HORIZON 2020

The contribution of Social Sciences and the Humanities to research addressing societal challenges

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Unit B6 Open and Inclusive Societies
7th Framework Programme (FP7)

Programme dedicated to SSH

No reference in the evaluation criteria to disciplines working together

Horizon 2020

1) SSH is a cross-cutting issue
2) Societal Challenge 6

Inter-disciplinarity is part of the evaluation criteria (Excellence)
Why SSH integration in H2020?

"The objectives of H2020 will therefore be addressed through a strong emphasis on finding efficient solutions; going well beyond an approach based simply on traditional scientific and technological disciplines" (Council decision 3 Decembre 2013, annex I, chapter 2, page 347).

A rather ancient quest at European level. See for instance the European Research Advisory Board final report on "Interdisciplinarity in Research" (2004), which starts: "Many major breakthroughs in science take place at the boundaries or intersections of disciplines".

EURAB recommends: 1) a reassessment, where useful of of disciplinary demarcations; 2) a removal of institutional barriers to interdisciplinary research; 3) a rethinking of associated research training.
Lessons from past FPs? FP5...

"We found disappointingly few projects among those funded in the early calls of the FP5 Programme that seemed by our criteria to be clearly interdisciplinary, particularly in terms of crossing the boundary between natural and social sciences. Although FP5 set ambitious targets for a step change in the amount and quality of interdisciplinary research, there have been formidable constraints to the delivery of these targets... However, the EC alone cannot deliver such an outcome. As we noted above, many of the constraints operating against interdisciplinary research emanate from academic systems in European universities, which still discriminate against inter-disciplinary research."

(Bruce, Lyall, Tait, Williams "Interdisciplinary integration in Europe: the case of the Fifth Framework programme". Futures, 36 (2004).)
Pros and cons of SSH integration?

+ The societal side. Problems are "societal" and thus demand a "SSH perspective" (see GMOs in food, diabetes, energy and transport, etc.).
+ The ethical side. SSH enrich ethical consciousness.
+ The knowledge side. The circulation of knowledge between sciences makes science more interesting.

- The knowledge side. Losing the disciplinary edge? "Low science" in disciplines and interdisciplinarity field? Interdisciplinarity always "after" disciplinary development, if and when? SSH as a mere "add-on"?
- The ethical side. "SSH only for social acceptance".
- The societal side. Social barriers to interdisciplinarity. The world of science is more and more fragmented...
SSH monitoring report 2014


SSH monitoring report 2015 (to be published soon)
PRELIMINARY RESULTS IN 2015

OVERVIEW
Integration of SSH in the WP 2014-2015

Overall, 37% of topics were 'flagged' for SSH
Involvement of 827 SSH partners in 197 projects in 2015
Budget going to SSH in 2015: €197 million

The share of budget going to SSH partners (i.e. €197 million) amounts to 5% of the total 2015 budget of €3.7 billion and 22% of the budget of SSH-flagged topics of €888 million.
### SSH partners by country in 2015

**concentration in few countries**

#### Country affiliation of SSH partners: Sub-groups

<table>
<thead>
<tr>
<th></th>
<th>Partners</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>827</td>
<td>100%</td>
</tr>
<tr>
<td>EU-28</td>
<td>730</td>
<td>88%</td>
</tr>
<tr>
<td>Associated countries</td>
<td>46</td>
<td>6%</td>
</tr>
<tr>
<td>Third countries</td>
<td>51</td>
<td>6%</td>
</tr>
<tr>
<td>Top 6 countries</td>
<td>432</td>
<td>52%</td>
</tr>
<tr>
<td>Top 20 countries</td>
<td>702</td>
<td>85%</td>
</tr>
</tbody>
</table>

![Bar chart showing number of SSH partners by country](chart.png)

![Pie chart showing country affiliation](pie.png)
Quality of SSH integration in projects funded under SSH-flagged topics in 2015

This indicator aggregates the performance of each project along four dimensions:

- Share of SSH partners
- Budget going to SSH
- Person-months by SSH partners
- Contributions from SSH came from at least two distinct SSH disciplines

The quality of SSH integration in each project:
- None: No threshold was met for any of the four dimensions
- Weak: Threshold met for one dimension
- Fair: Threshold met for two or three dimensions
- Good: Threshold met for all four dimensions
Quality of SSH integration in projects funded under SSH-flagged topics in 2015

- Good: 39%
- None: 24%
- Fair: 19%
- Weak: 18%
Share of projects with fair or good SSH integration 2015
% of projects funded under topics flagged SSH
### Discipline prevalence in SSH-flagged topics in 2015

<table>
<thead>
<tr>
<th>Disciplines and clusters of disciplines</th>
<th>Number of experts per discipline</th>
<th>Share of experts that include partner-level expertise</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economics</td>
<td>648</td>
<td>26%</td>
</tr>
<tr>
<td>Political Science, Public Administration</td>
<td>417</td>
<td>17%</td>
</tr>
<tr>
<td>Business, Marketing</td>
<td>268</td>
<td>11%</td>
</tr>
<tr>
<td>Sociology</td>
<td>245</td>
<td>10%</td>
</tr>
<tr>
<td>Non-Research activities</td>
<td>224</td>
<td>9%</td>
</tr>
<tr>
<td>Law</td>
<td>128</td>
<td>5%</td>
</tr>
<tr>
<td>History</td>
<td>109</td>
<td>4%</td>
</tr>
<tr>
<td>Communication</td>
<td>111</td>
<td>4%</td>
</tr>
<tr>
<td>Humanities, Arts</td>
<td>102</td>
<td>4%</td>
</tr>
<tr>
<td>Psychology</td>
<td>96</td>
<td>4%</td>
</tr>
<tr>
<td>Education</td>
<td>90</td>
<td>4%</td>
</tr>
<tr>
<td>Anthropology, Ethnology</td>
<td>46</td>
<td>2%</td>
</tr>
<tr>
<td>Human Geography, Demography</td>
<td>33</td>
<td>1%</td>
</tr>
<tr>
<td><strong>Total number of experts with SSH background</strong></td>
<td><strong>2517</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>
TODAY ➔ WP 2016-2017

