





Foreword



"Our mark of distinction: Linking academia and political consultancy."

Prof. Dr. Andreas Wenger,Director, Center for Security Studies (CSS)

The Corona pandemic kept the world on edge in 2020 and beyond. For the CSS, Corona had a variety of consequences. The entire workday was converted to home office; teaching offers, our dialogue platforms, and our consulting formats with our partners were henceforth carried out online. Our employees mastered the challenges associated with these changes very well – we would like to thank them for their flexibility and patience! The changeover to online operation went surprisingly well overall, and many were even more productive than average in their paperwork. On the other hand, the joint development of new innovative research topics came up short and many projects with international and national partners had to be postponed.

In terms of content, our work also focused on the consequences of the pandemic for national and international policy. In many respects, Corona reinforced tendencies that had already become apparent, such as the growing competition between the major powers of the USA, Russia and China, which continues to gain in importance regardless of the pandemic. This also raises a variety of issues, some of them new, for Switzerland.

An important focus of our work in 2020 was the newly established special topic "The Security Policy Implications of the Coronavirus Crisis". The focus here is on national and international crisis management as well as the impact of the crisis on international relations and national and international security policy. The

authors of Bulletin 2020 on Swiss Security Policy focused on the consequences for Switzerland. In addition to an interview with Army Chief Thomas Süssli on the role of the armed forces in the pandemic, the new volume contains six other articles that take stock of the situation and raise important questions about improving pandemic preparedness and crisis management. In contrast, the 2020 edition of Strategic Trends focuses on the implications of Corona for international politics, particularly with regard to the rivalry between the United States and China and its consequences for Europe.

This annual report provides an overview of our activities and is intended to encourage reading of our publications. Our publications are all freely available online on our website www.css.ethz.ch. If you would like to receive regular updates on CSS publications, you can sign up for our monthly newsletter here www.css.ethz.ch/en/center/css-newsletter.html, or follow us on Twitter (@CSS_Zurich), Facebook (@css.zurich) or LinkedIn.

We are looking forward to hopefully returning to our offices soon and to the direct exchange with our partners in science and politics.

I wish you a stimulating read.

Prof. Dr. Andreas Wenger

Director, Center for Security Studies (CSS)



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Bulletin 2020 on Swiss Security Policy

Bulletin 2020 on Swiss Security Policy is almost exclusively devoted to Switzerland's Corona crisis management during the first wave. In addition to an interview with army chief Thomas Süssli on the role of the army in this crisis, it contains a total of six articles. Our authors draw first conclusions, raise important questions and recommend how pandemic preparedness and crisis management could be sustainably improved in the future.



Pandemic Preparedness in Switzerland: Crisis Preparedness as an Ongoing Learning Process

In the first article, Andrin Hauri, Kevin Kohler, Benjamin Scharte and Andreas Wenger discuss pandemic preparedness in Switzerland. They describe Switzerland's preparedness planning as a step-by-step learning process alongside international coordination efforts. A snapshot describes the state of preparations before the outbreak of the coronavirus pandemic. At that time, according to the authors, many gaps and interdependencies still existed. Many weak points were known to the experts, but had been pursued only hesitantly due to a lack of pressure to act and an absence of political attention.

The entire Bulletin with the interview and all six contributions can be downloaded as pdf: Online version

The recommendations in the form of lead questions for a further development of the legal and planning framework for the management of pandemics can be found here: Online version

Swiss Crisis Management: The Coronavirus Pandemic as a Professional and Political Learning Opportunity

Andreas Wenger, Andrin Hauri, Kevin Kohler, Benjamin Scharte and Jan Thiel discuss Swiss crisis management in the most comprehensive article in this issue. They see the coronavirus pandemic as a professional and political learning opportunity. The article focuses on the content dimension - early detection, risk assessment and strategy adaptation as well as crisis communication and digitalization - and on the practical dimension - the crisis organizations of the Confederation and the cantons, the involvement of the scientific community and resource management - of efforts to cope with the first phase of the coronavirus pandemic. The authors conclude that Switzerland must overcome fundamental challenges and retain key lessons learned in order to have differentiated coping options in the future

Change to Digital in Research, Teaching and Policy Advice

The pandemic also presented the CSS in 2020 with the challenge of converting teaching offerings, dialog platforms, and consulting services, as well as everyday work in Research and the Think Tank, to digital. The lack of direct contact under the difficult conditions of the lockdown could be countered with online teaching offers, a new webinar series, current contributions on the CSS blog and teamwork on virtual platforms.

Online Teaching

In order to implement the valid protection concept and to be able to hold lectures under safe conditions for lecturers and students even in a crisis, ETH Zurich opted for various online offerings. CSS instructors have also recorded lectures or streamed them live and conducted seminars hybrid or entirely via Zoom. On the one hand, distance teaching ensured that lectures could be held, but on the other hand, all lecturers lacked the direct contact with students that characterizes face-to-face teaching.



Empty library during the closure of the buildings and workrooms. From the photo series "ETH Zurich in emergency operation (COVID-19)".

Selected CSS Blog posts addressing the security implications of the coronavirus crisis can be found here: <u>Online version</u>

Webinar Series

Since the Evening Talks and the other dialog platforms and consulting offers could not be physically held, CSS decided to launch the CSS Brown Bag Webinar Series. From April to July 2020, webinars were held for and with various partners on the following topics, among others: "COVID-19: Origin of the New Corona Virus and Countermeasures" or "Corona and the Future of the Iran Nuclear Agreement".

Virtual collaboration in the home office

The usual work routine came to an abrupt end in March 2020 when the office space could no longer be shared. All employees suddenly found themselves under the unfamiliar conditions of a permanent home office. In video conferences and online meetings, projects were planned together, contact with strategic partners was maintained, research work was coordinated, and personal exchanges were moved into the virtual space.



Duursma, Allard: African Solutions to African Challenges: The Role of Legitimacy in Mediating Civil Wars in Africa. In: International Organization, Volume: 74, 295–330, April 2020. Journal article:

African Solutions to African Challenges

Previous research suggests that the ticket to mediation success is the material manipulation of the bargaining environment by third parties with a high degree of economic and military resources. This article shows that third party legitimacy also matters by systematically comparing the effectiveness of African and non-African third parties. African third parties are typically considered ineffective because of a low degree of economic and military capacity.

Yet, they effectively mediate civil wars in Africa because of a high degree of legitimacy, which is a result of a strong conviction within Africa that African mediation is the most desirable type of mediation. Quantitative evidence indeed supports the effectiveness of African third parties. By bringing legitimacy to the forefront, this article supplements the current mediation literature that emphasizes material sources of power and ignores social structures.

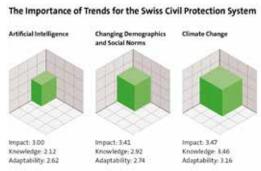
Trend Analysis Civil Protection 2030

The nature and impact of emergencies and disasters change over time. They depend on changes in social, technological and environmental conditions, as well as on the availability of preventive and coping measures.

This CSS report provides a systematic analysis of the relevant trends for the next five to ten years. Based on this, measures are recommended to optimize the Swiss civil protection system in the coming years. Civil protection is a continuous and dynamic process that requires constant adaptations.

This ensures that the relevant authorities are adequately equipped and prepared to mitigate risks and manage potential and actual threats.







Political Consultancy

As part of the Talks on Parliament and Politics organized by the Federal Parliamentary Services, Prof. Andreas Wenger discussed the topic "Between Cyberwar and New Fighter Jets: the Role of Parliament in Security Policy" together with Ambassador Pälvi Pulli and Werner Salzmann, member of the Council of States, on February 17, 2020. In addition, Prof. Wenger represented the CSS as a member of the advisory board of the accompanying group of the DDPS on the project "Analysis of the Procurement Process" and participated in the sounding board on the expert report on the future of military peacebuilding, on which the CSS also commented in writing.

Artificial Intelligence and Security Politics

Artificial intelligence (AI) is a key driver of changes in the economy, society, and the state. The work of the CSS focuses on the impact of AI on defense and foreign policy, as well as on internal security and democracy. In particular, we look at the anticipated changes in war and conflict caused by AI-based applications, the competition over AI-technology and resulting shifts in power, the regulation and governance of AI, and changes in the activities of intelligence services.



