

Success stories in SSH integration



SSH INTEGRATION IN SC1

The World Health Organization defines health as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity”. On the basis of this definition it is clear that to address the challenges related to the humans’ well-being, it is necessary to consider the disease not only from a medical point of view but also to include other aspects such as psychological, sociological and economic ones to offer the most customized and complete health-care system to all the categories, including disadvantaged people.

Horizon 2020 considers the socio-economic sciences and humanities (SSH) as cross-cutting and integrated in all the priorities and objectives of the Programme. The Societal Challenge 1, **Health, demographic trends and well-being**, involves SSH research in order to tackle the societal challenges and to provide the most suitable impact for society. The following aspects need to be considered:

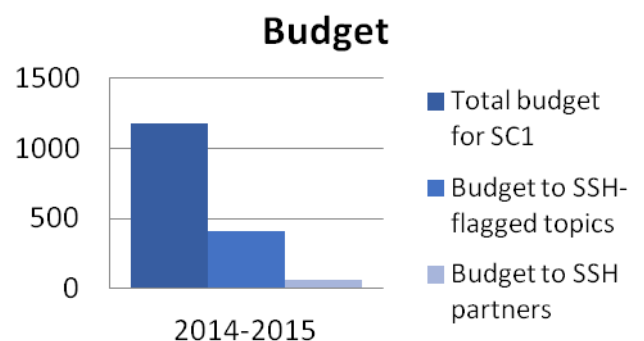
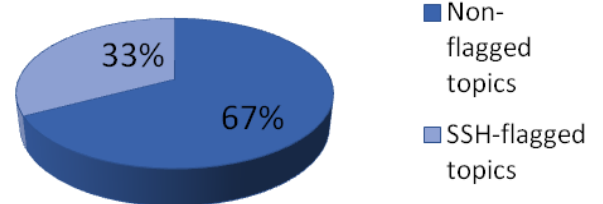
- To face the behavioral disorders and risk of social exclusion, projects have to involve psychologists and sociologists.
- To reduce inequalities, projects need to consider social and economic aspects.
- To improve well-being, projects need to use social innovation.

To have a good proposal cooperation with SSH researchers is crucial!

FACTS & FIGURES

In the Work Programme 2014-2015 SC1 funded a total of 52 topics with a total budget of €1179 million.

17 out of 52 topics were flagged for SSH. Within these topics 84 projects were funded for a budget of €410 million out of which 59 million went to SSH partners.



POLYCARE: a success story in SSH integration



Interview with Maria Jesús Cancer, Project Coordinator of Polycare project and Silvia Adillón, SSH partner

Q: Why did you decide to integrate SSH in your project?

The SSH integration was mentioned explicitly by the topic and in any case the SSH aspects would have been included in the proposal in order **to reach the expected objectives and results**.

Q: How did the process of SSH integration go from the proposal to the project?

Cooperation with the SSH partners is going well. The challenging aspect is the proper and frequent facilitation of **communication, feedback and exchange** between IT and SSH partner.

The inclusion of SSH partners has been made through:

- previous contacts
- networking and existing contacts of the partners

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

SSH integration is necessary to reach the objectives of the project.

STEM and SSH disciplines cooperate together to ensure that the **ICT solutions reflect the needs and expectations of the end-users** and that the ICT system has all necessary functionalities.

The project would have not been awarded if there was no SSH integration. The care model is created for the people and SSH expertise can ensure that the model is suited to their needs and expectations.

Q: Which are the factors that facilitate collaboration and which the factors that hamper it?

The factors which facilitate cooperation:

- An **active involvement** of all partners in the project already from the proposal writing phase
- A strong **professional experience** of the staff involved in the project.

The factors which hamper cooperation:

- **High expectations** of SSH experts concerning the functionalities of the ICT system used to develop the case model.
- The **different terminology** used by SSH and ICT experts. To solve this problem, in certain deliverables there was a section explaining different technical terms.

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

For the researchers:

- **Involvement of SSH and STEM experts from the very beginning** of the project preparation (i.e. already at the project proposal stage).
- Explanation, from the very beginning, of technical limits of solutions that will be developed in the project so as **to avoid misunderstandings** between different disciplines later in the project implementation.
- Ensuring **frequent communication** between different disciplines (tasks implemented in collaboration).

For the European Commission:

- Ensuring that **more topics** explicitly require **multidisciplinary** approach and to specifically define in those topics which disciplines should be involved."

Polycare

The Polycare project aims to **develop and test an integrated care model supported by advanced ICT systems**.



These systems and services will allow patients in acute phases to be monitored from home. This methodology strives to achieve the two main objectives:

- Enhance quality of life and care for patients.
- Increase sustainability of health and social care systems.

POLYCARE will provide ICT solutions that will foster real integrated care between health and social care following a new methodology. These ICT solutions will be based on a collaborative environment between health and social care services that will help to share information.

<http://www.polycare-project.com/>

Success stories in SSH integration



SSH INTEGRATION IN SC2

The objective of the Societal Challenge 2 'Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the bioeconomy' is to secure sufficient supplies of safe, healthy and high quality food and other bio-based products, by developing productive, sustainable and resource-efficient primary production systems, fostering related ecosystem services and the recovery of biological diversity, alongside competitive and low-carbon supply, processing and marketing chains ¹.

Horizon 2020 considers the socio-economic sciences and humanities (SSH) as cross-cutting and integrated in all the priorities and objectives of the Programme. The Societal Challenge 2 involves this research in order to tackle the societal challenges and to provide the most suitable impact for society. The following aspects need to be considered:

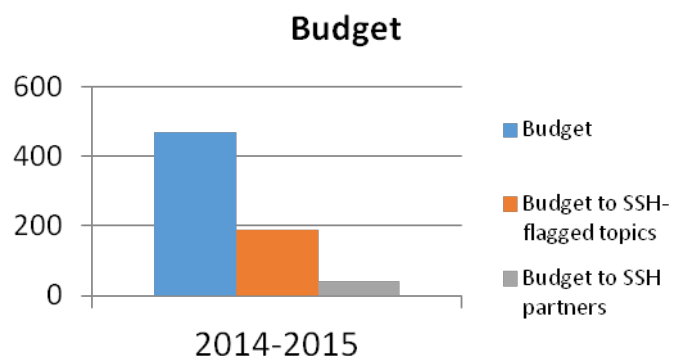
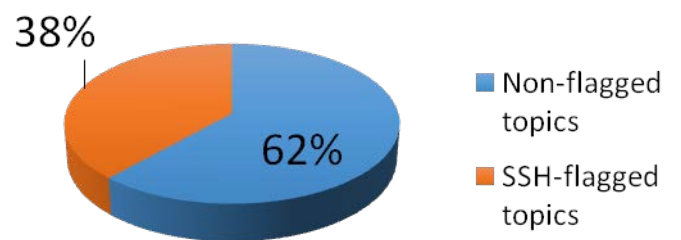
- To achieve sustainable agriculture and forestry, research should analyze the behaviour of citizens through sociologists and psychologists;
 - To have a sustainable and competitive agri-food sector for a safe and healthy diet, projects have to consider economic aspects but also the well-being of citizens;
 - To carry out marine and maritime research the project should consider the impact on society and involvement of local community.
- To have a good proposal cooperation with SSH researchers is crucial!

