

Using Competitions to Engage the Public: Lessons Learnt from *Rosetta*

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The year 2014 was an historic and challenging time for the *Rosetta* mission. On 20 January the spacecraft awoke from a 957-day hibernation; by August, it had arrived at Comet 67P/Churyumov–Gerasimenko; and in November, the lander *Philae* was deployed to the comet’s surface. These milestones were communicated by traditional outreach channels — on websites and via press events — as well as through the extensive use of social media. To provide an opportunity for the public to participate actively in these milestones, the European Space Agency and its partners ran three competitions. In this article we outline how these competitions provided a means for the public to engage with what was to become one of the most exciting space science missions in decades.

Introduction

As 2014 approached, one of the biggest challenges facing *Rosetta* science communicators was how to awaken interest in the mission, which had been launched almost ten years before, and how to generate sustained engagement with the broadest possible audience in a relatively short time. The adopted approach is outlined in an accompanying article (Bauer et al., 2016).

An important aspect of the communication plan was to offer as many opportunities as was feasible for the public to engage with the mission. We provided behind-the-scenes access via live streamed events with opportunities for questions from anyone via social media channels (Baldwin et al., 2016), Google+ Hangouts hosted by the European Space Agency (ESA) with mission experts, and independently produced documentaries in which the

crews were allowed to film closed meetings (Ayres, 2016). But we wanted to go further and create channels for people to directly share their excitement and interest in the mission — with us and with each other. This was the starting point for introducing competitions.

Competition 1: Wake Up, Rosetta!

As *Rosetta* approached the end of the hibernation period, ESA produced a number of short videos in order to signal the wake-up event on 20 January 2014, and the public were invited to play their part by sending in short video clips showing them “waking up” the spacecraft¹.

The videos were then to be rated by public vote. The two top prizes were trips to the European Space Operations Centre (ESOC) in Germany to be present when *Philae* landed on the comet on

12 November 2014², while the top ten winners would receive gift bags and have their videos beamed into space via ESA’s tracking station network, Estrack³.

This competition was announced on 10 December 2013 and ran using Facebook, Twitter, Vine and Instagram for submitting competition entries; using YouTube for promoting the competition and individual entries; and via Facebook (with a WooBox plug-in⁴) for the public voting, which closed on 24 January 2014. WooBox was chosen because it integrated very well with Facebook, Twitter and Instagram which were the platforms that we expected to use and had a fully fleshed out campaign module that matched our competition plans.

The number of entries — just over 200 — was somewhat lower than we had anticipated. On reflection, this was probably because we had expected participants to make



Figure 1. Winners of the top prize of the Rosetta competitions — a trip to the European Space Operations Centre to be present on the day that Philae landed on Comet 67P/Churyumov-Gerasimenko. From left to right: Alexandre Broust (winner of the Name Site J! competition), Elisabetta Bonora (winner of the Rosetta, are we there yet? competition), Józef Dobrowolski (winner of the Wake Up, Rosetta! competition), and Emanuele Andreola (winner of the Rosetta, are we there yet? competition). In the front is Dimitris Grillis (winner of the Wake Up, Rosetta! competition). Credit: ESA/C. Carreau

simple, short videos, for example, using their smartphone camera, whereas most of the submissions involved far more elaborate and imaginative “wake-up videos”, incorporating music, animation, dancing, acting and filming in various locations.

In fact, the quality of the submissions far exceeded our expectations⁵. It was immediately obvious that many participants in this competition were taking part not just because of the very attractive top two prizes, but also as their way of connecting with the mission. This provided a means for them to share, in a creative and personal way, their excitement about *Rosetta*. Perhaps surprisingly, a non-negligible percentage (about 7%) of entries came from people who knew they were ineligible for the top prize because of restrictions on residency (ESA was only able to pay to fly people to Germany from ESA member states, ESA cooperating states, EU member states and the USA), but who participated nonetheless.