> www.css.ethz.ch/en/Themes/AI.html

News

Predictive Policing: Proceed, but with Care CSS Policy Perspectives, 8/14

Data-driven analytics can increase the effectiveness and efficiency of police work and crime prevention. Police departments should proceed with care, however, as tools such as predictive policing raise a number of concerns regarding human rights and civil liberties, argues Matthias Leese in this CSS Policy Perspective.

New Publications

Matteo Bonfanti, Kevin Kohler, Artificial Intelligence for Cybersecurity, CSS Analyses in Security Policy, No. 265.

Sophie-Charlotte Fischer, Kevin Kohler, Andreas Wenger, **Digital Technologies in Corona Crisis Management**, CSS Analyses in Security Policy, No. 264.

Kevin Kohler, Benjamin Scharte, Integrating Al into Civil Protection, CSS Analyses in Security Policy, No. 260.

Other Activities

Blog: Mediation Perspectives: Artificial Intelligence in Conflict Resolution

Marta Lindström of Uppsala University discusses how technologies known as artificial intelligence (AI) are changing conflicts. She argues that peace practitioners need to develop an ethical, constructive and transparent use of AI while thinking about possible negative consequences.

Interview: Digitale Verbrechensbekämpfung – Wie ermitteln Algorithmen?

The police want to use predictive policing to prevent crimes before they are committed. But how sophisticated are the analysis programs? In this contribution for Planet Wissen on ARD, Matthias Leese provided the answers.

Media article: KI verändert auch das Risikomanagement Florian Roth and Kevin Kohler present AI in the journal SicherheitsFor um as an omnifunctional technology that has the potential to change all areas of life. The use of AI also offers a wide range of opportunities in risk management.

Blog: Facial Recognition will Outlast COVID-19

Alejandra Bringas and Kevin Kohler address the implications of the introduction of digital surveillance tools, including facial recognition systems (FRS), that will outlast the COVID-19 pandemic in this blog post.

"Belt and Road Initiative": Trade and Security in Eurasia

The geostrategic importance of Eurasia is growing rapidly as a consequence of the ongoing global power shifts. In this core theme, we examine how a rising China is expanding its economic and political influence through projects such as the "Belt and Road Initiative" and what impact this has on Europe. We also analyze the increasingly cooling relations among China, Russia and the USA in the context of Eurasian development.



Other Activities

pour le Moyen-Orient

Media article: Les enjeux de la "nouvelle Route de la soie"

China is increasingly present in the Middle East, writes Lisa Watanabe. This will not be without consequences for Europe, which will have to think about how to defend its interests

Media quote: A border dispute between India and China is coming to a head

The recently published report, "The Strategic Postures of China and India," by CSS Researcher Alexander Bollfrass and Frank O'Donnell, is featured in this article from The Economist.

Interview: The Response of Small, Medium, and Large Powers to U.S.-China Strategic Competition

In this panel for the University of Zurich conference on "Small, Medium and Great Powers' Response to US-China Strategic Competition," Brian Carlson spoke about strategic rivalry between the United States and China in their respective national contexts.

Webinar: Strategic Trends III: Chinas Belt and Road Initiative in Eurasien

In the June 11, 2020 CSS Brown Bag Webinar, Benno Zogg addressed the BRI in Eurasia and China's increasing economic and political engagement in the region.

Arctic Matters: Sino-Russian Dynamics CSS Analyses in Security Policy, No. 270

As Arctic ice recedes, interest in raw material deposits and trade routes increases. Two actors in particular will have a strong impact on the region: China and Russia. They are bound together by an intricate dynamic of cooperation and competition, particularly in the energy sphere. Faced with conflicting interests, tensions and asymmetries between them could increase, argue Maria Shagina and CSS Researcher Benno Zogg in this CSS Analysis.

www.css.ethz.ch/en/Themes/BRI-China.html

New Publications

Humphrey, Chris; Maduz, Linda, **China, Multilateral Banking** and **Geopolitics**, CSS Analyses in Security Policy, No. 272.

Zogg, Benno, **Demystifying the Belt and Road Initiative: A Clarification of its Key Features, Objectives and Impacts,** in: *SIRIUS – Journal of Strategic Analysis*, 4/3.

Watanabe, Lisa, China and Russia Maneuver in the Middle East, CSS Analyses in Security Policy, No. 271.

Perspectives on Euro-Atlantic Security

In this core theme, the spotlight is on developments in the Euro-Atlantic security structures, which are relevant for Swiss foreign, security and defense policy. The focus is on security organizations such as NATO and OSCE, military cooperation within the EU and arms control. Also covered are relations between Russia and Europe and challenges facing Europe with regard to North Africa and the Middle East.



Trouble with Turkey in the Eastern Mediterranean

CSS Analyses in Security Policy, No. 275

Fabien Merz's analysis shows that the discovery of gas deposits in the eastern Mediterranean has reignited unresolved conflicts between Turkey and two EU member states, Cyprus and Greece. A more assertive Turkey has recently taken a number of steps to secure access to energy resources in the Mediterranean. An escalation of the conflict would have far-reaching consequences.

> www.css.ethz.ch/en/Themes/European-Security.html

New Publications

Watanabe, Lisa, An 'Etroika' to Advance Europe's Policy on Libya, CSS Policy Perspectives, 8/6.

Schepers, Névine, China and Nuclear Arms Control, CSS Analyses in Security Policy, No. 276.

Larsen, Henrik, **The Western Balkans between the EU, NATO, Russia and China**, *CSS Analyses in Security Policy*, No. 263.



Other Activities

Media article: Ein halbes Jahrhundert nukleare Nichtverbreitung

Oliver Thränert explains in an NZZ article the impact of the Nuclear Non-Proliferation Treaty, which came into force 50 years ago. It has contributed to stability, but its credibility is fading.

Webinar: Corona and the Future of the Iran Nuclear Agreement

Névine Schepers discussed the current status of the Joint Comprehensive Plan of Action (JCPOA) and the importance of keeping it alive until the U.S. presidential election in November in the CSS Brown Bag Webinar on July 09, 2020.

Interview: Islamistischer Terror: Frauen springen für die Männer ein

For a long time, women in jihadism were merely birthing mothers. But suddenly they are committing attacks – as in Lugano. Fabien Merz talked about the reasons for this phenomenon in an interview with the NZZ.

Radio interview: Weissrussland: Sanktionen sind ein starkes Signal der EU

The EU has announced sanctions against the Belarusian leadership and security forces. Benno Zogg described these measures in Radio SRF's 4×4 podcast as an important signal to condemn violence and encourage protesters – but the EU must act with restraint.

Mediation and Peace Promotion

The CSS aims to study, develop and promote effective forms of mediation in armed conflicts. The focus is on mediation support in peace processes, mediation in conflicts with a religious nature, and ceasefires in peace processes. Further, the role of local mediators, gender perspectives, the issue of environment and peace, and peacebuilding in fragile contexts will be explored.



www.css.ethz.ch/en/Themes/Mediation.html

Other Activities

Publication: Online Training Courses and Peace Mediation at ETH Zurich

The Covid 19 pandemic has accelerated the development of online mediation training courses. This work by Inbal Ben-Ezer and Owen Frazer is intended to help peace me- diation teams at ETH make an informed decision about whether they should use and develop online learning resources for their education and training programs.

Media Article: The UN Has Appealed for a Global Coronavirus Ceasefire: But Is It Possible to Quarantine Conflict? In this article, Govinda Clayton examines the global response to the call for an "immediate global ceasefire" by UN Secretary-General António Guterres. This is the first global ceasefire call in the 75-year history of the United Nations.

Blog: Infectious Narratives: US, China, and COVID-19 In this blog, Katrina Abatis and Emanuel Schäublin analyze how the governments of the United States and China attempted to explain the origin and spread of the Covid-19 pandemic as the other side's fault.

Online workshops: **Mediation and Governance in Fragile Contexts: Small Steps to Peace**

A series of online training workshops have been conducted on this book for mediators and peacebuilders working in fragile contexts, such as Iraq and the Central African Republic.