¹ Horizon 2020 Specific Programme

FACTS & FIGURES

In the Work Programme 2014-2015 SC2 funded a total of 60 topics with a total budget of €471,5 million.

23 out of 60 topics were flagged for SSH. Within these topics 34 projects were funded for a budget of €189 million out of which 41 million went to SSH partners.



Source: 1st and 2nd Monitoring Report on Integration of Social Sciences and Humanities in Horizon 2020: Participants, budget and disciplines, EC



Interview with Michaela Aschan, Project Coordinator of ClimeFish project

Q: Why did you decide to integrate SSH in your project?

It was mentioned explicitly by the topic but in any case SSH aspects would have been included in the proposal as SSH expertise increases the effectiveness of project implementation, the impact, relevance and outreach of project's results.

Q: How did the process of SSH integration go from the proposal to the project?

No major problems have been identified, besides cultural differences between project partners. The main challenge was to agree on the terminology used in the project. For this reason, at the beginning of the project, a glossary was elaborated by and circulated among partners. The glossary is updated regularly to ensure that all partners have the same understanding of terms and names used throughout the project. The publishing of trans-disciplinary publications is difficult because publishers usually do not find it relevant to publish multi-disciplinary studies or have problems with finding relevant reviewers. The Coordinator's institution is a multidisciplinary institution comprising various scientific fields, including social sciences, governance and political studies, law and fisheries. This framework has been primarily used to identify relevant SSH partners.

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

SSH integration is crucial for the involvement of different actors in the co-creation process and ultimately for reaching the objectives of the project. It increases the impact and relevance of the project's results. The majority of project's activities are carried out in close collaboration between SSH and STEM experts. SSH partners are actively involved in the stakeholder co-creation process, for which a separate Work Package has been designed. It also aims at identifying risks and opportunities in the fisheries and aquaculture industries, and conducting socio-economic analyses of the impacts. In specific, SSH partners are responsible for the facilitation of this process, collecting stakeholders feedback, conducting relevant analysis and integrating them into final results and deliverables.

Q: Which are the factors that facilitate collaboration and which the factors that hamper it?

The factors which facilitate cooperation:

➤ **Physical meetings** (including informal situations e.g. dinners, etc.) should be organised as frequently as possible as all the partners need to know each other.

The factors which hamper cooperation:

➤ **Different approach** to the project: University employees are more focused on publications and tend to have a more distant, institutional approach while researchers in the institute sector are more pragmatic and hands on when it comes to implementation. This needs to be addressed up front to ensure effective collaboration and avoid problems in the implementation of the project.

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

For the researchers:

➤ To **involve** STEM and SSH experts from the **very beginning** of project preparation (i.e. already at the project drafting phase).

For the European Commission:

➤ There should be more **interdisciplinary institutions/universities** that would allow for better and more frequent integration of SSH in STEM projects.

Project info

ClimeFish

The overall goal of ClimeFish is to help ensure that the increase in seafood production comes in areas and for species where there is a potential for sustainable growth, given the expected developments in climate, thus contributing to robust employment and sustainable development of rural and coastal communities.



<http://climefish.eu>

Success stories in SSH integration



SSH INTEGRATION IN SC3

The objective of the Societal Challenge 3 ‘**Secure, clean and efficient energy**’ is to make the transition to a reliable, affordable, publicly accepted, sustainable and competitive energy system, aiming at reducing fossil fuel dependency in the face of increasingly scarce resources, increasing energy needs and climate change¹.

Horizon 2020 considers the socio-economic sciences and humanities (SSH) as cross-cutting and integrated in all the priorities and objectives of the programme. The Societal Challenge 3 involves SSH research in order to tackle the societal challenges and to provide the most suitable impact for society. The following aspects need to be considered:

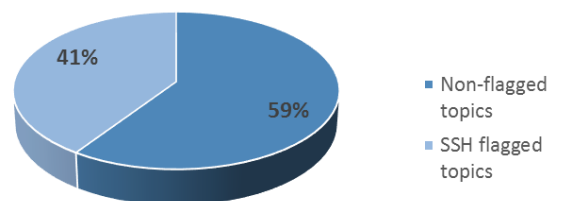
- To achieve behavioural change towards more sustainable choices and decisions for energy, projects have to involve psychologists and sociologists.
- To understand the issues related to social acceptance of or resistance to new energy technologies, research should address socioeconomic and livelihood aspects.
- To impact on society and policy, research needs to involve political science.

To have a good proposal cooperation with SSH researchers is crucial!

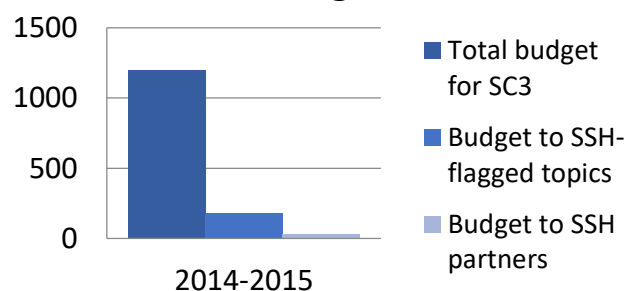
FACTS & FIGURES

In the Work Programme 2014-2015 SC3 funded a total of 74 topics with a total budget of €1202 million.

30 out of 74 topics were flagged for SSH. Within these topics 97 projects were funded for a budget of €182 million out of which 34 million went to SSH partners.



Budget



Source: 1st and 2nd Monitoring Report on Integration of Social Sciences and Humanities in Horizon 2020: Participants, budget and disciplines, EC

¹ Horizon 2020 Specific Programme

COMBI: a success story in SSH integration



Interview with Stephan Thomas, Project Coordinator of COMBI project

Q: Why did you decide to integrate SSH in your project?

SSH integration was explicitly mentioned in the call, in fact the project is mostly SSH focused.

Q: How did the process of SSH integration go from the proposal to the project?

All partners have been chosen on the basis of their **specific experience** matching the aim and objectives of the project. The majority of partners have been chosen from participants lists of various relevant projects in the energy field. Some partners were recommended by the already selected ones. One came from previous contacts. **It was easy to establish contacts and engage almost all partners**, except one high-level partner who joined the consortium late in the proposal phase.

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

The partner with strongest STEM focus is in charge of input data generation (based on technical aspects the partner provides energy saving potentials). This work also involves economic modelling, hence partially does also SSH work. On the basis of the input provided by the STEM partner, the SSH partners **quantify multiple impacts of energy efficiency** in 5 main areas: air pollution, resources, social welfare, macro economy and energy system and security. The aim is to develop an online tool to visualise the multiple impacts of energy efficiency.

