Horizon Prize – Breaking the optical transmission barriers H2020-OpticalPrize-2015

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Programme Status	Horizon 2020 Open	Main Pillar	Industrial Leadership

Topic:Horizon Prize - Breaking the optical transmissionOpticalPrize-barriers01-2015

Topic Description

• <u>Topic Conditions & Documents</u>

Submission Service

Scope:

The Horizon Prize for **breaking the optical transmission barriers** is a €500 000 challenge prize. It will be awarded to a solution that maximises the fibre capacity per channel, spectrum range and/or spectral efficiency and reach. It should also be energy efficient, economically viable, and easy to install and deploy. The solution should have a strong potential to be adopted in future generations of optical-system products. The feasibility of the approach will have to be demonstrated through clear experimental results.

OBJECTIVES

The objectives are:

- To overcome the current limitations of long-distance, optical transmission systems;
- To meet the bandwidth demand explosion;
- To provide the resources for future applications;
- To address the aspects of energy efficiency and economic viability of such
- optical breakthrough systems;

• To stimulate creative thinking across established SMEs, industrial and academic research organisations, but also to seed new industry to address the key component and system related questions, resulting in breakthrough solutions that can drive the European industry forward.

EXPECTED RESULTS

This prize will lead to a significant amount of research and potentially significant breakthroughs in the field of optical transmission which will ultimately find their way into the future optical networks.

It will help foster European leadership in optical transmission, by further capitalizing on the awarded results, and to the international visibility of Europe's excellence in this area.

The research produced will assist in supporting networks that deliver the insatiable demand for bandwidth, and in providing the resources for future applications that haven't been conceived of yet.