Entwicklung staatlicher Mediationsprofile: Kerndimensionen und Leitfragen

in: Friedensmediation: Spannungsfeld aus Methodik, Macht und Politik

This book chapter by Simon Mason helps policymakers and the broader public understand or shape their state's role in mediation. It outlines a series of questions that highlight key dimensions of a country's mediation profile, such as motivation, role, resources and strategy.

New Publications

Schäublin, Emanuel, **Disconnected Accountabilities: Institutionalizing Islamic giving in Nablus (Palestine),** *Journal of Muslim Philanthropy and Civil Society.*

Alder, Cora; Schäublin, Emanuel, **US Evangelicals: From Prophecy to Policy,** *CSS Policy Perspectives,* 8/11.

Bitter, Jean-Nicolas; Frazer, Owen, The Instrumentalization of Religion in Conflict, CSS Policy Perspectives, 8/5.

Military Doctrine and Arms Procurement

Issues of military security and defense are increasingly gaining political relevance as great power rivalries continue to intensify. We identify trends in military doctrine, force structures and arms policy. We monitor ongoing conflicts and their impact on defense debates at home and abroad. Furthermore, we study the influence of new technologies and analyze the defense and deterrence strategies of small states.



News

The Shadow of 2014: Armed Forces Development in NATO CSS Study

This CSS study by Niklas Masuhr examines the strategic and operational adaptation measures of the land forces of the United States, the United Kingdom, France, Poland, and Germany toward Russia since 2014.

> www.css.ethz.ch/en/Themes/Armament-Policy.html

New Publications

Michael Haas, Annabelle Vuille, The Swiss Army in Corona Deployment: A Relevant Scenario for Force Development? CSS Bulletin 2020 on Swiss Security Policy.

Alex Bollfrass, **Syria: Stumbling into stalemate,** in: *Military Coercion and US Foreign Policy: The Use of Force Short of War.*

Michael Haas, **Space Security: The Next Decade**, *CSS Analyses in Security Policy*, No. 256.

Julia Friedrich, Niklas Masuhr, Mercenaries in the Service of Authoritarian States, CSS Analyses in Security Policy, No. 274.

Other Activities

Webinar: CSS Brown Bag Webinar: Strategic Trends: Threat of War between China and USA?

In the CSS Brown Bag Webinar on April 30, 2020, Michael Haas and Niklas Masuhr discussed the context, as well as forms and consequences, of the competitive struggle between China and the U.S., with a focus on both sides' military strategic visions of a possible conflict.

Policy Advice: **4+4 with Group Defense/HSO**During the 9th workshop "Current Security Policy
Challenges", selected senior staff officers of the Swiss
Armed Forces discussed the Basic Principles Paper (GLP)
Space with representatives of the GS-VBS, the Army
Staff and the CSS.

Media article: Nationale Streitkräfte sind das Rückgrat einer integralen Krisenvorsorge

Our crisis prevention must become more serious and integral, argues Amos Dossi in this editorial for the NZZ. For this, national armed forces are indispensable – both in their core military domain and in subsidiary functions.

Media article: Nato-Russia Tensions: What a Biden Administration Can Do to Lower the Temperature

In this article for "The Conversation", Amelie Theussen and CSS Researcher Dominika Kunertova explain the general freeze in relations between Russia and NATO following Russia's 2014 annexation of Crimea and the end of the INF Treaty in 2019.

Cyber Security Politics

Over the last decade, cyber incidents have become more costly, more damaging, and also more political. We focus on two interlinked problems: first, the use and misuse of digital technologies in politics, society, and business; and second, the ongoing negotiation processes among the state, society, and the private sector regarding the definition of roles, tasks, and rules of conduct in cyberspace.

Other Activities

Initiative: The European Cyber Conflict Research Initiative (ECCRI)

This initiative by Max Smeets provides a platform for academic and policy dialogue on cyberconflict and is specifically dedicated to making high quality research accessible to policy makers and the general public.

Initiative: FIRST Threat Intelligence Coalition Special Interest Group

Founded by Lennart Maschmeyer, this group supports civil society organizations that lack information about the threats they face. It helps with capacity building and facilitates collaboration between civil society and professional threat intelligence researchers.

Initiative: Geneva Dialogue on Responsible Behaviour in Cyberspace

Initiated by the Federal Department of Foreign Affairs and led by the DiploFoundation, the Dialogue aims to develop a better understanding of the responsibilities of states, businesses, civil society, and academic and technical communities to contribute to greater security and stability in cyberspace. With Jakob Bund providing substantive advice, the CSS continues to support and strategically develop the dialogue.

Blog: Die Spannungsfelder der Cybersicherheit

Since July 1, 2020, Switzerland has had a National Cyber Security Center (NCSC). Is this the end of unclear bureaucratic responsibilities or a more typically Swiss solution that relies primarily on decentralized structures and a lot of coordination? Myriam Dunn Cavelty and Florian Egloff show in this contribution why cybersecurity must be approached in exactly the same way and not differently, but why it will also need a lot of political clarification in the future.

Blog: Persistent Engagement Neglects Secrecy at Its Peril In this post for "Lawfare," Lennart Maschmeyer examines the extent to which the new U.S. cyber strategy "Persistent Engagement" could negatively impact international intelligence and intelligence operations.

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News

The Evolving Cyber Threat Landscape during the Coronavirus Crisis CSS Cyberdefense Reports

This report by Sean Cordey examines the impact of the coronavirus crisis on the overall cybersecurity threat landscape in the first two quarters of 2020. The report highlights that the corona pandemic created a remarkable set of psycho-social, technical, and logistical-economic circumstances upon which malicious actors were able to capitalize.

> www.css.ethz.ch/en/Themes/Cybersecurity.html

New Publications

Gomez, Miguel Albert, Cyber-Enabled Information Warfare And Influence Operations: A Revolution in Technique?, in: Information Warfare in the Age of Cyber Conflict.

Smeets, Max, **US Cyber Strategy of Persistent Engagement and Defend Forward,** *Intelligence and National Security.*

Stefan Soesanto, A One-sided Affair: Japan and the People's Republic of China in Cyberspace, CSS Cyberdefense Hotspot Analyses.

Max Smeets, Trey Herr, Arthur Laudrain, Mapping the Known Unknowns of Cybersecurity Education, Journal of Political Science Education.

Socio-technical Resilience and Disaster Preparedness

This core theme deals with the security of societies and their critical infrastructures under consideration of natural, social and technical risk factors. Resilience is studied as a system-specific phenomenon in order to understand the dynamic and contextual characteristics of complex socio-technical systems and thus contribute to the further development of future civil protection.



News

Rethinking the Interplay Between Affluence and Vulnerability to Aid Climate Change Adaptive Capacity

Journal articles, Climatic Change

In this paper, Christine Eriksen, Florian Roth, Linda Maduz, and Tim Prior propose a re-examination of the dynamic relationship between wealth and vulnerability-a complex link defined as the Affluence-Vulnerability Interface (AVI).

www.css.ethz.ch/en/Themes/Disaster-Management.html

New Publications

Christine Eriksen, Europe's Fiery Future: Rethinking Wildfire Policy, CSS Policy Perspectives, 8/12.

Jakob Bund, Ann-Sophie Leonard, Information Battleground: Vaccines, CSS Analyses in Security Policy, No. 269.

Jan Thiel, **WHO's Dilemma in Global Outbreak Response,** CSS Analyses in Security Policy, No. 268.

Other Activities

Media Article: **Soziale Distanzierung kann tödlich sein** This guest commentary by Benjamin Scharte in the Aargauer Zeitung is about the importance of staying in touch with each other during the Corona crisis.

Presentation: **Resilienz als Antwort auf die Komplexitätsfrage**

On September 10, 2020, Benjamin Scharte presented findings from research on systemic resilience at the 6th FSS Security Talk of Forum Sicherheit Schweiz. In a subsequent panel, participants from business, academia, and society discussed what this means for cybersecurity, critical infrastructure protection, but also the COVID-19 pandemic.

Webinar: Protecting the Vulnerable, Strengthening Resilience: COVID-19 and Lessons from Previous Crises During the CSS Brown Bag Webinar on April 16, 2020, Florian Roth analyzed the needs and capabilities of citizens with regard to disasters and emergencies.