Q: Which are the factors that facilitate collaboration and which the factors that hamper it?

The factors which facilitate cooperation:

- **Common understanding** of the main concepts and the use of common language and terminology by all partners
- Frequent **personal meetings**
- **Regular communication** between all partners

The factors which hamper cooperation:

- **Different terminology, approaches and methodologies** used by different disciplines
- **Different levels of ambition** (some partners have a purely academic approach – as they represent academia, whereas others pursue a more practical one - as they come from the consultancy sector)

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

For the researchers:

- Already at the proposal phase, **clarify the common understanding and the terminology** to be used in the project.
- Be sure **to clarify interfaces of the project**, in specific the division of tasks and content-feeding between SSH and STEM experts.

For the European Commission:

- In projects that require interdisciplinary approach, the requirement for SSH integration should be explicitly mentioned in the call, **indicating what kind of disciplines and SSH-related issues** should be covered (e.g. social impact analysis).

Project info

COMBI

Calculating and Operationalising the Multiple Benefits of Energy Efficiency in Europe



The overall goal of the COMBI project is to **provide a graphical online tool to visualise the multiple impacts of energy efficiency and their aggregation.**

The project aims at helping to define cost-effective policies and support policy-makers and evaluators in the development and monitoring of energy efficiency strategies and policies in the future.

<http://combi-project.eu/>

Success stories in SSH integration



SSH INTEGRATION IN SC4

The objective of the Societal Challenge 4 '**Smart, green and integrated transport**' is to achieve a European transport system that is resource-efficient, climate- and environmentally-friendly, safe and seamless for the benefit of all citizens, the economy and society ¹.

Horizon 2020 considers the socio-economic sciences and humanities (SSH) as cross-cutting and integrated in all the priorities and objectives of the Programme. The Societal Challenge 4 involves this research in order to tackle the societal challenges and to provide the most suitable impact for society. The following aspects need to be considered:

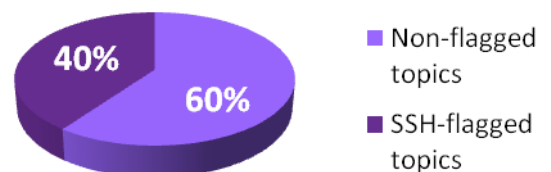
- To reach a resource-efficient transport that respects the environment, it is necessary to influence citizens' behaviour through sociologists and anthropologists.
- To have a better mobility, less congestion, more safety and security, research has to consider also the well-being of people involving psychologists.
- To reach a global leadership for the European transport industry the project has to assess economic factors.
- To carry out socio-economic and behavioural research and forward-looking activities for policy making, it is necessary to include sociologists, psychologists and political scientists.

To have a good proposal cooperation with SSH researchers is crucial!

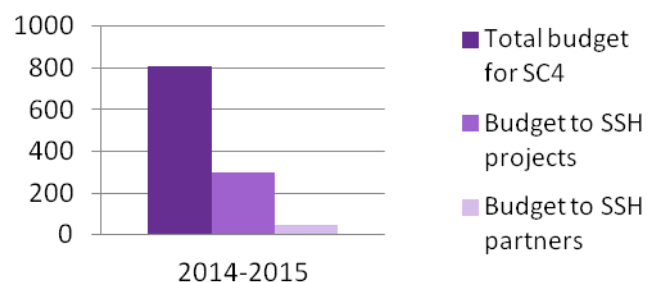
FACTS & FIGURES

In the Work Programme 2014-2015 SC4 funded a total of 55 topics with a total budget of € 807 million.

22 out of 55 topics were flagged for SSH. Within these topics, 55 projects were funded for a budget of €301 million out of which €48 million went to SSH partners.



Budget



Source: 1st and 2nd Monitoring Report on Integration of Social Sciences and Humanities in Horizon 2020: Participants, budget and disciplines, EC

¹ Horizon 2020 Specific Programme



Interview with Cristina Garzillo, Project Coordinator of the SUMPs-UP project

Q: Why did you decide to integrate SSH in your project?

*It was mentioned explicitly by the topic, but in any case SSH aspects would have been included in the proposal as within the mobility field, technical issues should be integrated with **social aspects** due to **the complexity of urban areas and the transport sector**.*

Q: How did the process of SSH integration go from the proposal to the project?

*The cooperation between different disciplines in the project went well. The problem is making synergies and aligning with other relevant projects, as required by the call. The main challenge was to find **synergies between social and technical aspects** in the project, in order not to focus only on typically technical or engineering issues. The focus of the project is on cities where the take-up of sustainable urban mobility plans is low. In these cities in particular **social and cultural aspects** should be taken into account (e.g. when planning new bike paths, etc.).*

*The integration of different disciplines was mainly achieved by ensuring the presence of **multidisciplinary institutions** in the project - that also allowed for having another (new) perspective on the existing problems related to the mobility field. There is no typically SSH oriented organisation in the consortium, but many organisations are multidisciplinary. The coordinator knew them from previous projects.*

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

*The reality of the mobility field, urban areas and related transformations is very complex. It covers not only typical technical/engineering aspects but also **social matters** (e.g. poverty, mental health, people's habits, etc.). To address the challenges related to the mobility sector, all those issues must be aligned and synergies must be created. Inclusion of SSH expertise offers **new perspectives** to the existing problems, allows for **co-creation, co-design and co-innovation**. Inclusion of different stakeholders and different perspectives allows to reach better conclusions. SSH expertise is used for the purpose of evaluating and monitoring of mobility plans in the cities. SSH experts are also in charge of awareness raising campaigns and contact with local governments, policy makers and citizens. Moreover, they are responsible for capacity building activities (online and face to face learning, workshops, etc.).*

Q: Which are the factors that facilitate collaboration and which the factors that hamper it?

The factors which facilitate cooperation:

➤ Regular and frequent **communication** between all partners.

The factors which hamper cooperation:

➤ **Too big of a focus on technical/engineering aspects**, in this way the project loses the overall picture of the targeted problem.

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

For the researchers:

➤ Focus on the main objective of the project and keep this focus throughout the project. You can do that by **equally and actively involving different disciplines** from the very beginning of project writing throughout the project's whole duration.

For the European Commission:

➤ More **transdisciplinary** teams in calls. **Clearer specification of disciplines** that should be involved (but not closing the list, just giving examples).

Project info

SUMPs-UP

Through SUMPs-Up (**SUMP** = Sustainable Urban Mobility Plans), a consortium of public and private organisations, including four major city networks and seven cities, skilled in coordinating major European SUMP projects will accelerate the take-up of SUMP.

To achieve this, the project will combine comprehensive SUMP research, tailored capacity-building, strong mechanisms for technical support, as well as constant SUMP monitoring and evaluation.