It was not just us as organisers who were impressed with the videos: the public voted enthusiastically, with more than 75 000 votes in total cast for the videos. The top two winners⁶ of the trip to ESOC were student Dimitris Grillis, accompanied by physics teacher Koskos Spyros and representing the Ellinogermaniki Agogi Primary School in Greece, and Józef Dobrowolski from Poland.

Competition 2: Rosetta, are we there yet?

Rosetta was due arrive at its destination, Comet 67P/Churyumov-Gerasimenko, on 6 August 2014, during Europe’s summer holiday season, and this naturally led to the idea of a second competition, this time based on the theme of completing a journey and reaching a destination. One common expression heard or uttered by anyone who has been on a long journey is: “Are we there yet?” And so the next competition was born⁷.

Announced on 9 July 2014, the competition invited participants to submit photographs that captured the “Are we there yet?” feeling. Two props were made available to download, print and include in the photo: a cut-out-and-make *Rosetta* and *Philae* model based on the cartoon characters designed as part of the mission communication, and a certificate to fill in with a destination (Mignone et al., 2016). Participants were also encouraged to draw inspiration from *Rosetta* mission themes, such as photographing comet-like landscapes, or by incorporating the themes of water and life.

Facebook, Twitter, and Instagram were the primary channels used for submission and voting, and the top prize was again a trip to ESOC to be present on the landing day. Weekly spot prizes were awarded to keep the competition in the public eye

and to encourage people to participate, as well as providing more opportunities to win something.

Compared to the Wake Up, Rosetta! competition, a similar number of entries were received, and somewhat fewer votes — around 22 000 by the time the competition closed on 21 August. Although the number of participants was lower than we expected, especially as the required task seemed simpler than that of the first competition, the quality of many of the entries was very high, with participants going to extraordinary lengths (and places) to produce imaginative and evocative photographs.

Some photographs showed people sharing their interest in *Rosetta* with family and friends, colleagues and students. Models of the spacecraft in various shapes and sizes were built, including many of the cut-out-and-build one that we provided, and brought to new destinations. The destination certificate was also widely used and was printed out, completed, and featured in many pictures. Participants spanned a broad range of ages and interests, with some people involved in the space business and others stating that this was the first time that they had felt captivated by a space mission. About 10% of participants could not win the top prize because of the residency requirement, but they still submitted pictures.



Figure 2. The most popular names proposed by participants in the Name Site J! competition. *Agilkia* is the name chosen by the jury for the site where *Philae* touched down on 12 November 2014. The lander bounced and eventually came to rest at a site which was later given the name *Abydos*, the second choice of the jury. Credit: ESA

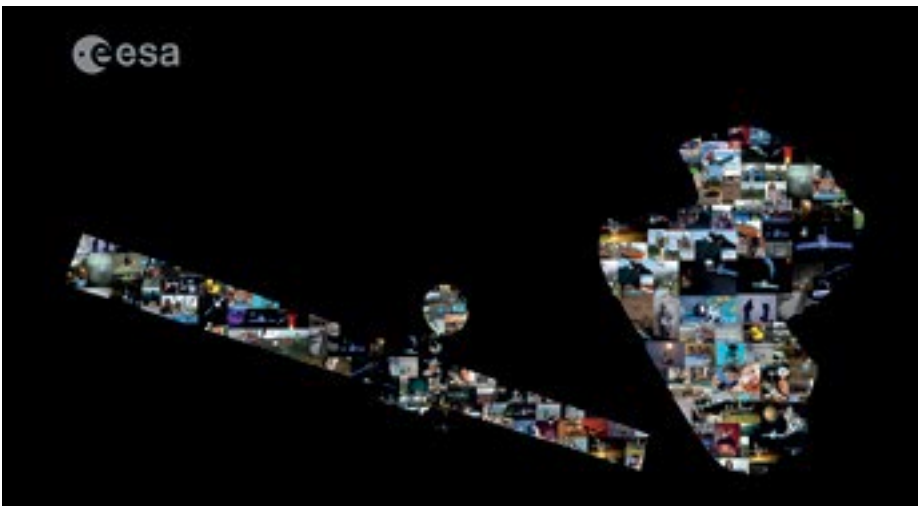


Figure 3. This mosaic, in the shape of the *Rosetta* spacecraft and Comet 67P/Churyumov-Gerasimenko, is made from images submitted by participants in the *Rosetta, are there yet?* competition. Credit: ESA

