



## Success stories in SSH - STEM collaboration

### The contribution of Social Sciences and Humanities to health research

As a cross-cutting issue of broad relevance, Social Sciences and Humanities (SSH) research was not only fully integrated into each of the priorities of **Horizon 2020**, but the effective integration of Social Sciences and Humanities will also be a principle through the programme cycle in **Horizon Europe** including clusters, missions, and partnerships.

Integrating the socio-economic dimension of grand societal problems into the design, development and implementation of research itself, and of new technologies, can help find solutions to societal issues and enhance the impact of such activities for society.

SSH can provide essential contributions to **Health research**:

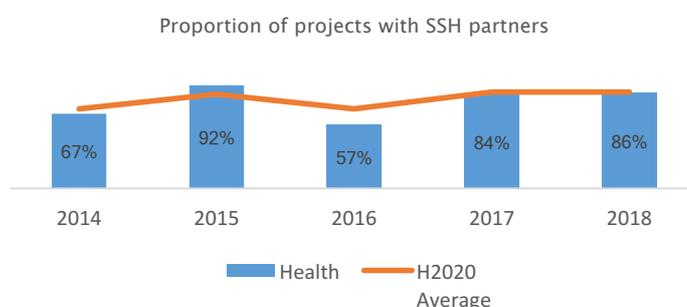
- ✓ To understand the **social relationships, interpersonal processes and cultural factors** that lead people to engage in healthy and unhealthy behaviours
- ✓ To reform public health systems, because **economic and social analysis** is crucial
- ✓ To understand demographic change, wellbeing and adaptive behaviour
- ✓ To support the design of health care delivery practices and interventions that acknowledge and adapt to **social, cultural, and economic barriers**

### FACTS & FIGURES

Collaboration between SSH and STEM researchers in H2020 has been gradually increasing in the period 2014–18: the proportion of projects funded under SSH-flagged topics with at least one SSH partner increased from 67% to 86% while the budget going to SSH partners went from 12% to 18%.

In terms of SSH expertise across the 56 projects funded under SSH-flagged topics in 2018, Political Science (19%), Economics (12%), Business/Marketing (10%) and Sociology (10%) represented the most prevalent disciplines.

*Source: Monitoring reports (2014–18) on Integration of Social Sciences and Humanities in Horizon 2020 (EC)*



SSH: Social Science and Humanities

STEM: Science, Technology, Engineering and Mathematics

# ECoWeB: a success story of collaboration between SSH and STEM researchers



Interview with Ed Watkins, Project coordinator of ECoWeB project

## Why did you decide to integrate SSH in your project ?

SSH was integrated into the project from the beginning, because it was necessary to include SSH competences to investigate the questions under study. In particular, when conducting clinical trial research it is now recognised that multiple competencies and disciplines are required, including treatment delivery, clinical trial methods, statistics, **economics and qualitative research and implementation science**. The latter two elements typically involve SSH research, and are thus a necessary aspect of the project.

## How did the process of SSH integration go from proposal writing to project implementation?

**SSH integration occurred throughout the lifecycle of the project from initial design, proposal writing and grant preparation to delivery and implementation of the research.** It was easy to establish contacts with SSH organisations because contacts were made on the basis of existing networks and based on logical choices to investigate our research questions. Because of the ongoing dialogue between all elements of the project and their explicit outline in the proposal and the recognition that the research would benefit from harmonious working of quantitative and qualitative approaches, there have not been any major challenges to integrating SSH.

## What is the added value of integrating SSH in your project and what is the contribution from SSH partners?

SSH research will **facilitate our understanding of the experience of users** of the proposed self-help digital mental health app and what will increase the ability to have young people continue to use it after the research, so this is an important added value.

## Which are the factors that facilitate collaboration between different disciplines?

The factors that facilitate collaboration include:

1. **Close involvement of all parties** from the beginning of preparing the grant proposal
2. **Shared understanding** emerging from psychology as a core discipline
3. A well-established approach to conducting clinical trials research that utilises **multidisciplinary teams**, including SSH approaches

## What would be your main recommendation for both researchers and EC?

Ensure there is **a good shared understanding and framework** for working in advance of project launch.

## ECoWeB



The ECoWeB Project aims to develop and disseminate a mobile application (App) to provide engaging and personalized tools and psychological skills to promote emotional wellbeing and prevent mental health problems in adolescents and young adults.

