

Case Study

Longitude Prize 2014

A public dialogue to seek input from the public on the early framing of the challenges for the Longitude Prize 2014

Vital statistics

Commissioning body:

Department for Business, Innovation & Skills, Nesta

Duration of process:

10 months: September 2013 – June 2014

Total public participants involved:

32 participants in workshops in Leeds, Cambridge and London

Total stakeholders involved:

16 at a workshop in London

Cost of project:

£157,032 total,
Sciencewise co-funding = £48,825

In 1714, the original Longitude Prize sought to find a solution to one of the great challenges of the day – to pinpoint a ship's location at sea by knowing its longitude. Being able to do this led to safer sea travel and opened up global trade. The prize, valued at £15 million in today's terms, was won by John Harrison, a watchmaker and carpenter, who created the marine chronometer.

300 years on, a new prize for a new century was launched. Longitude 2014, which has been developed and is being run by Nesta, the UK's innovation foundation, is a groundbreaking global challenge prize of £10M. It aims to catalyse an 'ideas race' for innovations that solve publicly important challenges.

Longitude 2014 began in April 2013 with a meeting at 10 Downing Street where a group of the UK's most eminent scientists met to discuss ideas that could be presented to the public for a new, world-leading challenge prize. Following this, the Prime Minister announced the UK's intention to recreate the Longitude Prize.

The Longitude Committee, chaired by Lord Martin Rees and backed by leading scientists, major foundations and the UK Government, used the insights of experts and the public (through this public dialogue project) to shortlist prize challenges. In May 2014, the shortlisted challenges were aired on BBC Two's 'Horizon' programme and put to a vote by the general public. The result was announced by Alice Roberts on BBC One's 'The One Show' in June 2014.

Commissioning view

“ *The BBC vote on the choice of topic was not the only time that the public influenced the Longitude Prize. Our public dialogue in 2013 informed the choice of the six challenges. It was at the sweet-spot between scientific and academic priorities and public desire for action that the six challenges were selected.* **”**

Influence on policy and policy makers

This dialogue project provided insights, helped shape ideas and provided more structure to the Longitude Prize development process through public and stakeholder dialogue. The dialogue results influenced the choice of challenges to some extent and, more significantly, influenced the criteria to select the challenges and the ways in which the public could engage with the prize. The dialogues also identified challenges that might not interest the public. As a result of the project and further Nesta challenge work, a good set of challenges was identified that could be put to the wider public vote.



The independent evaluation concluded that, despite weaknesses in the process, the public and stakeholder dialogues were of value to the Longitude Committee and the Nesta team in developing a list of potentially exciting and valuable challenges.

In addition, staff from the Department for Business Innovation & Skills (BIS) shared findings with colleagues and ministers. They were particularly interested in the public lack of interest in some challenges and the evidence on the criteria that should be used for selection.

Key messages from the public participants

Views of challenges facing society

Initial discussion with participants revealed spontaneous views of the societal issues that were of concern. (See figure below)

Figure 1. Wordle™ to illustrate the range of societal issues mentioned by the public at the first dialogue session – larger words represent those mentioned most frequently



Prize selection criteria

The participants felt that identifying criteria for choosing the challenges was more important than the themes within which the challenges were categorised. The criteria identified by the public were that the challenges should:

- **be ambitious but solvable** – Longitude 2014 should reflect the scale and significance of the original Longitude prize
- **be interconnected** – tackling or solving one challenge to help resolve other problems
- **have global reach** – specifically, promoting global equality between developed and developing countries
- **benefit the whole society** – unless the prize has the potential to make a ‘life-changing’ impact for specific groups.

Opinions tended to diverge when the public began to trade-off perceived benefits and drawbacks of using criteria for prize selection. The criteria that did not have public consensus were:

- **proven impact** – needed evidence of demand for emergent technologies so it would be adopted by society and would solve a problem
- **advances existing work** – while some supported harnessing and building on what is already happening, others felt this would give organisations already receiving funding an unfair advantage, and most did not want large companies to make a profit as a result of prize success
- **innovation** – some were concerned that the criteria may stifle innovation, so wanted to avoid restrictive criteria.

The challenges with most public support (from those proposed by Nesta) were:

- tackling food shortage
- tackling malnutrition
- tackling pollution and contamination
- improving ecosystems
- providing a reliable energy supply to all
- helping people to live independent lives.

The public also suggested some alternatives to the challenges proposed by Nesta:

- tackling Alzheimer’s Disease
- mental health/blindness/‘killer diseases’
- combating obesity
- water shortage and quality.