Expert opinion: Ernstfall Pandemie: Das Coronavirus testet die Widerstandsfähigkeit Europas

In an interview with the NZZ, Andrin Hauri discussed the consequences of the pandemic. He saw the greatest damage in the serious economic consequences for the respective countries, but considered the state resilience to be unbroken.

The CSS in Figures

The seventh most viewed website at ETH Zurich, 711,000 views.

Over 811,000 documents were downloaded from the CSS website, the most common being the CSS Analyses with almost 200,000 downloads.

The CSS blog was visited nearly 10,000,000 times

to 20 different courses at ETH Zurich reaching 644 students.

CSS has 14,800 followers on Twitter, nearly 112,000 on Facebook and 13,800 on LinkedIn.

In its advisory role, the CSS entered into dialogue with CSS partners in politics and administration more than $120\,_{
m times}^{
m times}$ in workshops, hearings and other formats.

css employees
gave more than 150 lectures
to academic and
non-academic audiences.

CSS employees published 14 articles in Swiss newspapers and were interviewed 54 times by Swiss media.

Honors

- Enzo Nussio received the Teacher of the Hour 2020 honor from the University of Zurich.
- Mauro Gilli's article "Why China Has Not Caught Up Yet" was awarded Best Research Article on U.S. Foreign Policy and Grand Strategy by Duke University, Johns Hopkins Kissinger Center and the University of Texas.
- Emanuel Schäublin received the 2020 SAGW Young Researcher
 Award from the Swiss Academy of Humanities and Social Sciences for his article "Islam in face-to-face interaction: direct zakat giving in Nablus (Palestine)" published in Contemporary Levant.
- Max Smeet's article "The Strategic Promise of Offensive Cyber Operations" in the Strategic Studies Quarterly Journal was downloaded over 80,000 times and was named the Most published article 2019 by the United States Airforce.
- CSS Researcher Christine Eriksen, along with Eliza de Vet, received the Dorothy R Taylor Best Paper Prize from the Geographical Society of New South Wales for their article "When insurance and goodwill are not enough: Bushfire Attack Level (BAL) ratings, risk calculations and disaster resilience in Australia" in the journal Australian Geographer.



CSS Research

"Research at CSS is diverse, interdisciplinary and relevant."

Dr. Myriam Dunn Cavelty,Deputy Head CSS Research and Teaching

Strategic Competition

in the Age of Complexity

CSS research is dedicated to a wide range of security policy issues with high socio-political relevance. We distinguish ourselves through excellent, innovative and high-impact academic research; a dialogue with practitioners and the broader public about the results of that research; and the provision of high-quality teaching for academic and practitioner students. Our research is theory-driven, empirically grounded, and methodologically pluralistic. We are concerned with old and new threats to states and their

societies and with the way in which key actors organize to address these threats. The analysis of causes and consequences of political violence, of shifts in security thinking, and of institutions, political processes, norms, and policies to mitigate insecurity, define us. It is true that we operate in an inherently inter- and transdisciplinary field: We draw on explanatory approaches from international relations, international history, science and technology studies, political sociology, political psychology, and criminology.

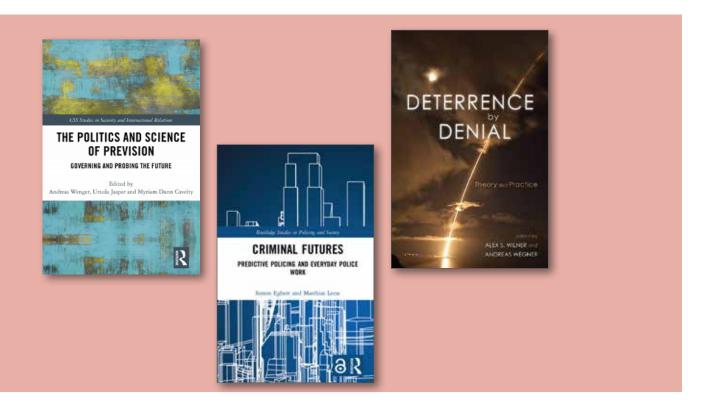
The Three Clusters of Our Research Digital Technologies and Security Policy Conflict Resolution and Violence Prevention

The first cluster on Conflict Resolution and Violence Prevention focuses on various forms of violence, including civil war, terrorism, non-state conflict, and urban and community violence. We study why, and under which conditions, various conflict management tools and/or violence prevention strategies are effective.

The second cluster on Digital Technologies and Security Politics focuses on the use of digital technologies in security policy contexts and on the societal consequences that arise from such use. We study interactions between actors and how arrangements designed to govern the use of digital technologies are formed.

The third cluster on Strategic Competition in an Age of Complexity focuses on great power relations in an increasingly competitive and complex international system. We study the extent to which great powers can anticipate, understand and respond to change in technology, economics, society and the environment.

Selected Books



Andreas Wenger, Ursula Jasper, Myriam Dunn Cavelty (eds.)

The Politics and Science of Prevision, Governing and Probing the Future

2020

Online version

This volume examines the use of forecasting at the interface between policy and science and reflects on the implications of forward-looking policymaking in different fields. The first part of the book discusses different academic perspectives and contributions to future-oriented policymaking. The second part examines the role of future knowledge in decision making in various empirical areas such as climate, health, finance, bio- and nuclear weapons, civil war, and crime. It analyzes how predictions are integrated into public policy and governance and, in turn, how governance structures influence the generation of knowledge about the future.

Simon Egbert, Matthias Leese

Criminal Futures: Predictive Policing and Everyday Police Work

2020

Online version

Police departments around the world have begun using data-driven applications to make criminality forecasts and guide preventive measures. Simon Egbert and CSS Researcher Matthias Leese argue that predictive policing should not be analyzed as an isolated technological artifact, but as part of a larger socio-technical system. Building on empirical findings from three years of field research in Germany and Switzerland, the authors present a set of practical recommendations for the prudent use of algorithmic analysis tools in policing to protect civil and human rights while meeting the professional needs of police organizations. ■

Andreas Wenger, Alex Wilner (eds.)

Deterrence by Denial: Theory and Practice

2020

Due to the longstanding focus on deterrence through punishment, few research projects have systematically addressed denial theory and strategy in modern security environments. This book, edited by CSS Director Andreas Wenger and Alex Wilner, is the first study to focus exclusively on contemporary deterrence and to bridge the theoretical gap between classical deterrence theory and contemporary insecurity. The book significantly advances scholarship on deterrence by denial with empirically driven and policy-relevant contributions written by leading international scholars in the fields of conventional military aggression, missile defense, terrorism and militancy, crime, and cybersecurity. ■

CSS Studies in Security and International Relations

The CSS Studies in Security and International Relations focus on historical and current security policy issues. Based on a broadened concept of security, the series presents itself as a forum for innovative research. The authors of the studies include both CSS Researchers and scholars from associated partner institutes.

In addition to the latest volume, The Politics and Science of Prevision: Governing and Probing the Future, the following books have already been published in this series:

Stephen Aris, Aglaya Snetkov, Andreas Wenger (Hrsg.)

Inter-Organizational Relations in International Security 2018

Roland Popp, Liviu Horovitz, Andreas Wenger (Hrsg.)

Negotiating the Nuclear Non-Proliferation Treaty: Origins of the Nuclear Order

2016

Wilhelm Mirow

Strategic Culture, Securitisation and the Use of Force: Post-9/11 Security Practices of Liberal Democracies 2016

Aglaya Snetkov

Russia's Security Policy under Putin: A Critical Perspective

2015

Thierry Tardy, Marco Wyss

Peacekeeping in Africa: The Evolving Security Architecture 2014

2014

Ursula Jasper

The Politics of Nuclear Non-Proliferation: A Pragmatist Framework for Analysis

2013

Stephen Aris, Andreas Wenger

Regional Organizations and Security: Conceptions and Practices 2013

Selected Journal Articles



Max Smeets, Robert Chesney

The Dynamics of Cyber Conflict and Competition

In: Texas National Security Review 2020

In this special issue of the Texas National Security Review on cybercompetition, CSS Researcher Max Smeets and Robert Chesney challenge the way cyberattacks and cybercompetition are often studied, hoping to advance old and new debates.