<http://www.ecowebproject.eu/>



## Success stories in SSH - STEM collaboration

### The contribution of Social Sciences and Humanities to food security and sustainable agriculture research

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SSH can provide essential contributions to **Food security and sustainable agriculture research**:

- ✓ By understanding the **economic, social, and behavioural issues** associated with the adoption of new agricultural management strategies
- ✓ By analysing the **social and economic impacts of digitisation** on agriculture and rural areas
- ✓ Through **design of new rural policies**, which translate research outcomes into tools that are understandable for policymakers and citizens

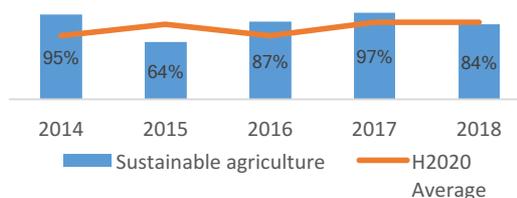
## FACTS & FIGURES

Collaboration between SSH and STEM researchers in H2020 has slightly decreased in the period 2014-18: the proportion of projects funded under SSH-flagged topics with at least one SSH partner went from 95% to 84% while the budget going to SSH partners went from 27% to 17%.

In terms of SSH expertise type across the 44 projects funded under SSH-flagged topics in 2018, the most prevalent disciplines were Economic Sciences (33%) Business/Marketing (14%) and Political Science (13%).

Source: Monitoring reports (2014-18) on Integration of Social Sciences and Humanities in Horizon 2020 (EC)

Proportion of projects with SSH partners



SSH: Social Science and Humanities  
STEM: Science, Technology, Engineering and Mathematics



## DESIRA: a success story of collaboration between SSH and STEM researchers

Interview with Gianluca Brunori, Project Coordinator of Desira Project

### Why did you decide to integrate SSH In your project ?

We believe that **Social Sciences and Humanities are a key component of Innovation studies**. In the field of digitisation, ethical and political issues are extremely important. Our approach is based on a vision of **Innovation as a socio-technical process**, with technology embedded in social structures and co-evolving with them.

### How did the process of SSH integration go from proposal writing to project implementation?

Since the project is composed for the most part of SSH partners, we need to talk about the integration of the STEM researchers. They were involved since the beginning of the core writing team. We dedicated several meetings to understanding each other and to create a common understanding. Along with the project, ICT partners have participated in living labs together with social scientists.

### What is the added value of Integrating SSH In your project and what is the contribution from SSH partners?

In the consortium there are five ICT partners. The integration has been very fruitful, as they were already accustomed to interacting with SSH researchers. Being exposed to socio-economic considerations, they have developed a capacity to go beyond the specific technical aspect, looking at broader social implications.

### Which are the factors that facilitate collaboration between different disciplines and which are the factors that hamper it?

We have based our collaboration on a **collaborative framework** centered on the concept of a socio-cyber physical system. This led to a project that integrates all the competences of the partners and where all partners share a common understanding and language.

### What would be your main recommendation for both researchers and EC?

- ✓For researchers: Dedicate time and resources to conceptual framework elaboration.
- ✓For the European Commission: Identify appropriate evaluation tools to assess the effectiveness of integration.

## Desira



The project aims to improve the capacity of society and political bodies to respond to the challenges that digitalisation generates in agriculture, forestry and rural areas

<http://desira2020.eu/>

## Success stories in SSH - STEM collaboration

### The contribution of Social Sciences and Humanities to energy research

As a cross-cutting issue of broad relevance, Social Sciences and Humanities (SSH) research was not only fully integrated into each of the priorities of **Horizon 2020**, but the effective integration of Social Sciences and Humanities will also be a principle through the programme cycle in **Horizon Europe** including clusters, missions, and partnerships.

Integrating the socio-economic dimension of grand societal problems into the design, development and implementation of research itself, and of new technologies, can help find solutions to societal issues and enhance the impact of such activities for society.