<http://www.eurocities.eu/eurocities/projects/SUMPs-Up&tpl=home>

Success stories in SSH integration



SSH INTEGRATION IN SC5

“The objective of the Societal Challenge 5 '**Climate action, environment, resource efficiency and raw materials**' is to achieve a resource – and water – efficient and climate change resilient economy and society, the protection and sustainable management of natural resources and ecosystems, and a sustainable supply and use of raw materials, in order to meet the needs of a growing global population within the limits of the planet's natural resources and eco-systems.”¹

Horizon 2020 considers the socio-economic sciences and humanities (SSH) as cross-cutting and integrated in all the priorities and objectives of the Programme. The Societal Challenge 5 involves this research in order to tackle the societal challenges and to provide the most suitable impact for society. The following aspects need to be considered:

- To face climate change with its consequent risks for citizens, sociologists and psychologists can support understanding and influencing citizens' behaviour.
- To move to a green economy, projects need to consider social and economic aspects.
- To **impact on society and policies**, research needs to involve political science.

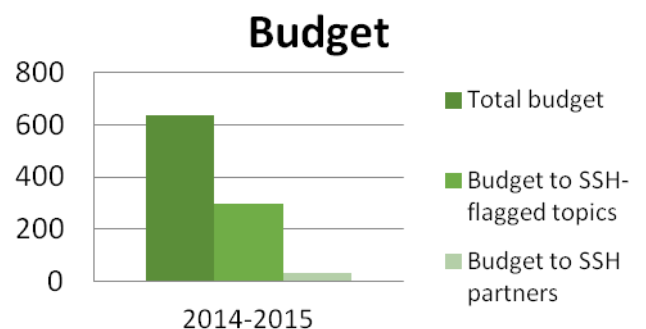
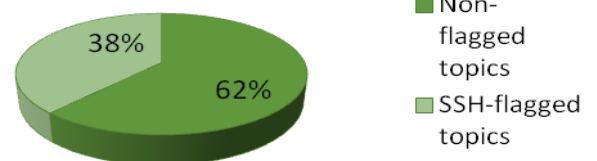
To have a good proposal cooperation with SSH researchers is crucial!

¹Work Programme 2016-2017 Societal Challenge 5

FACTS & FIGURES

In the Work Programme 2014-2015 SC5 funded a total of 47 topics with a total budget of €635 million.

18 out of 47 topics were flagged for SSH. Within these topics 58 projects were funded for a budget of €296 million out of which 32 million went to SSH partners.



Source: 1st and 2nd Monitoring Report on Integration of Social Sciences and Humanities in Horizon 2020: Participants, budget and disciplines, EC

WATERSPOUTT: a success story in SSH integration



Interview with Kevin McGuigan, Project Coordinator of WATERSPOUTT project

Q: Why did you decide to integrate SSH in your project?

SSH integration was explicitly required by the topic. The project would in any case involve SSH expertise **in order to ensure that the main objective of the project is reached**, namely that the technology developed in the course of the project is accepted and widely used by end-users.

Q: How did the process of SSH integration go from the proposal to the project?

Previous contacts of the coordinator allowed to have SSH partners involved in the consortium.

The main challenge was to get the STEM experts realize that SSH contribution was necessary in the project. We guaranteed this through:

- **Physical meetings** where people could exchange information;
- STEM and SSH researchers **work together** on field works and this ensures a close collaboration.

All the actions carried out by the SSH partners are aimed at ensuring that the technology developed by STEM partners is accepted and used in practice by the end-users.

The SSH partners :

- carried out **baseline studies**;
- analysed certain **governance issues** related to water;
- organise **workshops** for local people

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

Without the SSH integration the project would have not been approved and would not reach its objectives. The project would not be successful without SSH integration as only the SSH experts can ensure that the new technology is tailored to the needs of people who will use it.

Q: Which are the factors that facilitate collaboration and which the factors that hamper it?

The factors which facilitate cooperation:

- **Good communication** between experts is necessary
- **Physical meetings** are important at the initial phase to avoid misunderstandings

The factors which hamper cooperation:

- **Language and terminology** used by STEM and SSH experts differs. Asking questions and a good communication can avoid this problem.

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

For the researchers:

- The **initial contact** between SSH and STEM researchers is very important
- Guaranteeing **regular meetings**

For the EC:

- **Organisation of events where STEM and SSH experts can meet.** (organized by NCPs at local level but also big international events)
- Additional funding for experts from low-income countries to attend such events should be secured.

WATERSPOUTT project

The project aims at providing safe drinking water to communities who rely on unsafe sources.



The consortium is carrying out a technological development programme to advance three applications based on Solar Disinfection (SODIS), which can make water safe to drink after it has been collected. In parallel, a social science programme has been structured to make sure that the technologies are adopted by the target communities in rural Africa, with the support of the local authorities and in an economically sustainable way.

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

Success stories in SSH integration



SSH INTEGRATION IN SC7

The concept of security is represented by the idea of protection against threats such as crime or foreign attacks. To improve this concept of security there is a need for the analysis of aspects covered by the socio-economic sciences and humanities, such as social, legal, historical and cultural dimensions.

Horizon 2020 considers the socio-economic sciences and humanities (SSH) as cross-cutting and integrated in all the priorities and objectives of the Programme. The Societal Challenge 7, '**Secure societies – Protecting freedom and security of Europe and its citizens**', involves this research in order to tackle the societal challenges and to provide the most suitable impact for society. The following aspects need to be considered:

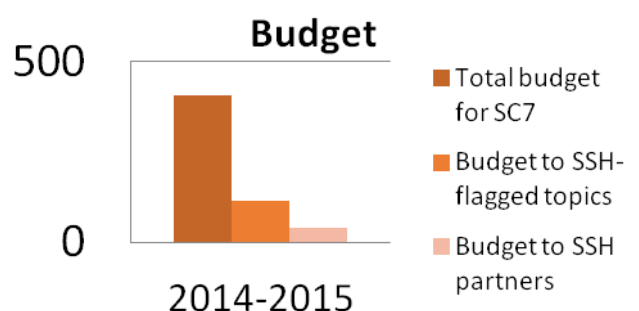
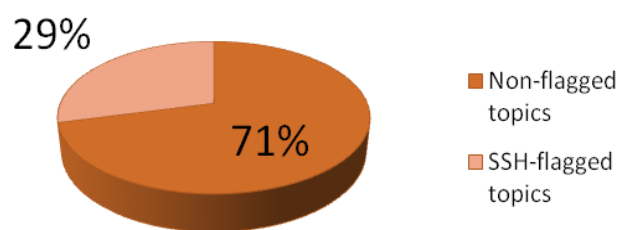
- To understand the real causes of the threats the EU is facing, projects need to analyse the historical background and the values which are at the basis of current societies.
- To tackle the challenges the society is facing, research needs to consider the social, behavioural and cultural aspects which drive people.
- To make the results effective on society, the legal and political framework and the effects on people need to be taken into consideration.

To have a good proposal cooperation with SSH researchers is crucial!

FACTS & FIGURES

In the Work Programme 2014-2015 SC7 funded a total of 62 topics with a total budget of €405 million.