Public Attribution of Cyber Intrusions

In: Journal of Cybersecurity, vol. 6, No. 1 Oxford Academic, Oxford, 2020

This journal article by Florian Egloff examines the public attribution of cyber incidents as a political strategy to achieve specific political goals. These may include influencing the operational and normative environment of cyber operations as well as the possibility of acting as a deterrent to opponents.



Matthias Leese,

Sam Evans, Dagmar Rychnovská

Science, Technology, Security: Towards Critical Collaboration

In: Social Studies of Science SAGE Journals, 2020

In this journal article, Matthias Leese explores possible forms of socio-technical collaboration with communities of practice in the security field. It identifies several key challenges for critical social engagement of STS scientists in security-related issues, and uses three case studies to show how these challenges have evolved over time.

Enzo Nussio

Attitudinal and Emotional Consequences of Islamist Terrorism: Evidence from the Berlin Attack

In: Political Psychology Wiley Online Library, 2020

In this article, Enzo Nussio argues that the broader public is desensitized to terrorist attacks, both cognitively (when citizens expect an attack with increasing certainty) and emotionally (when the public loses sensitivity to attacks). The present study analyzes a survey conducted with German citizens in the context of the attack on the Berlin Christmas market in 2016.



Michiel Foulon, Gustav Meibauer

Realist Avenues to Global International Relations

In: European Journal of International Relations SAGE Journals, 2020

CSS Researcher Michiel Foulon and Gustav Meibauer argue in this article that exploring new ways to explain international relations is a prerequisite for developing more global IR. A recent variant of realism that can contribute to a more global understanding of international relations is neoclassical realism. This allows for a contextualization and historical examination of the drivers of state behavior.

Lennart Maschmeyer, Ronald Deibert, Jon Lindsay

A Tale of Two Cybers – How Threat Reporting by Cybersecurity Firms Systematically Underrepresents Threats to Civil Society

In: Journal of Information Technology & Politics

Taylor & Francis Online, 2020

Public and academic knowledge about cyber conflict relies heavily on data from commercial threat reporting. According to Lennart Maschmeyer, there is reason for concern that this data provides a distorted picture of the cyber threat. The result is an incomplete sample of cyber conflict that downplays the targeting of civil society and distorts both academic debate and public policy.

Miguel Alberto Gomez, Christopher Whyte Cyber Wargaming: Grannling with

Cyber Wargaming: Grappling with Uncertainty in a Complex Domain

In: Defense Strategy and Assessment Journal

Institute for National Defense and Security Research, 2020

Observational studies in the cybersecurity literature that analyze state-level actions offer limited insights into the individual-and group-level mechanisms from which these actions emerge. Consequently, in this article, Miguel Alberto Gomez provides the reader with an overview of the benefits of wargaming as a tool to improve our understanding of cyber decision making during crises.

Andrea Asoni, Andrea Gilli, Mauro Gilli, Tino Sanandaji

A Mercenary Army of the Poor? Technological Change and the Demographic Composition of the Post-9/11 US Military

In: Journal of Strategic Studies Taylor & Francis Group, 2020

Is the U.S. military a mercenary army of the poor, as some critics of U.S. foreign policy suggest? In this article, Andrea Asoni, Andrea Gilli, CSS Researcher Mauro Gilli and Tino Sanandaji analyze data from two nationally representative samples covering the period 1979 – 2008. They find that, contrary to popular belief, the U.S. military no longer primarily recruits individuals from the most disadvantaged socioeconomic groups.

Allard Duursma

Making Disorder More Manageable: The Short-term Effectiveness of Local Mediation in Darfur

In: Journal of Peace Research SAGE Journals, 2020

Most of the quantitative literature on conflict resolution focuses on mediation between states or on efforts to end a civil war through a comprehensive peace agreement that brings peace to the entire country. In contrast, Allard Duursma's article analyzes the effectiveness of mediation between a variety of armed actors at a subnational level. Examining unique data on Darfur, covering the period from January 2008 to August 2009, he shows that mediation efforts following armed conflict in a given area significantly prolong local ceasefires.

Doctoral Program of the Center for Comparative and International Studies (CIS)

At the heart of the doctoral program of the Center for Comparative and International Studies (CIS) is the writing of the dissertation. Additionally, the students attend – complementary to their previous courses of study – courses in their respective specialties. The following dissertations were supervised by the CSS in 2020:

- > Sophie-Charlotte Fischer
 - Mobilizing Commercial Technology Companies: Explaining the Pursuit of U.S. Technological Superiority vis-à-vis China in a Commercially Driven and Globalized Innovation System
- › Markus Geray
 - You Shall (not) Pass: Where, Why, and How Armed Groups use Roadblocks in Violent Conflicts

- > Jennifer Scurrell
 - How Artificial Intelligence Modifies
 Political Opinion Formation An Experimental Approach to Understand the
 Influence of Political Bots in Online Social
 Networks
- > Jan Thiel
 - The Power and Constraints of an Intergovernmental Expert Organization: States and Scientists at the World Health Organization (completed)
- > Claudia Wiehler
 - Contagious Escalation: Investigating Network Effects Between Communitybased and Militarized Conflict Dyads
- David Kostenwein (ISTP Doctorate)
 In Between Walls and Fences: How Gated
 Communities in Bogotá Shape Exclusive
 and Insecure Public Spaces outside the
 Gates

- Samuel Lloyd (ISTP Doctorate)
 Urban Policies as Tools for Enhancing Informal Social Control Processes and Reducing Crime in Public Space
- > Annabelle Vuille
- Big Ticket vs. Small, Smart, and Many: Exploring Small State Force Structure Choices (Southern Denmark University)
- > Valerie Sticher
 - Ceasefires as Bargaining Instruments in Intrastate Conflicts: Ceasefire Objectives and Their Effects on Peace Negotiations (Leiden University)
- > Owen Frazer
 - **Sequencing in Peace Processes** (University of Birmingham)
- > Amos Dossi
 - Balancing Scale against Heterogeneity: How Military-Technological Complexity Influences Optimal Framework Size in Armaments Procurement (University of St. Gallen)

Das CeaseFire-Projekt (CFP)

The CFP generates knowledge and practical guidance on how to negotiate and implement ceasefires in civil wars. The project is led by CSS Research and involves close collaboration with the CSS Think Tank and other institutions, including the Peace Research Institute Oslo and Uppsala University, and the United Nations. The CFP provides the intellectual foundations for a growing

subfield of research through a series of journal publications, two special issues in leading journals, a forthcoming book, and the creation of the ETH/PRIO Civil Conflict Ceasefire Dataset. A series of workshops, a conference, practice guides, policy briefs, op-eds, and training materials facilitate knowledge exchange among academia, policy, and practice.



Clayton, Govinda et al.: Introducing the ETHPRIO Civil Conflict Ceasefire Dataset. In: Journal of Conflict Resolution, forthcoming 2021.



Cybersecurity Policy

Over the past five years, CSS has built one of the world's leading cybersecurity policy competency clusters. Through a series of conferences and workshops, we have taken an active role in building an interdisciplinary community of senior and early-career scholars, including many women. Past and future top publications (four books forthcoming, several high-profile journal articles and special

issues) have given the group international visibility. Going forward, we will continue to strengthen the CSS as a hub for innovative cybersecurity policy research, educate and train the next generation of researchers and practitioners in the field, and work with industry and public policy to support societies in adapting to the digitized world.



CSS Think Tank

The basis of the CSS Think Tank's work is its understanding of science-based advisory work as part of a continuous dialogue between politics, science and society. Knowledge production aimed at consultancy is not a one-way street. What issues are relevant or to be prioritized for politics and society cannot be developed by the CSS Think Tank on its own. Rather, this can only succeed if its employees are in constant dialogue with politics and society. Therefore, the CSS Think Tank is in constant and close exchange with its strategic partners. The resulting knowledge about the needs of politics and society allows for an early anticipation of topics.

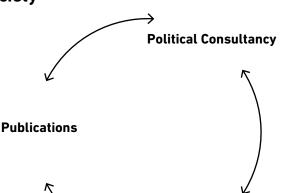


"Political consultancy thrives through constant dialogue with policymakers and society."