In the end, the two top prizes, selected by a combination of public vote and a jury, were given to Elisabetta Bonora and Emanuele Andreola, both from Italy⁸.

Competition 3: Name site J!

On 15 October 2014, ESA announced the selection of *Philae*'s landing site. Chosen from a set of ten initial candidates, the location was known at that time as Site J⁹.

Even before the landing site had been selected, there had been discussion

amongst the partners involved in *Rosetta* and *Philae* about how to name this area. Because the surface of a comet can evolve as it travels closer to the Sun, International Astronomical Union rules do not apply when it comes to naming surface features, so there were no boundary conditions.

The core *Philae* partners — ESA, Deutsches Zentrum für Luft- und Raumfahrt (DLR), Centre national d'études spatiale (CNES), and the Agenzia Spaziale Italiana (ASI), supported by all other *Rosetta* partners, including NASA — agreed to run a competition, inviting the public to propose a

name for the landing site. The main condition was that the name could not be that of a person, living or dead. These would then be considered and a choice made by a jury comprising members of the *Philae* Lander Steering Committee.

Given the need to pick the name before landing, the Name Site J! competition was launched on 16 October and ran until 22 October, again with a top prize of a trip to ESOC for landing day. To ensure that as many people as possible could participate, a simple web form was used. No social media accounts were required although the competition was still heavily promoted on our, and our partners', social media channels. In addition, entries could be made in any European language.

The competition attracted proposals from more than 8000 people spanning 135 countries with almost 14% not eligible to win the top prize because of the residency requirements. To accompany the proposed name of the landing site, participants were asked to provide a short justification for their proposed name. Many used this opportunity to express their delight in having an opportunity to participate in the mission by means of the competition.

A shortlist of 30 names was drawn up by the organisers and provided to the *Philae* Lander Steering Committee who chose *Agilkia* as the name for the landing site¹⁰. More than 150 people had proposed this name and of these, Alexandre Brouste from France was selected to be at ESOC for landing day.

Although *Philae* touched down at *Agilkia* the lander then bounced and eventually landed at a site now known as *Abydos* — the second choice of the steering committee.

Lessons learnt

As each competition ran its course, we were confronted with aspects that we had not anticipated. Each one yielded lessons that were folded into the next.

When entries started to arrive for the Wake Up, *Rosetta!* competition, we soon realised that participants were being far more creative than we had anticipated, perhaps resulting in fewer entries than hoped.



Figure 4. Rosetta-themed images, to use on Facebook, Twitter, and as wallpapers on laptops, tablets and smartphones, were made to share with people who participated in the Rosetta competitions. Credit: ESA

For the subsequent competitions, we tried to provide unambiguous guidelines and clearer examples of what we expected to see.

Similarly, we had thought that people would submit individual entries, but many were submitted by groups, and we had to adapt the rules to account for this.

Lessons were also learnt about voting formats. Public voting has the advantage of being transparent and allowing people to have their say in what is considered to be a winning submission, but there are some aspects that should be carefully considered before deciding to opt for this method of choosing a winner. While monitoring the voting for the Wake Up, Rosetta! competition, we realised that some of the participants were undertaking lobby-

ing and promotion campaigns to gather votes for their entries. While this was not against the written rules, we felt that it was against the spirit of the competition. Thus for the Rosetta, are we there yet? competition, we adopted a selection process that relied on public voting for one of the two winning places and a jury vote for the other. Unusual voting patterns were also noted in this competition.