SSH can provide essential contributions to **Energy research**:

- ✓ To support the design, implementation, and evaluation of effective **policies** for energy conservation and efficiency through behavioural and economic analysis
- ✓ To realise and maximise the potential gain in **energy efficiency**, because the economic, psychological, and cultural issues that drive market and individual behaviour need to be understood
- ✓ To address questions related to the economics and **governance models** for sustainable energy systems

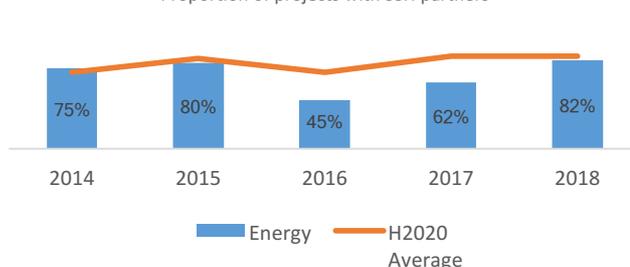
### FACTS & FIGURES

Collaboration between SSH and STEM researchers in H2020 has been gradually increasing in the period 2014–18: the proportion of projects funded under SSH-flagged topics with at least one SSH partner increased from 75% to 82% while the budget going to SSH partners slightly decreased from 22% to 18%.

In terms of SSH expertise across the 88 funded projects in 2018, the most prevalent disciplines were Economics (21%), Political Science (18%) as well as Business/Marketing (16%).

Source: Monitoring reports (2014–18) on Integration of Social Sciences and Humanities in Horizon 2020 (EC)

Proportion of projects with SSH partners



SSH: Social Science and Humanities

STEM: Science, Technology, Engineering and Mathematics



## SMARTEES: a success story of collaboration between SSH and STEM researchers

Interview with Christian A. Klöckner, Project coordinator of Smartees

### Why did you decide to integrate SSH In your project?

For SMARTEES, it was rather the other way around. The call it is funded in is an SSH call (SSH in the Energy Transition). However, we decided to add the mathematical modelling perspective to bind the activities in the project closer to the work that is going on in the Energy Systems Modelling community.

### How did the process of SSH integration go from proposal writing to project implementation?

The project started as an SSH project, but from the start there was the affinity to the modelling community due to some involved partners. As SMARTEES is an **SSH project per design which makes use of mathematical modelling**, the issues were rather not integrating SSH, but integrating modelling into the SSH framework. The main challenges in the project were defining where modelling and SSH research work well together, how they are different, developing a common understanding of what a mathematical simulation model does, and agreeing on diversity in approaches, especially between the sociological researchers in the project and the very quantitative modellers. The SSH partners developed the general theoretical framework, data input to feed the models, but also to answer other research questions not related to the modelling.

### What is the added value of integrating SSH In your project and what is the contribution from SSH partners?

The project is SSH at its core, so the question is what is the added value of the mathematical models. We see that translating SSH theory and assumptions into formalised models makes it: (a) more reliable for non-SSH researchers on the outside, and (b) forces SSH researchers to be explicit about assumptions and make them verifiable, but (c) also shows the limits of simulation models.

### Which are the factors that facilitate collaboration between different disciplines and which are the factors that hamper it?

A factor that certainly contributed to the good collaboration between STEM and SSH in SMARTEES is that we invited **teams of modellers and SSH researchers from the same institution**. This established a daily collaboration between the perspectives on the institutional level. Furthermore, it helped to have psychology as a discipline involved that is strongly dominated by quantitative research and thus relatively close to the mathematical modelling. On the other hand, psychology is close enough to sociology to be compatible with some of the assumptions in that discipline.

### What would be your main recommendation for both researchers and EC?

Projects where SSH is (a smaller) part of a larger project dominated by, e.g. STEM, are rather common now. Less common are projects where it is the other way around. It appears that SSH researchers (once they take the leading role for proposal design) do not involve other disciplines strongly enough. I would wish for more interdisciplinary/multi-perspective projects, where SSH takes the leading role, but where other non-SSH disciplines are strongly represented.

## Smartees



SMARTEES – Social Innovation Modelling Approaches to Realizing Transition to Energy Efficiency and Sustainability – is a transdisciplinary research project which aims to support the energy transition and improve policy design by developing alternative and robust policy pathways that foster citizen inclusion and take local peculiarities into account.

<https://local-social-innovation.eu/>



## Success stories in SSH - STEM collaboration

### The contribution of Social Sciences and Humanities to transport research

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Integrating the socio-economic dimension of grand societal problems into the design, development and implementation of research itself, and of new technologies, can help find solutions to societal issues and enhance the impact of such activities for society.