Dr. Oliver Thränert, Head CSS Think Tank

It also feeds into editorial planning for publications, dialogue platforms and policy advice. The feedback on the written and oral products forms the basis for further topic planning. In short, the dialogue-based knowledge production of the CSS Think Tank results in needs-oriented advice, which in turn leads to the raising of new questions.

Think Tank Work as a Dialogue among Science, Politics and Society



Targeted political consultancy is sciencebased support for strategic partners in the early stages of policy formulation processes. At the same time, it is a means of needs assessment and networking and facilitates addressee-oriented editorial planning.

CSS Think Tank publications aim to transfer knowledge in topical areas of interest to national and international partners as well as the broader public. They offer orientation knowledge, but also concrete suggestions for future political action.

The dialogue platforms serve to pass on policy-relevant knowledge and to identify topics and issues of importance for Swiss and international security policy. They also enable networking with politicians and experts.

Dialogue platforms

CSS Analyses in Security Policy



Since 2006, the CSS Analyses in Security Policy have been discussing current foreign and security policy developments and their backgrounds in a concise form. The topics are often examined with a view to Switzerland, but usually also appeal to an international audience.

CSS analyses are published on the first Wednesday of the month (except January, July and August) in German, French and English.

 Editors: Lisa Watanabe, Julian Kamasa, Fabien Merz, Benno Zogg und Névine Schepers.

All CSS Analyses 2020

- > No.276: China and Nuclear Arms Control Névine Schepers
- No. 275: Trouble with Turkey in the Eastern Mediterranean Fabien Merz
- No. 274: Mercenaries in the Service of Authoritarian States Julia Friedrich, Niklas Masuhr
- No. 273: Internet Freedom in retreat Julian Kamasa
- No. 272: China, Multilateral Banking and Geopolitics Chris Humphrey, Linda Maduz
- No. 271: China and Russia
 Maneuver in the Middle East

- No. 270: Arctic Matters:
 Sino-Russian Dynamics
 Maria Shagina, Benno Zogg
- No. 269: Information Battleground: Vaccines Jakob Bund, Ann-Sophie Leonard
- No. 268: The WHO's Dilemma in Global Outbreak Response Jan Thiel
- Nr.267: Coronavirus: A
 Double-edged Sword for China
 Brian Carlson
- No. 266: Virus in the System: Russia and the Corona Crisis Jeronim Perović

- No. 265: Artificial Intelligence for Cybersecurity Matteo Bonfanti, Kevin Kohler
- > No. 264: Digital Technologies in Corona Crisis Management Sophie-Charlotte Fischer, Kevin Kohler, Andreas Wenger
- No. 263: The Western Balkans between the EU, NATO, Russia and China Henrik Larsen
- No. 262: The Swiss Candidacy for the UN Security Council Fabien Merz
- No. 261: Nuclear Non-Proliferation in a Deadlock Oliver Thränert

- No. 260: Integrating Al into Civil Protection
 Kevin Kohler, Benjamin Scharte
- No. 259: Ukraine: The Religious Dimension of the Conflict Cora Alder, Palwasha Kakar, Leslie Minney
- No. 258: The Colombian Trap: Another Partial Peace Enzo Nussio
- No. 257: Current Dynamics of Urban Military Operations Niklas Masuhr
- No. 256: Space Security: The Next Decade Michael Haas

CSS Policy Perspectives

In the CSS Policy Perspectives, CSS staff members analyze current security policy issues, sometimes in co-authorship with international guest authors. CSS Policy Perspectives are produced on an ad-hoc basis and translate the CSS's academic expertise into policy-oriented analyses and recommendations for action.

The publication targets an international audience and is therefore mostly written in English. Fourteen CSS Policy Perspectives were published in the 2020 reporting year:

- > Predictive Policing: Proceed, but with Care
- > China's Rise Can Unite NATO
- Europe's Fiery Future: Rethinking Wildfire Policy
- > US Evangelicals: From Prophecy to Policy
- > Arms Control: For and By Europe
- Das Krisenmanagement kann aus der Krise lernen
- > Keeping the Skies Open over Europe
- Corona-Aufarbeitung: Sind wir strategiefähig?
- An "Etroika" to Advance Europe's Policy on Libya
- > The Instrumentalization of Religion in Conflict
- > Securing Future 5G-Networks
- Obstacles Ahead: Preserving the JCPOA
- Policy Consulting in the Age of Corona
- > Neo-Containment: a Strategy toward Russia

CSS Policy Perspectives Newsletter A newsletter, which provides regular updates on the latest issues, can be subscribed to at www.css.ethz.ch/en/publications/css-policy-perspectives.html.

Russian Analytical Digest

The Russian Analytical Digest (RAD) analyzes events, trends and developments with regard to the political, economic, security and social situation in Russia. Each issue contains academic and policy-relevant articles by international authors, as well as thematic statistical information, graphs and opinion polls.

The publication is published in cooperation with the Research Center for East-

ern European Studies at the University of Bremen, the Institute for European, Russian and Eurasian Studies at George Washington University, the Center for Eastern European Studies (CEES) at the University of Zurich, and the German Society for Eastern European Studies (DGO).



- > No. 260: Arms Control
- > No. 259: Russian Military Strategy
- > No. 258: Media Capture
- > No. 257: Russia and Belarus
- > No. 256: Russia's Arctic Policy
- > No. 255: Countering Violent Extremism
- > No. 254: Social Issues
- > No. 253: US-Russian Relations
- > No. 252: Russian Orthodoxy
- > No. 251: Russia and the Covid-19 Pandemic
- > No. 250: **Putin**
- > No. 249: Need-based Social Policies
- > No. 248: Central Asia
- > No. 247: Eurasian Economic Union
- No. 246: Putin's Power Games
- > No. 245: Russian Youth

Caucasus Analytical Digest

The Caucasus Analytical Digest (CAD) is published as an Internet publication by the CRRC-Georgia / Research Center for Eastern European Studies at the University of Bremen, the CSS, the Center for Eastern European Studies (CEES) at the University of Zurich, and the German Society for Eastern European Studies (DGO). The CAD analyzes the political, economic, and social situation in the three South Caucasian states of Azerbaijan, Armenia, and Georgia in terms of the international and security dimensions of the region's development.



Caucasus Analytical Digest (CAD)

- > No. 117: Agriculture and Trade with Russia
- No. 116: Public Opinion In Georgia New Caucasus Barometer Results
- > No. 115: The COVID-19 Pandemic in the South Caucasus
- > No. 114: Formal and Informal Political Institutions
- > No. 113: Pension Reform

Strategic Trends 2020

The publication series Strategic Trends offers an annual analysis of important developments in world politics. The focus is on issues of international security. The volumes contain in-depth studies of selected key trends and are enriched with numerous graphics. The series is published in English.



China's rise is reflected in all four chapters of Strategic Trends 2020:

China, the U.S. and World Order

In the first article, Jack Thompson analyzes the domestic determinants of U.S.-China rivalry. According to Thompson, variations of nationalism have emerged in both the U.S. and China. The rule-based international order is thus endangered.

US-China Relations and the Specter of Great Power War

Michael Haas and Niklas Masuhr focus on the military dimension of the U.S.-China confrontation. They analyze the preparations of both sides for a possible armed conflict, which they no longer consider very unlikely.

China as a Stress Test for Europe's Coherence

Henrik Larsen and Linda Maduz examine the impact of the "new Silk Road" initiated by China on Europe. They argue that China has already gained considerable political influence on the old continent by exploiting European disunity.

On the Belt, on the Road: China's Pivot to Eurasia

In the concluding chapter, Benno Zogg looks at the consequences of the "new Silk Road" for Eurasia. The growing importance of China for politics and the economy in Central Asia will ultimately also have consequences for Europe.

Due to the Corona pandemic, the usual ETH workshop World Politics could unfortunately not take place in 2020. Instead, the individual chapters of Strategic Trends were presented in Webinars. These took place on the following dates: April 30; May 14; May 28; June 11; June 25. On June 12, the Strategic Trends were also presented online at the invitation of the Security Policy Division in the FDFA. Furthermore, a podcast on the Strategic Trends was created and published on the CSS website.