The dialogue that is possible using social media channels was crucial in managing expectations and in providing direct and rapid feedback in the few instances when there were issues. For example, on one occasion, we had to temporarily suspend voting while irregularities were investigated and on another, there was a problem with the submission mechanism. By communicating this immediately and

openly via social media, we avoided any major negative feedback. That said, it was also good that our competition rules included a clause indicating that rules might be updated or modified, if that was considered necessary.

Did the competitions engage the public?

What do we mean by engagement in the context of science communication? Most often, engagement refers to a two-way process, involving interaction and dialogue between communicators and audience. Did the *Rosetta* competitions facilitate this?

At the end of 2013, we had only planned for one competition — Wake Up, Rosetta! — as part of the process of stirring interest in the mission. We had no real metric for success in mind, apart from the qualitative raising of interest in the mission through direct participation, rather than purely passive.

However, following the highly creative participation in the first competition, the Rosetta, are we there yet? and Name Site J! competitions arose naturally in the developing landscape of dramatically increased interest in the whole mission and particularly in the attempt to deploy a lander to the surface in November 2014.

The periodic competitions also provided focal points for the public to participate in the main mission milestones of 2014: they provided a channel for the public to connect with the mission team, with other enthusiastic supporters, and vice versa.

The abundant and mostly enthusiastic comments that participants included with their entries, in follow-up email messages to the organisers, or in posts on social media channels, clearly demonstrated engagement. People explicitly stated that they were happy to have a means of contributing to the mission and of doing something to show how much such a mission meant to them.

At a more detailed level, the content of the photo and video competitions reflected strong personal involvement from individuals and groups. People organised activities with friends, family, colleagues, and students to create their entries for

the photo and video competitions. They became interested in *Rosetta* together, which further enhanced the engagement and the discourse.

Also, the presence of the competition winners at ESOC on landing day allowed them to act as avatars of the wider public, representing them at an event that was otherwise confined to mission participants, VIPs, and media.

Finally, for those of us involved in the competitions, the direct connection it gave us to people who were following the mission was hugely motivating and instructive.

Acknowledgements

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competitions, assisted with selection of winners, and organised the prizes and their distribution.

Notes

- ¹ More information on the Wake Up, Rosetta! competition here: http://www.esa.int/Our_Activities/Space_Science/Rosetta/Wake_up_Rosetta/
- ² See this blog article about the Wake Up, Rosetta! winners: <http://blogs.esa.int/rosetta/2014/11/12/competition-winners-at-esoc/>
- ³ See this blog article about the Wake Up, Rosetta! runners up: <http://blogs.esa.int/rosetta/2014/05/08/a-light-speed-voyage-to-the-distant-future/>
- ⁴ WooBox allows users to manage online voting and can be hosted on Facebook: <https://woobox.com/>
- ⁵ Video entries for the Wake Up, Rosetta! competition can be seen here: <https://www.youtube.com/playlist?list=PLbyvawxScNbuKC6e4LxqZJq6t51WmZ9mt>
- ⁶ News item about the success of the Wake Up, Rosetta! competition: http://www.esa.int/Our_Activities/Space_Science/Rosetta/The_competition_winners_who_helped_us_wake_up_Rosetta

- ⁷ More information on the Rosetta, are we there yet? competition: http://www.esa.int/Our_Activities/Space_Science/Rosetta/Rosetta_are_we_there_yet
- ⁸ Information on the Wake Up, Rosetta! winners of the Rosetta, are we there yet? competition: http://www.esa.int/Our_Activities/Space_Science/Rosetta/Rosetta_arrival_competition_winners
- ⁹ Information on the naming *Rosetta*'s landing site competition: http://www.esa.int/Our_Activities/Space_Science/Rosetta/Name_Rosetta_mission_s_landing_site
- ¹⁰ Announcement of the new name for *Rosetta*'s landing site: http://www.esa.int/Our_Activities/Space_Science/Rosetta/Farewell_J_hello_Agilkia

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Biographies

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