European Commission

Development of a novel alternative to existing cold-chain technologies for vaccine formulation, preservation and transportation.

Frequently asked questions

Introduction

These rules provide additional information to, and clarification of those details which are published in the FP7 Cooperation Work Programme 2012 Health[1] and should be read in conjunction with that document.

What are inducement prizes?

Inducement prizes refer to a funding scheme where first a technological, social or scientific challenge is defined and an award promised for the delivered breakthrough solution. The concept of prizes that reward the achieving of a predefined goal in the future is very flexible and effective. Compared with traditional funding tools, prizes reduce the entry barriers and help to mobilise new talents. They can be tailored to complement traditional incentive instruments, such as grants and scholarships, to spark research into problems which are of critical importance to Europe's future (energy security, climate change, ageing society, etc.).

Why is the lack of an alternative to cold-chain technology an issue?

The delivery of vaccines from manufacturer to recipient can take up to 18 months and for most vaccines, the doses must be kept at a constant and cool temperature, above freezing. This requires an unbroken cold-chain which is logistically complicated and expensive. These problems are exacerbated in regions with weak infrastructure, precisely where the need is often greatest. The World Health Organisation estimates that half of all supplied vaccine doses are wasted. Since most of this wastage is caused by an inadequate cold-chain, there is an urgent need for alternatives to, or cost-effective improvements on these technologies.

Why is the Commission trying to tackle the issue through an inducement prize?

Prizes are a way of bringing fresh ideas to problems which can seem intractable, as they are not prescriptive in terms of the approach to be taken. This form of funding has become popular worldwide thanks in part to private, non-profit organisations, which have delivered impressive proofs of concept of this new tool to spur innovation. The

[1] http://ec.europa.eu/research/participants/portal/page/cooperation?callIdentifier=FP7-HEALTH-2012-INNOVATION-1

Commission took advice on the definition of the prize objective and its awarding from experts in the field, including from the X-Prize Foundation, the World Health Organisation, the European Centre for Disease Prevention and Control and academia.

Who can apply and how?

Applications for the vaccine technology prize can be submitted over the next year from competitors established as legal entities in the EU and associated countries. The competition is therefore open to the very widest possible selection of potential participants.

Applicants can find the rules for the competition and can register their interest to participate via the website http://ec.europa.eu/research/health/vaccine-prize_en.html.

Who will judge this prize? When will it be awarded?

The winner of the prize will be announced in the last quarter of 2013. Applications will be judged by a panel of high level experts to be announced later in 2012.

The rules for the competition state that the winning proposal must convince the judges that vaccines can be safely transported and stored in field conditions such that they retain their full potency and effectiveness, as well as of course their safety characteristics. Further, the solution should be able to be implemented at reasonable cost. Finally, the proposal should be relevant to a number of vaccines so that the eventual impact would be significant.

Is the Commission already funding research in this area?

By the end of 2012, Research Framework Programmes 6 and 7 will have seen in the region of €400 million allocated to over 100 projects on human vaccine research, in addition to other work, including clinical trials, funded elsewhere in these programmes and of relevance to the field. The majority of projects funded have focused on infectious disease, innovative therapies, public health, development and ageing and span basic research to the development of new vaccines, the improvement of their design or the development of new vaccination strategies. Cold chain technology has not been a focus of FP6 or FP7.

The Commission said it may use prizes in its consultation leading to adoption of the Horizon 2020 proposal. Could they become used more widely?

Inducement prizes will figure more prominently in Horizon 2020 than they did in FP7, but will still form only a small part of the armoury in the fight against infectious disease and other challenges that we face. The Horizon 2020 Communication highlights prizes as a new approach that will encourage the involvement of a wider range of innovators to achieve specific goals.

Why two million euro? It doesn't sound very much compared to some projects financed under FP7?

Extensive consultation with the acknowledged leaders in the field of inducement prizes as well as the abovementioned experts in the field of vaccines resulted in the allocation of €2 million as a prize fund. The goal of the competition is different to vaccine development projects financed under FP7, which frequently involve activities which are cost-intensive, such as clinical trials.