18 out of 62 topics were flagged for SSH. Within these topics 34 projects were funded for a budget of €117 million out of which 41 million went to SSH partners.



Secure societies - Protecting freedom and security of Europe and its citizens

EU-CIVCAP: a success story in SSH integration



Interview with Ana E. Juncos, Project Coordinator of EU-CIVCAP project

Q: Why did you decide to integrate SSH in your project?

The topic was dedicated to SSH research and we had to integrate STEM expertise within it as it required to take into account certain technical aspects of conflict prevention and peacebuilding. The technical perspective brought an added value to the project.

Q: How did the process of SSH integration go from the proposal to the project?

It went well and smoothly.

*The main **challenges** are related to **different concepts, methodologies and approaches** followed by STEM and SSH experts. **Good and frequent communication** between SSH and STEM partners is the key to overcome those problems. Also, setting up **common objectives and targets** from the beginning of the project is important in this context.*

The involvement of STEM partners was implemented through previous contacts and networking.

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

The STEM partner was in charge of explaining the role of technologies in conflict prevention and peace building, whereas the SSH partners were responsible for the analysis of the social and political aspects-, trends, developments and best practices in the area.

As the project is primarily focused on SSH research, we need to integrate STEM research in it. The STEM expertise added a new, technical perspective and knowledge to a primarily social research and hence enhanced the scientific relevance of the research and project results.

Q: Which are the factors that facilitate collaboration and which the factors that hamper it?

The factors which facilitate cooperation:

- To have a clear concept and objectives from the very beginning of the project writing, agreed upon between all partners.
- Agreement of all the partners on all deliverables and division of tasks so as to avoid misunderstandings in the implementation phase.
- Leadership of one discipline is helpful as it shows the direction that the project should go and the focus it should take.

The factors which hamper cooperation:

- Different conceptual understanding and different methodologies followed by STEM and SSH partners.

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

For the researchers:

- Reach out and use your networks and contacts.
- Discuss and agree on a conceptual and methodological framework and follow it throughout the project.

For the European Commission:

- Interdisciplinary nature of calls. To ensure that SSH and STEM expertise are taken into account, more calls should require the interdisciplinary approach.

Project info

EU-CIVCAP



The EU-CIVCAP project will provide a comprehensive, comparative and multidisciplinary analysis of the EU's capabilities in conflict prevention and peacebuilding in order to identify existing shortfalls.

The main objectives of the project are:

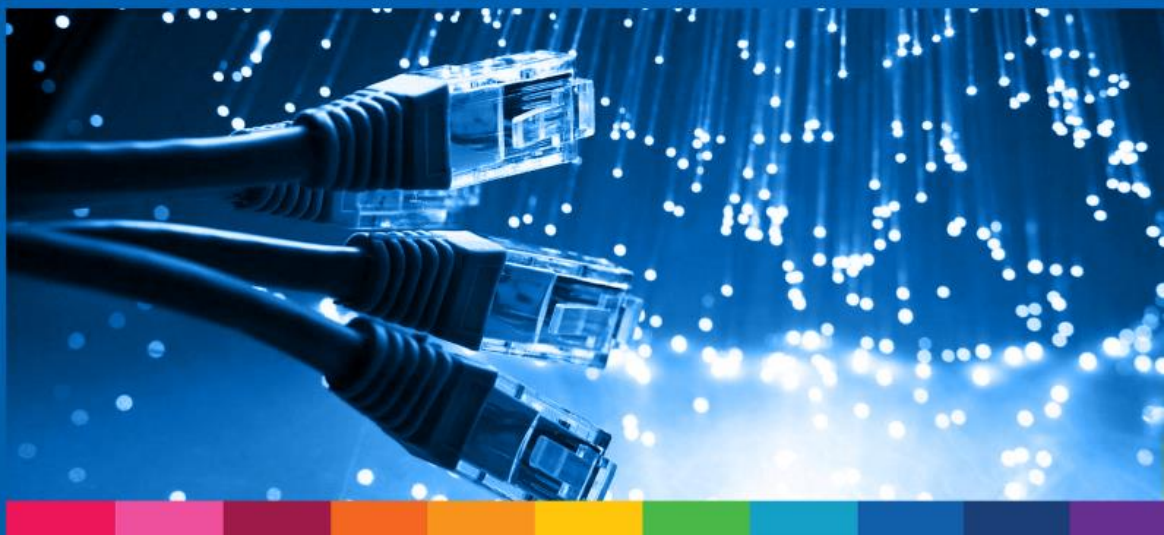
1. To assess EU civilian capabilities for external conflict prevention and peacebuilding.
2. To identify and document lessons learned and best practices in EU conflict prevention and peacebuilding.
3. To enhance future policy practice and research on EU conflict prevention and peacebuilding.

<https://eu-civcap.net/>



This project is funded by the European Union under Horizon 2020

Success stories in SSH integration



SSH INTEGRATION IN ICT

The potential and capabilities of modern ICT systems are still growing exponentially and are fuelled by the progress in electronics, microsystems, networking, the ability to master increasingly complex cyber-physical systems and robots, and progress in data processing and human machine interfaces.

Horizon 2020 considers the socio-economic sciences and humanities (SSH) as cross-cutting and integrated in all the priorities and objectives of the Programme. **Information and Communication Technologies** involves SSH research in order to tackle societal challenges and to provide the most suitable impact for society. To do so, the following aspects need to be considered:

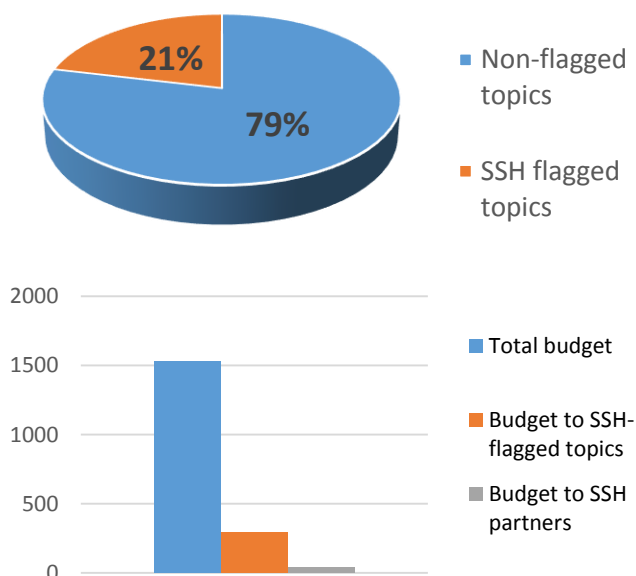
- To pay attention to emerging ethics of digital innovation, such as social entrepreneurship, direct democracy, privacy preservation and digital rights, projects have to involve SSH researchers.
- To address non-technical market barriers to evaluate the impact of robotics on the labour market in a pro-active way, ethics, law, sociology and economics should be involved.
- To pay due attention to the diversity of users and users' needs, cooperation with SSH researchers is crucial.

