

SEREN4 Online Info Day & Brokerage event 12 May 2020

Social Sciences and Humanities in Security research

Mr. Mikołaj Pyczak IPPT PAN - Net4Society

What?

"Social sciences and humanities (SSH) are given an enhanced role as a **cross-cutting** issue aimed at improving **our assessment of and response to complex societal issues**. Therefore, where relevant, the research and innovation chain should **include contributions from SSH disciplines**"

Topics flagged for Social sciences and Humanities

"Many topics invite contributions from the SSH, often in collaboration with non-SSH disciplines such as natural and physical sciences, health sciences or technology. These topics have been 'flagged' and can be found on the Participant Portal."

Source: EC Online manual

Past vs Present



Programme

dedicated to SSH, No reference
to disciplines working together
in the evaluation criteria



SSH is a cross-cutting issue, trans-disciplinarity is part of the evaluation criteria



WORKING INDEPENDENTLY



WORKING TOGETHER



Socio-economic Sciences and Humanities integrated in Horizon 2020

Excellent Science

- European Research Council
- Frontier research by the best individual teams
- Future and Emerging Technologies
- Collaborative research to open new fields of innovation
- Marie Skłodowska Curie actions
- Opportunities for training and career development
- Research infrastructures (including e-infrastructure)
- Ensuring access to wo facilities

Industrial Leadership

- Leadership in enabling and industrial technologies
- ICT, nanotechnologies, materials, biotechnology, manufacturing, space
- Access to risk finance
- Leveraging private finance and venture capital for research and innovation
- Innovati

ST SN

Societal Challenges

- Heal agraphic change and v
- Food stage
 agricultt
 mariti

- Jort
- climate action, en Alment, resource efficiency and raw materials
- Inclusive, innovative and reflective societies
- Security society

pean Institute of Innovation and Technology (EIT)

Spreading Excellence and Widening Participation

Science with and for society

Joint Research Center (JRC)

Cross-cutting Issues

EURATOM



SSH aspects include...



Human behaviour and choices, lifestyles and well-being



Historical considerations



Economic analysis and business models



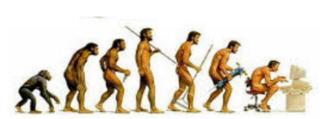


Legal, institutional and political frameworks



Variations across social groups







Why are the SSH disciplines integrated?



STEM disciplines

(science, technology, engineering and mathematics)







COMPLEX SOCIETAL ISSUES



Integration of SSH: solutions and products that are socially acceptable, directly applicable or marketable and cost-effective

Why do I need to integrate SSH in my proposals?

- ✓ **SSH experts are called by EC** to contribute to framing the questions and issues to be tackled in Horizon 2020
- ✓ **Topics are 'flagged' for SSH by EC**, i.e. they point to SSH research as integral part of the expertise needed to properly address the issue outlined in the topic
- ✓ **Proposals submitted** for topics 'flagged' for SSH should contain meaningful, integrated contributions from SSH researchers
- ✓ Evaluation panels include SSH expertise: evaluators briefed on how to identify and evaluate SSH aspects



How can Net4Society help you?

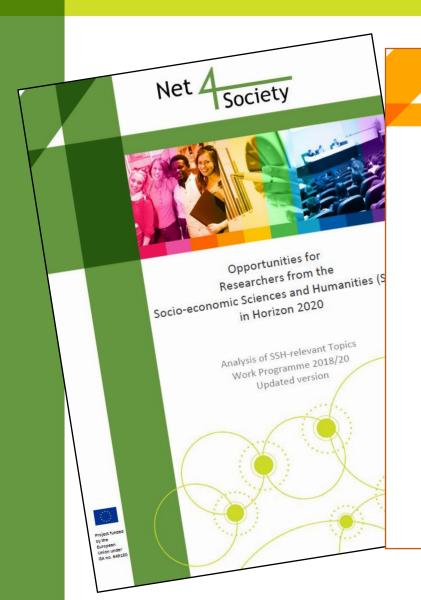
Net4Society - Website

Net4Society is the international network of National Contact Points for the Societal Challenge 6 ("Europe in a changing world: inclusive, innovative and reflective societies") in Horizon 2020.

Every year Net4Society issues 2 different version of the SSH Opportunities aimed at supporting researchers in the identification of SSH-flagged topics



SSH Opportunities document – LONG VERSION





Societal challenge 7

Secure societies

Protecting freedom and security of Europe and its citizens

Call - Artificial Intelligence and security

SU-AI01-2020: Developing a research roadmap regarding Artificial Intelligence in support of Law Enforcement

Specific Challenge

As indicated in the Coordinated Plan on Artificial Intelligence and in the Cybersecurity Joint Communication 19, there is a need to better understand how Al-based systems, services and products could enhance the objectives of the security sector, had technologies can be protected from attacks; how to address any potential abuse of Al for malicious purposes; how to establish cybersecurity requirements for Al. From the Law Enforcement point of view, these dimensions have to be analysed in a longer term, taking lind secount that the potential Al benefits for Law Enforcement Agencies (EAs) are therefold, i.e., through: 1) proactive policing (from reactive to anticipative policing); 2) data analysis (e.g., connecting the doss, discovering criminal patterns and defragmenting LBA actions), and 3) identity checks (improving detection, targeting and interdiction).