On May 12, the Neue Zürcher Zeitung published a double-page spread with the articles "China and America on a confrontation course – is the big war coming?" and "China uses every opportunity to strengthen its influence in Europe".

Studie Sicherheit 2020

Aussen-, Sicherheits- und Verteidigungspolitische Meinungsbildung im Trend



Author(s): Tibor Szvircsev Tresch, Andreas Wenger, Stefano De Rosa, Thomas Ferst, Robert Jacques Editor(s): Tibor Szvircsev Tresch, Andreas Wenger

The publication is published in German and includes summaries in German,

French, Italian and English. Online version

The annual study Security, which is published jointly by the Military Academy and the CSS, serves to identify long-term trends and tendencies in the formation of opinion on foreign, security and defense policy in Switzerland. They are based on representative surveys conducted every year and include the repetition of core questions on foreign, security and defense policy as well as surveys on selected in-depth topics.

The data of the study were collected between January 6 and 24, 2020. Thus, possible effects of the COVID-19 pandemic outbreak in Switzerland and Europe on the current data can be excluded.

In general, the Swiss feel very safe in January 2020. The Swiss people's low willingness to open up continues in 2020. Establishing closer ties with or joining institutions such as the EU or NATO are only popular with a small minority. Switzerland's good offices are supported by a large majority.

CSS Dialogue Platforms

ETH Workshop:

"Dealing with Foreign Fighters and Their Families after the Loss of ISIS Territory."

On January 31, 2020, the CSS hosted an ETH Workshop on Swiss Security Policy. After a keynote speech, three panels discussed how well prepared states are for the return of jihadist travelers; security, legal, and humanitarian issues related to the detention of foreign fighters and their families in northeastern Syria and Iraq after the recapture of ISIS areas, and the challenges related to the repatriation of foreign fighters' children to their countries of origin.

ETH Workshop: "Artificial Intelligence and Cybersecurity."

On December 11, 2020, the CSS hosted a virtual workshop. Participants held discussions in three blocks, each with three short presentations. The first block provided an overview and focused on the political-strategic implications of the increased use of AI in cybersecurity. The second block focused more narrowly on cyber-assisted influence operations and how AI could be used in such operations. The third block addressed applications of AI to conduct or defend against operational-level cyberattacks, as well as the vulnerability of AI systems.

ETH Evening Talk: "Challenges to Democracy: Do the EU and NATO Have the Right Answers?"

The EU and NATO must face the challenges posed by uneven economic development, migration, and influence operations emanating from Russia.

An important part of the answer lies in improved cooperation between the two institutions. Switzerland can also benefit from this, at least indirectly. This was the quintessence of the ETH Evening Talk on Thursday, January 16, 2020.

CSS Political ConsultancySelected Studies

In its advisory role, the CSS supports various public sector actors working in the field of security policy.



Oliver Thränert, Michael Haas, Annabelle Vuille, Michèle Gemünden, Henrik Larsen, Brian Carlson, Niklas Masuhr, Julian Kamasa, Fabien Merz, Lisa Watanabe, Névine Schepers

Sicherheitspolitische Trends 2021 – 2029: Die Post-COVID-19 Welt

Center for Security Studies (CSS), 2020

Each year, CSS analyzes global political developments and their potential consequences for Switzerland over the next eight years. This year, we focus on the global impact of the Corona pandemic; the US and NATO after Trump; the role of drones and robotics in the armed forces; Russia and China; security trends in the Mediterranean and Gulf regions; and how vaccines could help overcome the pandemic.

Jasper Frei

Israel's National Cybersecurity and Cyberdefense Posture

Center for Security Studies (CSS), 2020

This CSS Cyberdefense Report by Jasper Frei provides a brief overview of Israel's national cybersecurity and cyberdefense policy. It outlines key events for Israel's threat perception and sets out the evolution and changes in Israeli cybersecurity and cyberdefense policy. ■



Marie Baezner

Study on the Use of Reserve Forces in Military Cybersecurity

Center for Security Studies (CSS), 2020

This CSS Cyberdefense Project report addresses the structure, organization, development, and challenges of reserve forces in military cybersecurity in Estonia, Finland, France, Israel, Switzerland, and the United States.



Kevin Kohler, Andrin Hauri, Florian Roth, Tim Prior, Benjamin Scharte

Monitoring and Reporting under the Sendai Framework for Disaster Risk Reduction

Center for Security Studies (CSS), 2020

This Risk and Resilience Report by Kevin Kohler, Andrin Hauri, Florian Roth, Tim Prior, and Benjamin Scharte discusses the national coordination of the reporting under the Sendai Framework for Disaster Risk Reduction 2015 – 2030 (SFDRR). On the basis of six case studies (Austria, France, New Zealand, Germany, Sweden, and Switzerland), it is noted that there are considerable institutional differences in the organization of reporting between ministries. ■

Linda Maduz, Tim Prior, Florian Roth, Marco Käser

Individual Disaster Preparedness: Explaining Disaster-related Information Seeking and Preparedness Behavior in Switzerland

Center for Security Studies (CSS), 2019

In this CSS Risk and Resilience Report, Marco Käser, Linda Maduz, Tim Prior and Florian Roth investigate what motivates German- and French-speaking Swiss to inform themselves about risks and prepare for hazards, and how the population's ability to transform risk knowledge into concrete action could be improved.



Felix Colchester, Laura Henao Izquierdo, Philipp Lustenberger

Implementing Peace Agreements: Supporting the Transition from the Negotiation Table to Reality

Mediation Support Network, ETH Zurich Center for Security Studies (CSS), 2020

This publication aims to contribute to how mediation support actors and peacebuilders can contribute to a qualitative implementation of peace agreements. It is based on discussions that took place during the 2018 Mediation Support Network (MSN) meetings in London and 2019 in Bogota. ■

Selected Hearings, Workshops and Courses

Introductory seminar for newly elected federal parliamentarians

From January 8–9, 2020, a two-day introductory seminar for newly elected parliamentarians, organized by ETH Zurich, took place in Gerzensee. Prof. Andreas Wenger gave a presentation on the topic of "International Security: Swiss Challenges".

Parliamentary Hearings

On May 13, 2020, Fabien Merz briefed the Security Policy Commission of the National Council (SiK-NR) and members of the directorate of Fedpol, FDJP during the hearing on the federal law "Police Measures to Combat Terrorism".

On October 26, 2020, Oliver Thränert gave a presentation on "International Normal Developments" and Michael Haas spoke on "Autonomous Weapon Systems: State of the Art and Prospects" for the SIK-NR.

Course for higher cadres of the Swiss Security Association (LG SVS I / 2020)

On February 25, 2020, Prof. Andreas Wenger gave the opening lecture with subsequent discussion at the SVS course for senior managers in Bern on the topic "Switzerland's Security Policy: In a Historical Perspective".

Worldview Learning Process

In January 2020, the Culture and Religion in Mediation Program (CARIM), a joint program of the CSS and the Swiss FDFA, conducted a learning process entitled "Mediating Conflicts between Groups with Different Worldviews: Approaches and Methods" together with the University of British Columbia (Canada) and Seton Hall University (USA). The process aims to learn from fifteen peace practitioners who are engaged in contexts where worldview differences shape disputes, polarize societies in ways that block peace processes, or create challenges and opportunities for agreeing on a process to end armed conflict.

EU Religion and Mediation (RMC)

In September 2020, the CARIM program organized the first religion and mediation course for staff of the European External Action Service (EEAS) and the Foreign Policy Instruments (FPI) of the EU as well as for participants from EU member states. The virtual course took place over two days with 30 participants. The training provided an introduction to concepts and tools for analyzing the role of religion in conflicts and approaches to mediating and transforming conflicts with religious dimensions.

Environment and Peacemaking

In October 2020, the CSS contributed to a three-day online workshop organized by the European External Action Service of the EU on environmental peacemaking. The workshop explored the linkages between different levels (local to global), different environmental dimensions (renewable and non-renewable), and the possible use of tools in mediation (e.g., analysis, modeling, backbone agreements, complex regeneration).