“ This prize is massive; whatever comes out of it, it should be big. ”

Public participant

There was a tension between the public and stakeholder views relating to Nesta’s suggested prize challenges. The public favoured global issues being tackled, whereas stakeholders prioritised challenges that were seen to have a direct impact on individuals’

views did converge around certain issues (e.g. tackling dementia/ Alzheimer's Disease), but only when they were invited to suggest alternative challenges that they thought could be taken forward to subsequent stages of Longitude 2014.

Effective triggers for driving engagement

The dialogue results do not differentiate between public and stakeholder views on promoting engagement with the Longitude Prize. The following covers both sets of views on what would be effective triggers:

- **stimulating interest** – information about the details of the original and Longitude 2014 prizes should be attention grabbing and stimulate interest, specifically if it captured the ethos (open to all) and gravitas (significant impact) of the Longitude Prize
- **making it personal** – if members of the public could be made to feel they have a stake in Longitude 2014, and be convinced it was relevant and important to their lives, this might prompt engagement. This would be dependent on the tone and framing of the Longitude 2014 messages.

The dialogue activities

The objectives of the project were to ensure that:

- through consultation with stakeholders and dialogue with the public, the public voice informs the scope and framing of a new Longitude prize for innovation in science and technology
- there is a high degree of transparency around the process for developing longitude challenges

- the outcomes from the stakeholder workshop and public dialogue frame and develop specific ideas and topics for potential challenges under each challenge theme by engaging with the public.

Additionally, a set of secondary objectives were drawn up, namely to:

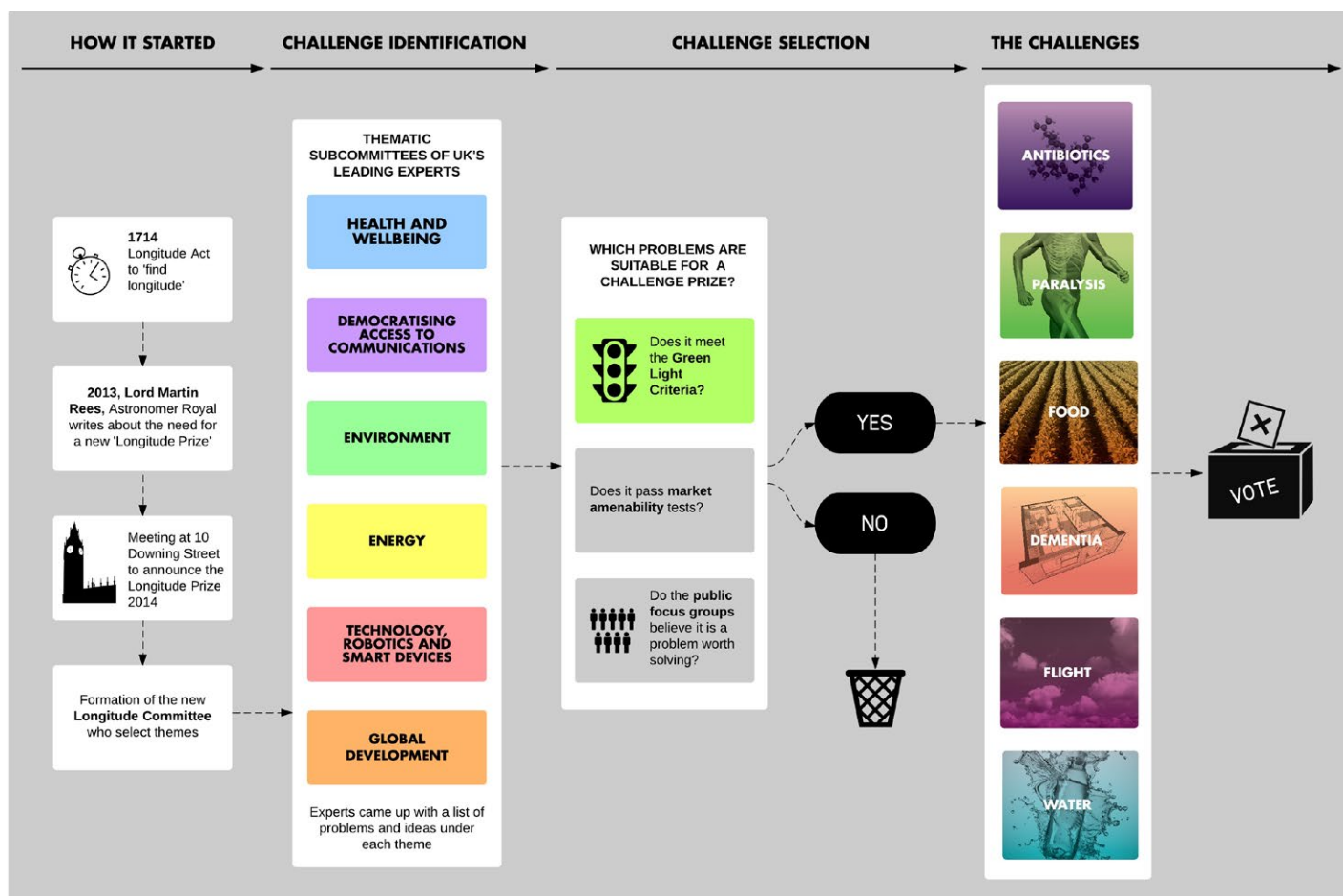
- frame and develop ideas and topics for potential challenges under each challenge theme
- understand public response to each theme and challenge
- develop new potential ideas for prize challenges/themes
- understand language and priorities of the general public.