Scope

Proposals under this topic should provide an EU AI roadmap for LEAs, meeting their specific operational and cooperation needs, by identifying, in a longer-term perspective: the key areas in which AI would be beneficial for LEAs, the key areas in which it could be pose a threat to executive, yelenexoutly requirements for AI based technologies in use or to be used by LEAs as well as meaning prevention and mitigation of malicious use of AI for criminal activities. As such this project would not only need to continuously interact (in a cluster mode) with projects funded under SU-AI02-2020 and SU-A03-2020 but also provide recommendations for further work to be done under Horizon Europe, Digital Europe, or the Internal Security Fund as well as for policy and market

untake. The objective is to develop a research readmap that provides answers to e.g., following questions: What are and will be the Al needs of LEAS in their daily world What are the major research paps in the near of Al in support of LEAS? What are the challenges that need to be addressed, both from the flighting crime, including cybercrime and terrorism, and from improving cyberscurity (rejections? Which approaches might be desirable? What needs to be set up for test and evaluation? How to prevent and mitigate malicious use of Al for criminal activities and terrorism?

Script from these considerations, composals must demonstrate commitment to produce recommendations that are undated.

scaring from those consequences, proposas most common season are upons. Confinuously, and at least every 5 months, about the following limited of actions which Al based changings, systems and solutions could support/enhance the work of LEAs and how, what the corresponding restraints (including ethical and legal) are, as well as replaced rivels source has been according to the proposal constraints of the proposal con

as indicated in the Introduction of this call, proposals should foresee resources for clustering activities with other projects

The Commission considers that proposals requesting a contribution from the EU of around EUR 1.5 million would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other removals.

spected Impact

Short term:

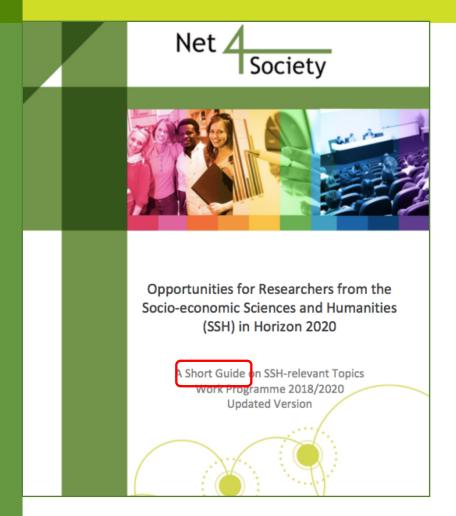
- Effective contribution to the overall actions of this call;
- Medium and longer term:
- In the longer term perspective, identification of key areas in which AI would be beneficial for LEAs, meeting their
 operational and collaborative needs, and of key areas in which it could pose a threat to security;
- A carefully planned roadmap in order for Law Enforcement to benefit as much as possible from the AI based technologies, systems, solutions, including their protection;
- Increased awareness regarding the state of the art and trends in AI-based criminal activities (short-, mid- and long-term).

	Type of action	Coordination and Support action
	Deadline	27 August 2020
	Call identifier	H2020-SU-AI-2020
	Topic information	Link





SSH Opportunities document – SHORT GUIDE





SC7 Flagged topics still open in 2020

Call - Artificial Intelligence and security



• SU-Al01-2020: Developing a research roadmap regarding Artificial Intelligence in support of Law Enforcement; Main keywords: **ethics**, **law**



• SU-Al02-2020: Secure and resilient Artificial Intelligence technologies, tools and solutions in support of Law Enforcement and citizen protection, cybersecurity operations and prevention and protection against adversarial Artificial Intelligence; Main keywords: ethics, law, political science

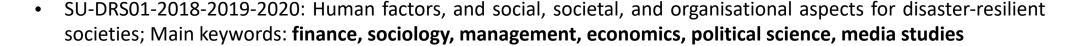


• SU-Al03-2020: Human factors, and ethical, societal, legal and organisational aspects of using Artificial Intelligence in support of Law Enforcement; Main keywords: ethics, law, political science, gender studies, sociology

SC7 Flagged topics still open in 2020

Call - Security







- SU-DRS02-2018-2019-2020: Technologies for first responders; Main keywords: **sociology, law, ethics, gender studies**
- SU-FCT01-2018-2019-2020: Human factors, and social, societal, and organisational aspects to solve issues in fighting against crime and terrorism; Main keywords: **psychology, law, anthropology, sociology**



- SU-FCT02-2018-2019-2020: Technologies to enhance the fight against crime and terrorism; Main keywords:
 psychology, law, anthropology, sociology, ethics
- SU-FCT03-2018-2019-2020: Information and data stream management to fight against (cyber)crime and terrorism; Main keywords: psychology, sociology, linguistics, ethics, law



 SU-BES01-2018-2019-2020: Human factors, and social, societal, and organisational aspects of border and external security; Main keywords: economics, sociology, law, demography, gender studies, ethics

SC7 Flagged topics still open in 2020

Call – Digital Security







- SU-DS03-2019-2020: Digital Security and privacy for citizens and Small and Medium Enterprises and Micro Enterprises; Main keywords: **ethics, law**
- SU-DS04-2018-2020: Cybersecurity in the Electrical Power and Energy System (EPES): an armour against cyber and privacy attacks and data breaches; Main keywords: **ethics, law**