and

THE WAY AHEAD ➔ WP 2018-2020
Integration of SSH in the 2016-17 WP

<table>
<thead>
<tr>
<th>Societal Challenge</th>
<th>Total number of topics</th>
<th>Number of SSH flagged topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC1</td>
<td>37</td>
<td>18</td>
</tr>
<tr>
<td>SC2</td>
<td>83</td>
<td>43</td>
</tr>
<tr>
<td>SC3</td>
<td>61</td>
<td>13</td>
</tr>
<tr>
<td>SC4</td>
<td>55</td>
<td>24</td>
</tr>
<tr>
<td>SC5</td>
<td>29</td>
<td>12</td>
</tr>
<tr>
<td>SC6</td>
<td>39</td>
<td>37</td>
</tr>
<tr>
<td>SC7</td>
<td>30</td>
<td>14</td>
</tr>
<tr>
<td>LEIT-ICT</td>
<td>39</td>
<td>10</td>
</tr>
<tr>
<td>LEIT-NMBP</td>
<td>52</td>
<td>11</td>
</tr>
<tr>
<td>LEIT-SPACE</td>
<td>21</td>
<td>1</td>
</tr>
</tbody>
</table>

41% of topics 'flagged' for SSH
Best practices examples – Topics

**FOOD (SC2) RUR-01-2016: Consolidated policy framework and governance models for synergies in rural-urban linkages**

[...] Activities should look at economic, environmental and social linkages and dependencies in an integrated way and examine various territorial settings, covering various forms of territorial interaction beyond city-hinterland relationships, including networks of small market towns and other types of more distant, cross-border or international interaction.

**ENERGY(SC3) LCE-32-2016: European Platform for energy-related SSH research**

Within the scope of this call a platform for SSH research communities in the energy field will be set up at European level [...]. The platform will seek to structure and enhance the energy-related dialogue at EU level among the different SSH stakeholders, as well as with other energy-research communities, creating greater inter-disciplinarity and fostering knowledge and information sharing among various disciplines. It will promote the generation of novel, evidence-based research designed to inform and influence relevant policy processes, particularly with respect to the role of SSH aspects (including gender) in hindering or accelerating the transition to a low-carbon energy system in Europe.
Best practices examples – Projects

**Project NANORESTART:** NANOmaterials for the REStoration of works of ART

Type of action: IA  
WP Part: LEIT  
Call: Nanotechnologies & Advanced Materials

http://www.nanorestart.eu/

NANORESTART will develop nanomaterials to ensure long term protection and security of modern and contemporary cultural heritage, taking into account environmental and human risks, feasibility and materials costs.

**NANORESTART brings together specialists in chemistry, materials science, art conservation, art restoration as well as museum curators and cultural heritage educators.** They will priorities and assess the new materials on modern and contemporary artefacts in urgent need of conservation, then disseminate the knowledge among conservators on a worldwide perspective.

**NANORESTART in BBC Science in Action**  
http://www.bbc.co.uk/programmes/p03zzgnj
**Best practices examples – Projects**

<table>
<thead>
<tr>
<th>Project LIFEPATH: Life course pathways underlying social differences in healthy ageing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of action: RIA</td>
</tr>
<tr>
<td>WP Part: SC1 Health</td>
</tr>
<tr>
<td>Call: Personalised Healthcare</td>
</tr>
</tbody>
</table>

There are significant differences in the biological pathways to aging among individuals. In particular, healthy ageing, quality of life and life expectancy differ significantly between individuals of different socioeconomic groups.

To understand what determines this variation, LIFEPATH integrates biology, biostatistics, epidemiology and epigenomic approaches with social science approaches (sociology, economics and public health policies).
Integration of SSH in the WP 18-20 – modus operandi

Upstream preparation of the WP:
• SSH as a key aspect in the definition of the focus areas and of other calls in the scoping papers setting the main priorities
• Consultation & coaching of services and DGs involved in drafting the WP

Evaluation Process:
• SSH experts in the evaluation panels of SSH-flagged topics.
• Targeted guidelines for the experts /moderators of SSH-flagged topics

Downstream - Development of a monitoring system:
But what about the actual interdisciplinarity?

**Upstream preparation of the WP:**
- Specific SSH integration item in the agendas of EAG and PC meetings
- Advocacy and awareness-raising activities focussing on Commission staff and external stakeholders (national contact points)

**Downstream:**
- There are several initiatives at national or European level in favour of interdisciplinarity between SSH and other sciences.
- But we know too little about them.

**New science policy needs?**
- Rather bottom-up than top-down? Open calls...
- Rather SSH led than STEM led? Equality in science...
- Instruments in favour of interdisciplinarity in order to 1) map the practices, 2) remove barriers and 3) improve training.
Thank you for your attention!

https://ec.europa.eu/research/social-sciences/index.cfm