The public dialogue activities were designed to fit with the overall development of the Longitude Prize, as shown in the diagram below.

The dialogue fitted into the overall development of Longitude Prize 2014 as follows:

- The Longitude Committee identified seven potential prize categories and a series of potential prize challenges. Sub-committees were set up to further develop the list of challenges in each theme – these discussions continued throughout the public dialogue process. The outputs from these discussions informed materials used during public dialogue workshops
- Public dialogue workshops were held between 24 October and 7 November 2013 in three locations (Leeds, Cambridge and London), each lasting around three hours in weekday evenings. Each workshop was attended by around 11 members of the public;

Figure 2. The public dialogue within the Longitude Prize selection process



a total of 32 public participants. The Cambridge workshop was for young people only (between 18 and 25 years old); the other two included people with a mix of ages. The participants in all workshops were specially recruited to be broadly representative of the areas in which the workshops were held in terms of gender and ethnicity

- A stakeholder workshop was held at the Science Museum in London in November 2013 (after the completion of the public workshops), which lasted three hours. This was attended by 16 scientists, academics and experts from a range of fields. Findings from public dialogue and discussion with experts were presented, and stakeholders were asked to consider those findings, but not be constrained by them
- The results from the dialogue and stakeholder events were then fed into the Longitude Committee meeting deciding on the final challenges to be presented by the BBC and voted on by the general public.

The project was governed by a Project Management team made up of funders of the project (the Director of the Innovation Lab at BIS and Sciencewise senior manager); Nesta's Chief Executive; the Nesta Prize team; a Sciencewise Dialogue and Engagement Specialist (DES); and, after appointment, team members of the dialogue delivery contractors. No Longitude Committee members attended this group.

Influence on policy and policy makers

This dialogue project provided insights, helped shape ideas and provided more structure to the Longitude Prize development process through public and stakeholder dialogue. The dialogue results influenced the choice of challenges to some extent and, more significantly, influenced the criteria to select the challenges and the ways in which the public could engage with the prize. The dialogues also identified challenges that might not interest the public. As a result of the project and further Nesta challenge work, a good set of challenges was identified that could be put to the wider public vote.

What worked especially well

The process made a genuine contribution to the content and process of the development of the Longitude Prize 2014.

Public participants found the dialogue experience enjoyable and interesting and were positive about being involved in influencing scientific policy. The participants also demonstrated an appetite for engagement with the Longitude Prize.

What worked less well

- **More time**, in general, was needed to develop the challenges and the criteria, and prepare for the dialogue events. The timescales were incredibly pressured. Development of stimulus materials involving expertise required more time and expert inputs than were available, and workshop topic guides would have benefited from more time for development and additional expert input
- **Lack of senior buy-in to the dialogue.** Decision makers needed to recognise and accept the value of public dialogue if they are to use the result with confidence. It is not clear that all the Longitude Committee had fully 'bought into' the

dialogue work, even at the end of the process. Greater shared clarity and agreement around the dialogue purpose/objectives was important. Equally as important was having clarity about why a public dialogue was the right approach to use and that its findings would be seen to have credibility, especially with respect to the size and diversity of participation. The presence of commissioning body members at the public dialogue events offered a very valuable opportunity for reflection and input, and it was a loss to the project that few attended

- **Late decision to include dialogue.** It would have aided the Longitude Prize immensely if the public and stakeholder engagement element had been planned in detail early in the process of developing the Prize. More time was needed for reflection and analysis by the Management Team, and time was very limited for the Committee to hear and discuss the dialogue results
- **Insufficient time and resources for full deliberation.** Workshops needed to be long enough to cover the content without rushing participants with sufficient time for real reflection and dialogue. In this case, there was an imbalance between the limited time available for the workshops (three-hour events) and the large number of topics to cover (19 issues). Limited budgets and lack of planning time resulted in this imbalance not being fully addressed. There was also a lack of science specialists acting as resources in the workshops to enable the facilitation/process and informational/content roles to be kept separate.

Contact Details

Commissioning body

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Full project and evaluation reports available from Sciencewise on www.sciencewise-erc.org.uk/cms/longitude-2014