SSH can provide essential contributions to **Transport research**:

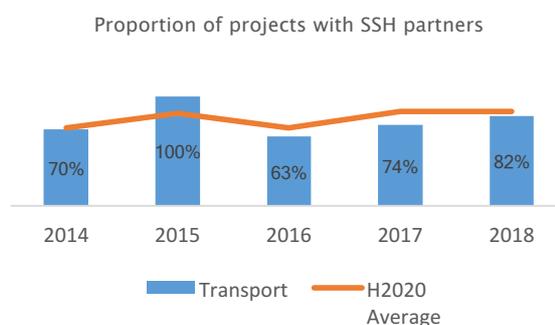
- ✓ **To influence citizens' behaviour** to use resource-efficient forms of transport, which respect the environment
- ✓ To make mobility not only more environmental friendly, but also **more user friendly**
- ✓ To understand if technologies or new systems of transportation will become successful, **by analysing users' habits and attitudes**

### FACTS & FIGURES

Collaboration between SSH and STEM researchers in H2020 has been gradually increasing in the period 2014-18: the proportion of projects funded under SSH-flagged topics with at least one SSH partner increased from 70% to 82% while the budget going to SSH partners went from 9% to 19%.

In terms of SSH expertise across the 33 funded projects in 2018, the most prevalent disciplines were Political Science (18%), Business/Marketing (14%) Psychology (14%).

*Source: Monitoring reports (2014-18) on Integration of Social Sciences and Humanities in Horizon 2020 (EC)*



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# HiReach: a success story of collaboration between SSH and STEM researchers

Interview with: Simone Bosetti, Project Coordinator HIReach

## Why did you decide to integrate SSH in your project ?

The H2020 call topic was flagged as relevant for SSH. Besides this formal requirement, its scope called for an SSH approach, and both the technical proposal and the project team was built around this need.

## How did the process of SSH integration go from proposal writing to project implementation?

To some extent, none of the project partners had an SSH-only connotation. When building the project consortium, an effort was put in toward involving the right departments/teams/researchers within each organisation. Previous contacts and a **long track-record of previous cooperation** among some of the partners were fundamental in this respect.

About the main challenges, as often happens, whenever a large multidisciplinary team of researchers with different backgrounds is involved, **strong coordination and conciliation efforts of different perspectives and attitudes** were constantly needed at both overall project and work package level.

## What is the added value of integrating SSH in your project and what is the contribution from SSH partners?

Without SSH in the multidisciplinary team, the project just would not have been feasible. The contribution of the SSH partners was relevant during all the steps of the project. In the first step, aimed at the analysis of needs, capabilities and behaviour of social groups vulnerable to exclusion, sociologists and psychologists were fundamental in organising the focus group workshops held to gain first-hand **knowledge and understanding of the specificities of the different targeted users' groups**. At a later stage, economists, business developers (together with computer scientists and engineers) were involved in assessing the existing inclusive mobility solutions, and in designing innovative ones.

## Which are the factors that facilitate collaboration between different disciplines and which are the factors that hamper it?

✓ Facilitating factors: The humbleness in understanding and accepting different perspectives and contributions in the project tasks.

✓ Obstacles: The lack of communication and coordination.

## What would be your main recommendation for both researchers and EC?

✓ For researchers: To never lose sight of the final goal, overall objectives for the project, and to adapt and be flexible in the ways of achieving them.

✓ For the European Commission: Multidisciplinary teams and a good balance of SSH and STEM should be required, and positively evaluated when awarding the H2020 projects.

## HiReach



HiReach builds on the potential of bundling and mixing dispersed, special and non-coordinated/optimised trip requests and needs from different vulnerable user groups to favour inclusive and participative mobility rather than exclusive/special and geographically-limited mobility. HiReach fosters social innovation processes through an in-depth (micro)analysis of capabilities and attitudes of different social groups and their direct involvement as co-users and co-owners of the proposed solutions.

