the Planetarium is hosting the Belgium office of ESA’s European Space Education Resource Office (ESERO).

**Events**
The Planetarium organises and hosts a number of events each year. With these events, the Planetarium aims to increase the interest of people in the Planetarium and, as a result, attract new visitors.

The first events took place in 2001 and the Planetarium has since then established itself as a major place for astronomical events. The events are of scientific, cultural or entertaining nature and are tailored to specific audiences. Recently, the Planetarium has worked on hosting events, like concerts, in partnership with other organisations. These efforts have helped improving the fame of the Planetarium.

**Exhibitions**
The Planetarium is meant to showcase both the work of the ROB and the other FSIs located in Uccle (RMIB and BISA). To do so, it displays information taken from the Space FSIs scientific research, develops specific workshops on a theme, advises the ROB on educational material, works as a relay for scientific questions to the FSIs and generally works with them on educative activities.

The ROB decides on the topic of these exhibitions and then the Planetarium implements them in a way that is suitable for all visitors. The educational team is charged with writing the accompanying texts, with support from the scientific staff in Uccle.

The Planetarium wants to give more importance to these temporary exhibitions and link them better to the activities of the organisation. The exhibition tools are not very well maintained. More intensive collaboration with the ROB would have a positive effect on the quality of the exhibition.

**Projects**
The Planetarium aims to be a central hub for space science in Belgium. A first step is to be contact point for international projects. Currently, the Planetarium is already the national contact point for ESO, ESA and most of the EU projects related to astronomical sciences. In 2009, the international year of astronomy, the Planetarium was the national point of contact for the activities in Belgium.

**Positioning**
In the field of astronomy, the Planetarium is in touch with most other planetariums in Belgium. For cultural events, it partners with organisations like the Brussels Philharmonic. It also has agreements with other attractions for joint tickets. The Planetarium is an active member of international organisations. It collaborates very rarely with universities.
**Communication activities**

There is no official communication strategy at the Planetarium of Brussels, neither is there a specific budget for communication activities. The primary means of communication are the website and word-of-mouth. Based on our media analysis the visibility of the Planetarium is low, compared to the FSIs. Recently, online activities have increased, notably on social media. The Planetarium has close to no recognition outside of Belgium.

**Recommendations**

**In relation to the mission:**

- Develop a strategy for the upcoming years that describes the Planetarium's strategic and operational goals.
- Become the Belgian 'home base' for science communication. At present, there is not a dedicated organisation for science communication at federal level. The Planetarium can fill this position. This would mean organising thematic sessions, possibly a conference, and being a more active partner for the national Day of Science (Dag van de Wetenschap). Together with the ROB and organisations like Technopolis in Mechelen, good practices for science communication can be used and disseminated. The staff of the Planetarium should focus more on activities that connect to this: 'show and tell', be a valuable partner and a 'good practice' for science communication.

**In relation to the infrastructure and location:**

- Renovate the Planetarium as soon as possible
- Address the 70's look of the building: playfully cultivating a 'hipster' image can add value, until a renovation can be realised. Connect young, hip ambassadors as 'guest curators' to the museum staff to reach a new audience.
- Install a new projection system, with new software.
- Use the opportunity of the NEO-project, with the possible establishment of a science museum that could be connected to the Planetarium. The NEO-project is a modern city development project with a focus on the future. It is important that the Planetarium shows that they are not 'stuck in time’ but searching for new and innovative approaches in science communication and that they have valuable relations with important art institutions in Brussels or Belgium. It would be wise for the Planetarium to experiment with new, small things to connect to the aim and style of the NEO-project.
- Improve the relationship with the City of Brussels to facilitate access to resources.

**In relation to the financial management:**

- Increase transparency of the Planetarium’s financial management.
- Develop, in parallel with the development of a strategy, a multi-annual budget plan that aligns with the Planetarium’s strategic plans.
- Monitor expenses and income against the multi-annual budget plan.
- Increase project income as a source of income for the Planetarium.

**In relation to the human resources:**

- Improve the relationship with the Planetarium staff and the ROB, building on the good relationship at management.
In relation to the educational activities, events, exhibitions and projects:

- Improve the pre-show exhibition.
- Make better use of the opportunities provided by ESERO.
- Explore the opportunities to make the Planetarium an experience that starts from home and does not end when people leave the Planetarium. Make the Planetarium more interactive.
- Explore the possible role for the Planetarium in the art & science community. This can help to change the image of the Planetarium. Art & science are combined more often in science museums and science centres. It is important that the Planetarium is an equal partner in these activities instead of just the location, and that these kinds of activities—like poetry, dance or music—are a regular occurrence at the Planetarium, not incidental. This should also mean extra income for the Planetarium, not only for the partners.

In relation to the positioning:

- The Planetarium could be the place (online and offline) to visit when you have questions about recent developments or news in the field of (space) science. A dedicated staff member or better cooperation with expertise from the ROB could be beneficial for this.
- Explore opportunities to attract more visitors during the school holidays.
- Improve the interaction between the two groups of visitors: school groups and families, e.g. children visiting the Planetarium with their school inspiring their parents to take the entire family for a visit to the Planetarium as well.

In relation to the communication activities:

- Improve the website.
- Find means to increase the position of the Planetarium as the showcase of the Uccle Space FSIs
- Increase the presence of the Planetarium on social media to reach younger visitors.
- Increase the outreach of the Planetarium by implementing a Planetarium ‘on-the-road’.
- Address the unique quality of the Planetarium: a Planetarium is not like any cinema but has a different value.
- Cooperate with the Atomium and offer combined visits focusing on shared content and educational value, not about of saving money. The message of the Atomium is ‘futuristic & universal since 1958’. The proposition of the Planetarium can be similar.