

The Civil Clause: No military research in civilian research institutions

immediate

The Science4Peace Forum

Abstract

The discussion about military research in civilian research institution has gained momentum recently. In Europe, the research center CERN in Geneva has in its constitution written, that " the Organization shall have no concern with work for military requirements", in Germany so-called Civil-Clauses have been issued as a self-declaration and self-commitment of many institutions and universities to work only for civilian and peaceful goals. While there was common agreement on research for peaceful and civil purpose after World War II, recently the discussion of the usefulness of Civil Clauses has been put on the table by the EU commission as well as national governments.

A dangerous development is taking place in science policy. Immediately followed by the invasion of Ukraine, Russian and Belorussian scientists were sanctioned, cooperations were stopped and scientists were excluded from participating in civilian research projects. Attempts to open research institutions, which were in the past a symbol for civilian research, for military purposes, is another step in separating the science communities and creating enemies-images, while giving up the universal feature of science.

Triggered by the announcement of the directorate of DESY to start a discussion whether opening of the research institution for military research in June 2024 and by a white paper of the EU commission from Jan 2024, the Science4Peace Forum started a qualified discussion with a panel discussion in September 2024 on different aspects of Civil Clauses.

In this paper we try to collect arguments for keeping the purely civilian and peaceful focus of public (non-military) research and argue that scientific progress for the benefit of humanity can only be achieved by collective efforts of all countries and nations. A restriction of research to those countries which share the same political values will create only anger, mis-trust and further conflicts, will result in another arms-race and is clearly counterproductive to solving the most important problems humanity is facing now: climate change, poverty and, most of all, the too many wars.

1 Introduction

In January 2024, the EU Commission issued a *White Paper* [1] calling for a special effort to promote research with both civil and military objectives (dual-use research). Similarly, the German Ministry of Education and Research (BMBF) released a *Position Paper* [2] in March 2024 calling for the deepening of cooperation between civilian and military research institutions and for establishing *funding incentives for increased cooperation between civilian and military research*. In its annual report for 2024, the German *Research and Innovation Expert Commission* proposed dissolving the previous separation between civil and military research [3].

This reorientation is in fundamental contradiction to the spirit of civilian research following the experiences of World War II: the Science Council of Japan vowed in 1950 *to never become engaged in scientific research for war purposes* [4]. At the international research center CERN, where the Higgs Boson was found in 2012, the convention of 1954 [5] demands explicitly that it *shall have no concern with work for military requirements*, and at the Helmholtz Research Center DESY in Germany the guiding principles [6] stipulate that *research pursues goals that are peaceful and serve civil society*. Moreover, many universities have adopted so-called Civil Clauses [7] to focus voluntarily their research and teaching to purely civilian and peaceful purposes. With the opening of civilian research to military research, international cooperation is called into question, research funds are withdrawn from civilian research and made available for military research as formulated in a statement [8] of the German University Rectors' Conference (HRK).

At DESY the directorate has initiated a discussion in June 2024 [9] whether the restriction of research to civilian and peaceful purposes is still adequate, or whether military research should be allowed at the laboratory. This initiative triggered a lot of discussion and protest at DESY, where shortly after this announcement a petition [10] was launched to protest against this move. The topic has also found attention in the national [11] and international press [12].

We are facing significant changes in science policy:

- **Sanctions in Science** Immediately after the start of the invasion of Ukraine, several science institutions in Europe initiated sanctions against Russian and Belorussian scientists. At DESY sanctions [13] imposed include a ban of common scientific publications as well as participation at scientific conferences, where Russian scientists participate under their institutional affiliation. The Science4Peace Forum has collected many arguments against excluding scientists from international cooperations [14]. At CERN, after invasion of Ukraine, collaborations were put on hold. At the end of 2023 the CERN council decided to not to prolong cooperation agreements with Russian and Belorussian institutes after their expiry dates in 2024. The Science4Peace Forum has warned about the long term consequences of such a decision [15]. At least the cooperation of CERN with JINR was not cancelled, and is continuing but still under sanctions and restrictions. These steps marked a clear change in science policy, scientists from certain countries are risking to be excluded from scientific cooperation, a step which did not happen at international organizations like CERN before (only in 1993 Serbia and Montenegro were excluded from CERN based on a decision of the UN security

council [16,17])

- **Role of science in geopolitical strategies** In a report *Security, Resilience and Sustainability* [18] from 2022 the increased role of science in security policy and military research is requested, but with caution ... *if Germany positions itself too assertively [in increased spending for military], its current reputation as a peaceful nation could suffer.* In a report of Leopoldina and DFG from 2024 [19] it is argued, that ... *in doing so, the claim is made that academic research can no longer be carried out solely for its own sake, but also bears responsibility for safeguarding our basic democratic order and other national values.* Further it is argued that ... *as a result, science and innovative power are also increasingly identified in Europe and North America as levers of geopolitical power in order to strengthen resilience and competitiveness in the sense of national security interests.* Even fellowships and student exchange are seen critically ... *young Chinese scientists with a scholarship from the Chinese Scholarship Council (CSC) will no longer be admitted in the future ...* , as written in Ref. [19].
- **Opening civilian research facilities for military research** The discussion about civil clauses and the focus of civilian research institution on purely civilian research has gained momentum recently with a White Paper [1] of the EU commission, where it is argued that resources spend for purely civilian research are missing in funding for military (or dual-use) research. With the further discussion on increased spending for military (at the moment several EU countries increased their spending to 2% of GDP) and the request to increase the spending from 2% to perhaps 3.5 or event 5 %, the resources for pure civilian research will decrease, and institutions maybe forced to look for additional funding, for example by removing civil clauses and opening their research facilities for military dual-use research. While such an attempt might solve the short term funding, it leads dramatic and significant changes in science and research.

In this paper we will discuss these three topics in more detail, with the emphasis that science and especially fundamental science is universal and independent of any political and geo-political strategies. We will argue, that sanctions and restrictions in science are counter-productive, and lead only to further separation and confrontation, rather than helping solving international conflict. We argue, that science should play a role in international affairs such that the language of science is used to build bridges and dialogue, instead of banning communication. We also argue that successful science which can serve society and can help solving the most important problems of people must be international, including all countries, as well as that all results must be made available to the public, and by this is required to work only on civilian projects.

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