<https://hireach-project.eu/>

# Success stories in SSH-STEM collaboration

## The contribution of Social Sciences and Humanities to Environmental Research

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SSH can provide essential contributions to **Environmental research**:

- ✓ To tackle the **cultural, behavioural, socio-economic and institutional change** needed to move to a more self-reliant and resource efficient economy
- ✓ To understand and influence **citizens' behaviour** in order to face climate change and its consequent risks for citizens

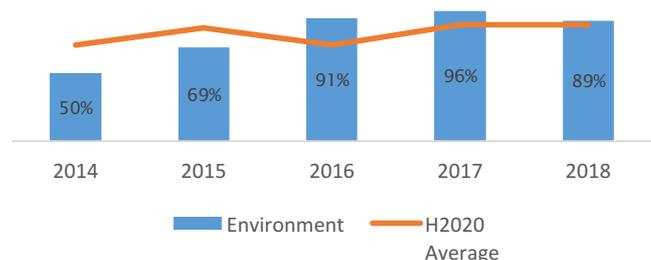
## FACTS & FIGURES

Collaboration between SSH and STEM researchers in H2020 has been gradually increasing in the period 2014–18: the proportion of projects funded under SSH-flagged topics with at least one SSH partner increased from 50% to 89% while the budget going to SSH partners went from 13% to 23%.

In terms of SSH expertise across the 36 funded projects in 2018, the most prevalent disciplines were Economics (22%), Political Science (12%) as well as Business/Marketing (11%).

*Source: Monitoring reports (2014–18) on Integration of Social Sciences and Humanities in Horizon 2020 (EC)*

Proportion of projects with SSH partners



SSH: Social Science and Humanities  
STEM: Science, Technology, Engineering and Mathematics

# RURITAGE: a success story of collaboration between SSH and STEM researchers



Interview with Simona Tondelli, Project Coordinator of Ruritage

## Why did you decide to integrate SSH in your project ?

The integration of SSH was encouraged by the call, but to us this was intrinsically linked to the topic, so it was natural to build an interdisciplinary consortium involving both STEM and SSH.

## How did the process of SSH integration go from proposal writing to project implementation?

It has been easy to establish contacts with SSH organisations, both from previous contacts and also from publications or desk research on the topic key words.

We didn't experience real challenges in integrating SSH because this is the way we normally work as urban and regional planners: **using scientific methods and tools to make changes at social and institutional level** and collaborating in large and diverse teams keeping together experts of different disciplines.

## What is the added value of integrating SSH in your project and what is the contribution from SSH partners?

SSH allowed us **to better understand participative processes and stakeholder engagement** in RURITAGE Rural Heritage Hubs, thanks to the integration of different disciplines and actors, adopting a transdisciplinary and interdisciplinary approach. The SSH partners have contributed in tackling the cultural, behavioural, socio-economic and institutional changes building upon cultural heritage, history, culture and identity.

## Which are the factors that facilitate collaboration between different disciplines and which are the factors that hamper it?

**Effective dialogue and direct collaboration** with the relevant stakeholders are important for consolidating a transdisciplinary approach. Factors that hamper this collaboration are **reciprocal diffidence** between STEM and SSH researchers and the need to step outside from one's "comfort zone", that is, starting to work in a more undetermined way.

## What would be your main recommendation for both researchers and EC?

✓For the researchers: embrace transdisciplinary projects. Even if it is more secure and probably easy to work within one's specific research field, transdisciplinary work allows to tackle more complex challenges and at the end is more satisfying.

✓For the European Commission: it is still needed to encourage a transdisciplinary approach, so this should be explicitly required in the research topics.

## Ruritage



All over the world, rural areas tell us the story of a thousand of years long collaboration between nature and human society. These places embody unique examples of cultural and natural heritage, which not only needs to be safeguarded but also recognized as communities of sustainable development. The RURITAGE project turns rural areas into laboratories to demonstrate natural and cultural heritage as an engine for regeneration.

<https://www.ruritage.eu/>



## Success stories in SSH - STEM collaboration

### The contribution of Social Sciences and Humanities to Security research

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SSH can provide essential contributions to **Security research**:

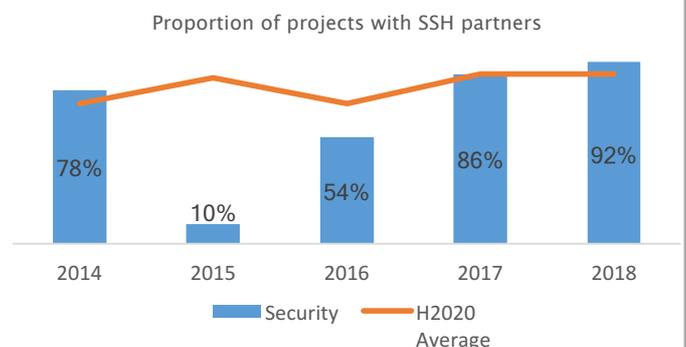
- ✓ To understand the **human factor** that leads to criminal and terrorist acts, and therefore, contributes to the prevention and mitigation of such acts
- ✓ To develop an understanding of **society's awareness of risks** and provide recommendations for the development of a culture of improved preparedness, adaptability, and resilience to risks
- ✓ For the development of **effective legal frameworks** at local, national and transnational levels

