

FEEL EUROPE



Emotion is the basis of our response to the physical world. Feeling represents the subjective experience aroused by that emotion – from joy to despair, security to fear. Such reactions differ from person to person, but they influence many aspects of human decision-making, even down to basic purchasing choices. In FEEL EUROPE, experts from numerous disciplines will pool their resources to determine how these seemingly intangible phenomena can be measured. Their findings could have a profound impact on both industry and society.

Feelings arise from human perception and experience. Each individual has different experiences and perceives impressions subjectively. A given event may, therefore, cause different feelings and emotions in any two people, even if both receive the same stimulus.

If such phenomena were able to be measured objectively, the results could be used in a variety of beneficial ways – such as, adapting working environments and conditions, improving the domestic landscape, making tools more user-friendly and the treatment of diseases more sympathetic – and, in doing so, enhance the quality of life for all EU citizens.

The overall objective of FEEL EUROPE is to stimulate interdisciplinary research to identify investigative methods that will underpin advances in measurement techniques for future application. A consortium of two organisations – Germany's Fraunhofer Society Institute for Biomedical Engineering and the medical faculty of Spain's Miguel Hernandez

University – will bring together over thirty of Europe's leading minds to participate in an open platform and explore this unconventional challenge.

Lean management, broad ambition

Because measuring human feelings and emotions is intrinsically multidimensional, the international group will comprise: scientists in medicine, biology, psychology, philosophy, neurology and materials science; engineers in biomedicine, architecture, telecommunications and acoustics; as well as designers and experts from the automobile, textiles, lighting, sports and consulting sectors. Their aim will be to promote the formation of new partnerships by pooling the creative potential of researchers drawn from an even wider range of fields.

To prepare the groundwork, the partners will produce a 'vision' paper presenting the state of the art with new hypotheses and questions, and proposing a series of topics for discussion.



“Artists and philosophers have offered us their musings on emotions in paintings, performance and literature throughout history.”



AT A GLANCE

Official Title

European Expert Platform for Measuring Human Feelings and Emotions

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Communication and emotion.

Motion and emotion.

An expert workshop will then be organised, within which it will be possible to explore the whole gamut of human feelings and reactions. This will not only allow participants to discuss the scientific and technical possibilities for measuring feelings and emotions, but will also enable them to consider aspects relating to issues such as ethics and gender.

As a first step towards developing measurement theories, the targeted emotions will need to be identified and characterised. In this regard, ideas and theories abound.

Artists and philosophers have offered us their musings on emotions in paintings, performance and literature throughout history. Physiologists and other natural scientists have provided no shortage of possibilities on the origins, development and mechanics of emotions. Likewise, psychologists, anthropologists and sociologists have contributed their perspective on the impact emotions have on the individual and society. FEEL EUROPE boldly proposes to bring all these threads together.

Long-term rewards

Since breakthroughs in this area could generate substantial returns in the future, efforts will focus on the recognition of new opportunities, research advances and methodologies that could impact on the overall project and might be incorporated into it.

At the same time, through continuous open dialogue with experts from all the related fields, careful attention will be paid to the possible risks incurred when measuring the feelings and emotions that form an integral part of daily human life.

A final paper will offer general guidelines on the possibilities for future development, as well as represent a culmination of FEEL EUROPE's results. On completion of the project, the document will be disseminated to national and international politicians, policy-makers, project investors, researchers and developers. A shorter version will also be published online to familiarise the general public with the project's results.

FEEL EUROPE will help to define and develop novel kinds of technical cognitive systems, with the ability to understand human behaviour and provide a basis for the development of improved human-machine interfaces.

The initiative will serve as a potential source of new thematic ideas for research and development programmes embracing novel technologies, such as (bio-) sensors, non-invasive techniques and miniaturisation. It will also provide new insights in the field of neural sciences, design and ethics – and, eventually, of patentable innovations capable of market development by European enterprises.