Good collaboration with SSH researchers at the proposal stage is crucial!

FACTS & FIGURES

In the Work Programme 2014-2015, ICT funded a total of 47 topics with a total budget of €1529 million.

10 out of 47 topics were flagged for SSH. Within these topics, 94 projects were funded for a budget of €295 million out of which 42 million went to SSH partners.



Source: 1st and 2nd Monitoring Report on Integration of Social Sciences and Humanities in Horizon 2020: Participants, budget and disciplines, EC

K-PLEX : a success story in SSH integration



Interview with Jennifer Edmond, Project coordinator of K-PLEX project

Q: Why did you decide to integrate SSH in your project?

SSH integration was mentioned explicitly by the topic. Moreover, there was no risk that the humanities and social sciences could become marginalised within K-PLEX, in spite of the fact that big data was at the heart of the project. Digital humanities itself is a great example of how humanistic knowledge creation can interact with other epistemic paradigms, given that we work all the time at the border of technology, the arts, culture and information science.

Q: How did the process of SSH integration go from the proposal to the project?

Each of the four partners involved in the project comes from one of the following backgrounds: literature and historical data, anthropology, research data archive, and language technology services.

I had met each of these collaborators over the preceding several years in the course of other projects and meetings. When I first thought of K-PLEX, I almost immediately thought of this group of contacts, knowing that applying these perspectives to big data could really add something new to the debate. From this point on, the work was a matter of true collaboration: in a 15 month project, we had 4 face-to-face meetings, including a week long writing retreat at the end to ensure our results were truly integrative and reflective of the perspectives we were bringing together.

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

We'd like to think that the value of having an SSH-led project in the area of big data was that we were able to see things others take for granted. We were not always listened to in the big data community meetings, but we were there, we were represented, and our recommendations will stand.

Q: What are the factors that facilitate collaboration and which factors hamper it?

The factors which facilitate cooperation:

- Dialogue and respect are crucial.
- The presence of people with the capacity and opportunity to act as facilitators and integrators.

The factors which hamper cooperation:

- Feeling like your work is not essential to the overall goal of the group.

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

For the researchers:

- Don't decide you want to do a project, then decide to integrate other perspectives. Get out there and get to know the other perspectives first, then develop the research questions together.

For the European Commission:

- We need more connectors, people and places that foster open dialogue, for unexpected connections.
- We need more support for interdisciplinary publishing and for interdisciplinary research positions in academic tracks.

Project info

K-PLEX

The project aimed to undertake a 15-month investigation of the ways in which a focus on 'big data' in ICT research elides important issues about the information environment we live in.



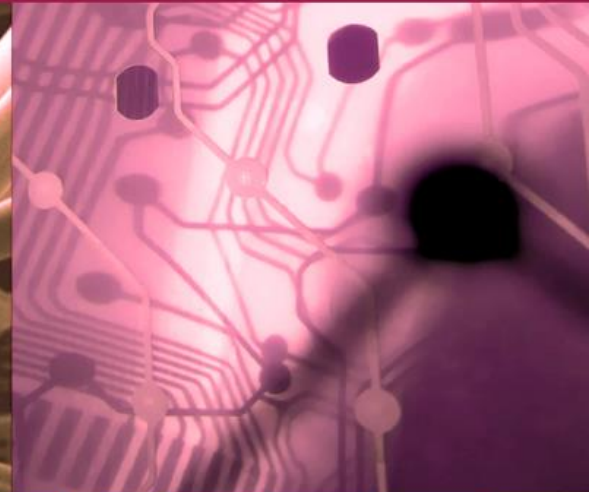
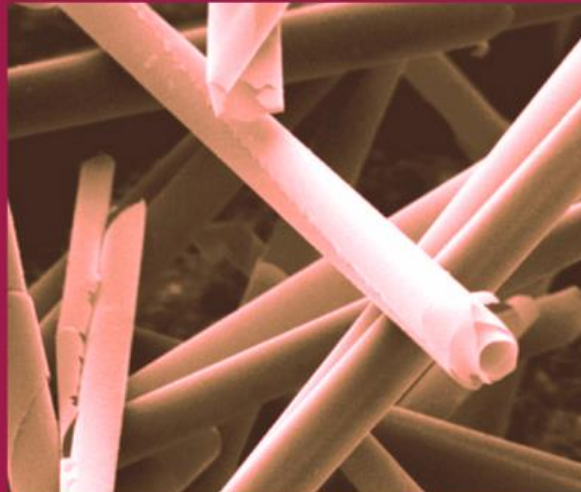
As an ICT-programme 'sister project,' the primary purpose of the project was to inform future research and policy in the ICT space. The team was committed to sharing results widely to inform philosophical debates in both the technical sphere as well as in the digital humanities.

The project investigated 4 key themes:

- Toward a New Conceptualisation of Data;
- Hidden Data and the Historical Record;
- Data, Knowledge Organisation and Epistemics;
- Culture and Representations of System Limitations.

<https://kplex-project.eu/about/>

Success stories in SSH integration



SSH INTEGRATION IN NMBP

The objectives of **Nanotechnologies, Advanced Materials, Advanced Manufacturing and Processing, and Biotechnology (NMBP)** are to support the development of technologies underpinning innovation across the following sectors: Nanotechnologies, Advanced materials, Advanced manufacturing and processing, and Biotechnology.

Horizon 2020 considers the socio-economic sciences and humanities (SSH) as cross-cutting and integrated in all the priorities and objectives of the Programme. **NMBP** involves SSH research in order to tackle societal challenges and to provide the most suitable impact for society. To do so, the following aspects need to be considered:

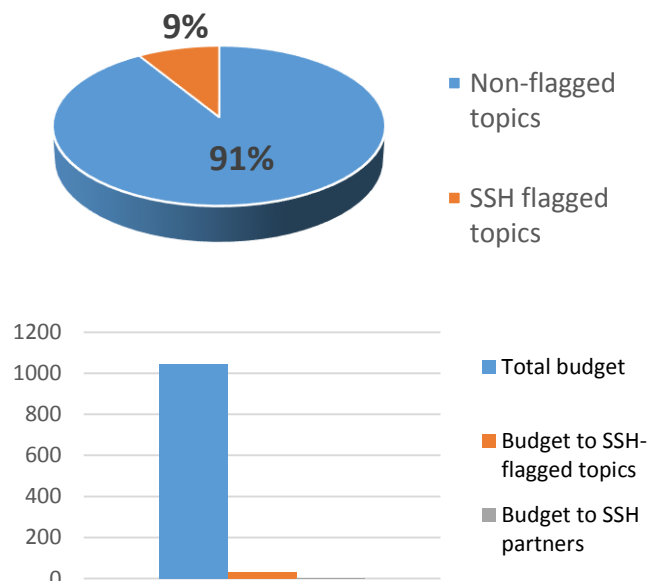
- To work on the engagement with stakeholders and the general public using appropriate communication strategies.
- To take into account user needs preferences and acceptance.
- To include the creative industries in the research on new materials.
- To develop business models and responsible consumer behavior that increase the use of the renewable resources and reduce energy demand.