### FACTS & FIGURES

Collaboration between SSH and STEM researchers in H2020 has been gradually increasing in the period 2014–18: the proportion of projects funded under SSH-flagged topics with at least one SSH partner increased from 78% to 92% while the budget going to SSH partners decreased from 36% to 16%.

In terms of SSH expertise across the 24 funded projects in 2018, the most prevalent disciplines were Law (25%), Political Science (19%) and Sociology (13%).

Source: Monitoring reports (2014–18) on Integration of Social Sciences and Humanities in Horizon 2020 (EC)



SSH: Social Science and Humanities  
STEM: Science, Technology, Engineering and Mathematics





## PROACTIVE: a success story of collaboration between SSH - STEM researchers

Interview with Grigore M. Havârneanu, Coordinator of PROACTIVE project

### Why did you decide to integrate SSH in your project ?

First, the FCT-01 call topic was requesting that project proposals address cross-cutting issues between SSH, gender, and other societal impacts. Secondly, the core partners who initiated the project ideas were persuaded that SSH was a key element missing from the existing CBRNe research.

### How did the process of SSH integration go from proposal writing to project implementation?

The process was long, and involved a lot of dialogue and exchange of ideas. The project coordinator and some core team partners met at a **brokerage event** and found out they had a **common vision** regarding the application of SSH to fight CBRNe-related crime and terrorism. Then we used our **existing network of contacts** to finalise the research team. We also used **search tools** to find specific organisation profiles. The PROACTIVE team performs research with quantitative and qualitative SSH approaches. Considering our research scope (CBRNe terrorism), and the involvement of vulnerable citizens in the research activities, the main challenge concerns the research ethics, data privacy and compliance with very strict legal, ethical, and acceptability requirements. We manage these challenges through a dedicated and transversal work package, through the appointment of a Data Protection Officer, a Project Ethics Officer, and an External Ethics Advisory Board.

### What is the added value of integrating SSH in your project and what is the contribution from SSH partners?

At the time of the proposal preparation, the PROACTIVE team was aware of the need to conduct more research that focused on the citizen (especially vulnerable groups). We were convinced that by integrating SSH in PROACTIVE, our project would become complementary to the mainstream CBRNe Research and Innovation Actions. The SSH partners have strong backgrounds and experience in Social Science research methods, **behavioural science, applied psychology, and ethics**.

### Which are the factors that facilitate collaboration between different disciplines and which are the factors that hamper it?

In my experience, some researchers are not very used to working with people from other domains. This is a skill which can be trained, and EU-funded projects are excellent opportunities for such cooperation. In PROACTIVE, we tried to overcome the **cultural differences** between partners and push the SSH and STEM researchers to get out of their comfort zone. In my project coordinator role, I did my best to act as facilitator and boost the **collaborative mindset** of the consortium even at proposal phase.

### What would be your main recommendation for both researchers and EC?

- ✓ For researchers: I repeat this every time I have the opportunity: research is interdisciplinary. If we want to achieve **practical research outcomes**, which answer **real societal needs**, then researchers from various domains need to learn how to work together.
- ✓ For the European Commission: It was highly appreciated when the Commission decided to include more SSH and Human Factor research in the H2020 programme compared to FP7. This was an important change, which facilitated interdisciplinary projects.

## PROACTIVE



Chemical Biological Radiological Nuclear & Explosive (CBRNe) incidents, whether accidental or terrorist-based, can have a high impact on society. PROACTIVE aims to increase practitioner effectiveness in managing large and diverse groups of people in a CBRNe environment. The main goal of the PROACTIVE project is to enhance preparedness against and response to a CBRNe incident through a better harmonisation of procedures between various categories of practitioners, and a better understanding of the needs of vulnerable citizen groups.