Good collaboration with SSH researchers at the proposal stage is crucial!

FACTS & FIGURES

In the Work Programme 2014-2015, NMBP funded a total of 79 topics with a total budget of €1043 million.

7 out of 79 topics were flagged for SSH. Within these topics, 9 projects were funded for a budget of €29 million out of which €3.2 million went to SSH partners.



Source: 1st and 2nd Monitoring Report on Integration of Social Sciences and Humanities in Horizon 2020: Participants, budget and disciplines, EC



Interview with Piero Baglioni, Project coordinator of NANORESTART

Q: Why did you decide to integrate SSH in your project?

The topic required a multidisciplinary approach, involving historical and artistic experts. In any case, the SSH experts (museums and conservators) would have been included in order to reach the objectives of the project (i.e. to ensure that the new methods and materials reflect the expectations of the end-users).

Q: How did the process of SSH integration go from the proposal to the project?

The process of SSH integration started from the project writing and went well and smoothly. All partners have been selected on the basis of their specific experience matching the aim and objectives of the project. In particular, the inclusion of SSH experts has been made through previous contacts

and existing networks. Some of them have been recommended by the already selected partners. The NANORESTART partnership is an extraordinary example of the successful collaboration between STEM and SSH disciplines.

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

It was fundamental for the success of the project to consider conservators and museum's needs and wishes as end-users of the new materials and techniques. Therefore, the majority of the project's activities have been carried out in close collaboration with the SSH experts. Within the project, conservators and museums are in charge of the assessment of the new methods and materials on modern/contemporary artefacts in urgent need of conservation. They are also responsible for the dissemination of the knowledge and the new nanomaterials among conservators worldwide.

Q: What are the factors that facilitate collaboration and which factors hamper it?

The factors which facilitate cooperation:

- To establish common objectives from the very beginning of the proposal elaboration.
- To ensure continuous communication in order to establish a common sense of belonging to the project.

The factors which hamper cooperation:

- Different methodologies and terminology used by STEAM and SSH partners.

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

For the researchers:

- Regular and frequent communication between partners.
- To involve SSH experts from the very beginning of the project writing (i.e. from the proposal preparation) throughout the project's entire duration.

For the European Commission:

- To stress the interdisciplinary nature of the H2020 calls. The requirement for SSH integration should be explicitly mentioned in the calls, indicating what kind of disciplines and SSH-related issues should be involved.
- To encourage the cooperation between STEAM and SSH experts also beyond the H2020 projects (e.g. supporting the creation of interdisciplinary networks which gather actors with different background).

Project info

NANORESTART

NANORESTART focuses on nanotechnologies and contemporary art.



The NANORESTART project will focus on the **synthesis of**

novel poly-functional nanomaterials and on the development of **highly innovative restoration techniques** to address the conservation of a wide variety of materials mainly used by **modern and contemporary artists**.

In NANORESTART, **enterprises** and **academic centers** of excellence in the field of synthesis and characterization of nano- and advanced materials have joined forces with complementary **conservation institutions** and **freelance restorers**. This **multidisciplinary approach** will cover the development of different materials in response to real conservation needs, the testing of such materials, the assessment of their environmental impact, and their industrial scalability.

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

Success stories in SSH integration



SSH INTEGRATION IN RI

Research infrastructures are facilities, resources and services that are used by research communities to conduct research and foster innovation in their fields. Research infrastructures play an increasing role in the advancement of knowledge and technology and their exploitation. By offering high quality research services to users from different countries, by attracting young people to science and by networking facilities, research infrastructures help to structure the scientific community and play a key role in the construction of an efficient research and innovation environment.

Horizon 2020 considers the socio-economic sciences and humanities (SSH) as cross-cutting and integrated in all the priorities and objectives of the Programme. **European research infrastructures (including e-Infrastructures)** involves SSH research in order to tackle societal challenges and to provide the most suitable impact for society. To do so, the following aspects need to be considered:

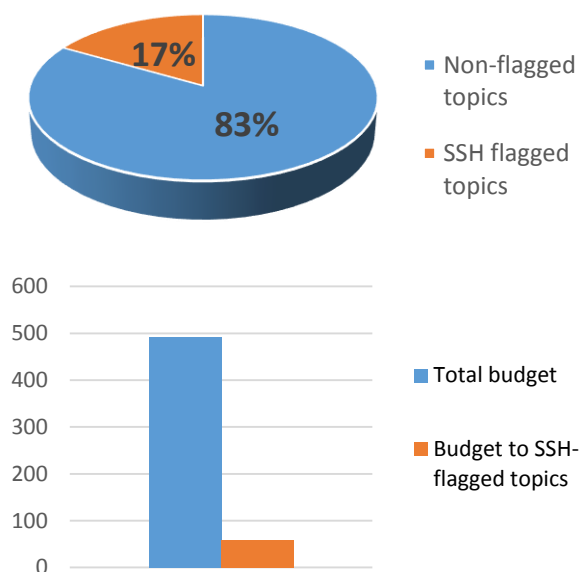
- To take into account the strategic relevance of today's and tomorrow's societal challenges, projects have to involve sociologists, lawyers and economists.
- To analyse societal and economic benefits of the infrastructure, projects have to involve sociologists, and economists.

Good collaboration with SSH researchers at the proposal stage is crucial!

FACTS & FIGURES

In the Work Programme 2014-2015, RI funded a total of 60 topics with a total budget of €587 million.

10 out of 60 topics explicitly required the involvement of SSH disciplines. Within these topics, 11 projects were funded for a budget of about €59 million.



Source: European research infrastructures (including e-Infrastructures) Work Programme 2014–2015, CORDIS.



Interview with Luca Pezzati, Project coordinator of IPERION CH

Q: Why did you decide to integrate SSH in your project?

Given that the project is an extension of a previous activity for restoration and conservation, the inclusion of SSH disciplines were fundamental to the project. In any case, SSH integration was explicitly mentioned by the topic.

Q: How did the process of SSH integration go from the proposal to the project?

Because the development of a trans-disciplinary heritage science is in our mission, the concept of co-creation of knowledge is the basic idea around which the project is built. The use of a common digital language will help to create new ways for making multi-disciplinary science between SSH and STEM a reality.

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

We started the project proposal with a kind of gap analysis to understand what we had to improve and what was the best way to do that. The conclusion was that we needed to have more SSH partners with respect to the previous project to balance the necessary expertises to achieve the project's objectives. Moreover, during the starting phase, all the partners were involved in writing down the most comprehensive and efficient proposal. The contribution of the SSH partners in that phase has been fundamental from both a STEM and SSH point of view. The real added value in the project has come from the creation of several multidisciplinary groups able to present a complex problem to answer and to better incorporate the response to create knowledge.

Q: What are the factors that facilitate collaboration and which factors hamper it?

The factors which facilitate cooperation:

- Think of the consortium as a whole and approach issues with an open mind.
- Look for a shared area to co-create knowledge giving each discipline the same importance.

The factors which hamper cooperation:

- Different semantics from country to country and from discipline to discipline.
- STEM and SSH researchers have different native languages, even digitally.

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

For the researchers: Active involvement of all partners from the very beginning poses the basis for positive communication and productive collaboration. Different disciplines need equal consideration.

For the European Commission: The landscape of tools for STEM - SSH cooperation is rather fragmented in Framework Programmes. Foster multi-disciplinarity to obtain better results!

Project info

IPERION CH

IPERION CH aims to establish the unique pan-European research infrastructure in Heritage Science by integrating national world-class facilities at research centres, universities and museums.



The cross-disciplinary consortium of 23 partners (from 12 Member States and the US) offers access to instruments, methodologies and data for advancing knowledge and innovation in the conservation and restoration of cultural heritage. Fourth in a line of successful projects (CHARISMA-FP7, Eu-ARTECH-FP6 and LabS-TECH network-FP5), IPERION CH widens trans-national access by adding new providers with new expertise and instruments to the three existing complementary platforms ARCHLAB, FIXLAB and MOLAB.

<http://www.iperionch.eu>

Success stories in SSH integration



SSH INTEGRATION IN FET

The visionary aspects and exploratory characteristics of FET might make it sound like a kind of magic, but the mission of FET is actually very concrete: to turn Europe's excellent science base into a competitive advantage. FET actions are expected to initiate radically new lines of technology through unexplored collaborations between advanced multidisciplinary science and cutting-edge engineering*.

Horizon 2020 considers the socio-economic sciences and humanities (SSH) as cross-cutting and integrated in all the priorities and objectives of the Programme. **Future and Emerging Technologies** involves SSH research in order to tackle societal challenges and to provide the most suitable impact for society. To do so, the following aspects need to be considered:

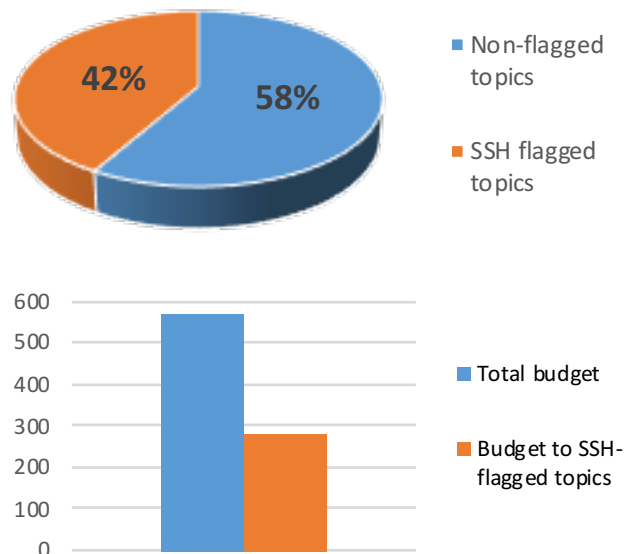
- To bridge the gap between the development of an innovative product and its use by early adopters, SSH researchers must be involved;
- To lay the foundations for radically new future technologies, interdisciplinary collaborations, including those with the social sciences and humanities, are necessary.
- To develop new tools and paradigms leading to new socially interactive media, the combination of social sciences and humanities with neuroscience, engineering, and computing is required.

Good collaboration with SSH researchers at the proposal stage is crucial!

FACTS & FIGURES

In the Work Programme 2016-2017, FET funded a total of 12 topics with a total budget of €570 million.

5 out of 12 topics explicitly required the involvement of SSH disciplines. Within these topics, 128 projects were funded from a budget of about €282 million.



Source: Future and Emerging Technologies Work Programme 2016–2017, CORDIS.

* <http://ec.europa.eu/programmes/horizon2020/en/h2020-section/future-and-emerging-technologies>



Interview with Massimo Warglien, Scientific Responsible at Ca' Foscari University

Q: Why did you decide to integrate SSH in your project?

SSH disciplines are at the very heart of the project. In fact, ODYCCEUS originates from a concept that combines technology, social sciences and humanities to address a fundamental problem: understanding and preventing cultural conflict in Europe, and capturing the related opinion dynamics, through technology that can address the issue of meaning and has language at its core.

ODYCCEUS is trying to push the boundaries of multiple domains of SSH – game theory, opinion dynamics, history, linguistics – **to ask new questions to technology, and to allow a future audience of users to interrogate data in new and original ways.**

Q: How did the process of SSH integration go from the proposal to the project?

Project writing has been a truly exciting experience of **creative dialogue between different competences and disciplinary languages**. Most of the participants had already worked together in other projects, and this has created a climate of openness and mutual curiosity. Participants were recruited looking for scientific excellence but also for **intellectual common ground and capacity to interact**. The shared perception of the social relevance of the goals of the project has helped to focus on the overall concept, rather than on disciplinary interests.

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

A key challenge (but also a key opportunity) has been that different **disciplines ask very different questions to the same material**. A better understanding of such questions and finding ways to make them interact to produce new and unexpected questions requires an intensive effort of direct interaction and collaboration across units and fields. **To make interaction work, they need a common object to work upon**. The design of tasks structure is from this point of view basically “within-task” collaboration, which is usually easier and more fruitful than “between-tasks” one.

Q: What are the factors that facilitate collaboration and which factors hamper it?

The factors which facilitate cooperation:

- A solid history of former collaboration.
- The effort to integrate the knowledge generated into a technological platform supports collaborative action.

The factors which hamper cooperation:

- The timing matters a lot.

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

For the researchers:

- I think that STEM researchers should expect SSH to provide questions very different from the ones they are used to – and take this as a great opportunity to push the boundaries of their own disciplines.

For the European Commission:

- The EU and funding agencies should, of course, increase the calls making SSH integration a strong prerequisite.
- An effort to broaden the scope of impact definitions and make more explicit their evaluation criteria for humanities would probably make it easier to integrate such disciplines and would mobilize larger portions of the humanities scientific community.

Project info

ODYCCEUS

ODYCCEUS stands for Opinion Dynamics and Cultural Conflict in European Spaces.

Social media and the digitization

of news and discussion fora are having far-reaching effects on the way individuals and communities communicate, organize, and express themselves. Can the information circulating on these platforms be tapped to better understand and analyse the enormous problems facing our contemporary society?

The project seeks conceptual breakthroughs in Global Systems Science, including a fine-grained representation of cultural conflicts based on conceptual spaces and sophisticated text analysis, extensions of game theory to handle games with both divergent interests and divergent mindsets, and new models of alignment and polarization dynamics. The project will also develop an open modular platform, called PENELOPE, that integrates tools for the complete pipeline, from data scraped from social media and digital sources, to visualization of the analyses and models developed by the project.

<https://www.odycceus.eu/project/>