Dialogue Workshops in Zimbabwe

Together with the Zimbabwe Institute and the Swiss Federal Department of Foreign Affairs (FDFA), CSS contributed to a series of training workshops on dialogue for the three main political parties in Zimbabwe in November 2020. The workshops explored methods of dialogue, as well as its possible objectives and structures. The CSS also contributed to a training for women parliamentarians on negotiation and mediation, organized by the Institute for Peace, Leadership and Governance (IPLG) of the African

University, Zimbabwe. The CSS contribution was made within the framework of the Mediation Support Project (MSP), a joint initiative of CSS and swisspeace, funded by the Swiss FDFA.



Training in negotiation and mediation for women parliamentarians from Zimbabwe. Photo: © 2020 IPLG Africa University





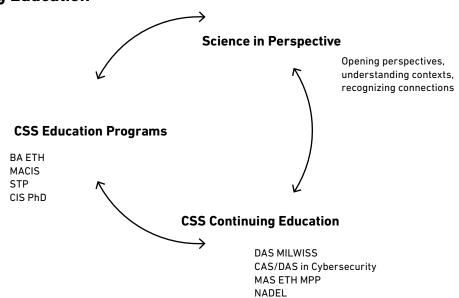
CSS Education

The CSS education courses are a central part of the study programs of the Department of Humanities, Social and Political Sciences (D-GESS) of ETH Zurich and the Center for Comparative and International Studies (CIS) of ETH Zurich and the University of Zurich.

Our courses cover all aspects of security policy within the framework of ETH teaching, from theory to concepts and history to specific topics. The teaching ranges from introductory lectures with tutorials to research-oriented seminars.

Prof. Andreas Wenger is Director of Studies for the Bachelor in Political Science and the Diploma of Advanced Studies in Military Science and also serves as Program Director for the Master of Advanced Studies ETH Mediation in Peace Processes (MAS ETH MPP).

CSS Education: Education Programs and Continuing Education



CSS Education Programs

BA ETH in Political Science

The six-semester bachelor's degree program BA Governmental Sciences is aimed at prospective Swiss professional officers. It comprises a curriculum of humanities, social and political science subjects, which are supplemented with military science courses. The program is a collaboration between the Department of Humanities, Social and Political Sciences (D-GESS) at ETH Zurich and the Military Academy (MILAK) at ETH Zurich. The students are at the same time graduates of the Bachelor Course (BLG) at MILAK.

The following courses were offered by CSS in 2020:

Lectures:

- > Schweizer Aussen- und Sicherheitspolitik seit 1945 (Spring Semester 2020)
- Weltpolitik seit 1945: Geschichte der Internationalen Beziehungen (Fall semester 2020)
- Die Rolle von Technologie in nationaler und internationaler Sicherheitspolitik (Fall semester 2020)
- > Einführung in die Cybersicherheitspolitik (Fall semester 2020)

Seminars:

- Seminar I: Eine neue multipolare Weltordnung Akteure und Interessen (Spring Semester 2020)
- Seminar II: Eine neue multipolare Weltordnung Akteure und Interessen (Fall semester 2020)

Colloquium:

> Bachelor colloquium (Fall semester 2020)

Master of Arts in Comparative and International Studies (MACIS)

MACIS is a four-semester research-oriented graduate program of the Center for Comparative and International Studies (CIS). The MACIS curriculum combines comparative and international political science to teach students about the complex interrelationships between national, international, and transnational political processes. Particular emphasis is placed on methods, theories and research-oriented work. In this respect, the MACIS is also intended as preparation for the doctoral level. Of the national and international applicants, around 20 students can be accepted each year.

The following courses were offered by CSS in 2020:

Seminars:

- > Ending Violence (Spring Semester 2020)
- > Political Violence (Fall semester 2020)
- Politics of Cyber Security (Fall semester 2020)

Master of Science in Science, Technology and Policy (STP)

The Master's Program in Science, Technology and Policy has been offered since September 2015. The program provides students of science and technology with the tools to analyze complex societal issues at the interface of science, technology and policy.

The following courses were offered by CSS in 2020:

Seminar

Science Communication (Spring Semester 2020)

Science in Perspective / Wissenschaft im Kontext

With the course program Science in Perspective / Wissenschaft im Kontext, the D-GESS enables students at ETH Zurich to gain new perspectives on the content of their core subjects. SiP thus enriches studies at ETH Zurich and contributes to the university's unique profile. Various CSS staff members teach in this course program. In the lectures, political contexts are conveyed without which science and technology would be inconceivable. The aim is to empower students to recognize and critically question the connections among scientific knowledge, technical innovations, cultural contexts, individuals and societies. In this way, they expand their reflective skills and are prepared for societal and global developments of the future.

The following courses were offered by CSS in 2020:

Lectures:

- Schweizer Aussen- und Sicherheitspolitik seit 1945 (Spring Semester 2020)
- Weltpolitik seit 1945: Geschichte der Internationalen Beziehungen (Fall semester 2020)
- Einführung in die Cybersicherheitspolitik (Fall semester 2020)
- Die Rolle von Technologie in nationaler und internationaler Sicherheitspolitik (Fall semester 2020)

One Study, Two Paths: The Dual-Use Dilemma in the Life Sciences

In the Fall Semester 2020, Michèle Gemünden and Oliver Thränert conducted the seminar "One Study, Two Paths: The Dual-Use Dilemma in the Life Sciences" as a live online course as part of the course program "Science in Perspective".

In the seminar students were encouraged to take a close look at dual-use issues in the life sciences through interactive group work, individual case studies and the drafting of a code of conduct. While developments in this field are of great benefit to society, they also carry a certain risk in many cases, as they can be misused for the production of biological or chemical warfare agents. In this context, the students dealt with the Chemical Weapons Convention (CWC) and the Biological Weapons Convention (BWC), which prohibit the development, production, use, stockpiling and distribution of such weapons. The analysis of their own research projects in the form of case studies allowed the students to make a connection to their own activities.

The project team is also encouraged to establish a dialogue with the researchers and to reflect on their projects with regard to the potential for abuse as well as on their own role as researchers.

CIS Doctoral Program

The Center for Comparative and International Studies (CIS) offers different ways to complete a doctoral program. The 12 ECTS doctorates of the Department of Humanities, Social and State Sciences (D-GESS) at ETH Zurich specialize in one of the five core research topics – Democracy, Market and Politics, Political Violence, Sustainable Development, and Security. It is possible to pursue a subject-specific or cross-disciplinary doctorate. The subject-specific doctorate is intended for candidates who have completed a master's degree in a

subject area of a D-GESS professorship. (e.g. law, history, philosophy, political science, sociology, economics). The Master's degree should have a similar focus as the doctorate. The cross-disciplinary D-GESS doctorate is recommended for candidates who have obtained a Master of Science (MSc) in natural or technical sciences from ETH Zurich or another university. The D-GESS doctorate requires cooperation with another ETH department – e.g. in the form of co-referees from the natural or technical sciences of ETH Zurich.

CSS Continuing Education

Master of Advanced Studies ETH Mediation in Peace Processes (MAS ETH MPP)

The CSS supports the Master of Advanced Studies ETH Mediation in Peace Processes. This program provides participants with the necessary knowledge, skills and techniques to mediate in violent political conflicts. The MAS ETH MPP is currently the only MAS program for mediation in peace processes.

The MAS ETH MPP is based on a close partnership between ETH Zurich, the Swiss Federal Department of Foreign Affairs (FDFA) and the foreign ministries of Germany, Finland and Sweden. The program is also supported by international organizations such as the UN, the EU and the Organization for Security and Cooperation in Europe (OSCE). In 2019, the CSS successfully completed the first program cycle and began the second cycle.

Two modules were conducted in 2020. Module 2 "Mediation Methods: Negotiation / Mediation Theories and Skills" in March provided students with the core concepts and techniques of negotiation and mediation. In November, Module 3, "Mediation Content: Substance of Peace Processes and Peace Agreements," highlighted five core topics such as security, justice, power-sharing, economics, and the environment from the perspective of peace mediation.

Due to the ongoing global pandemic, the program felt compelled to move the teaching of Module 3 to the virtual classroom. To do so, the program exchanged ideas with various partners in advance, researched best practices of online teaching, and developed appropriate programs, tools, and exercises. These efforts enabled a positive learning experience despite the challenges associated with distance learning.



MAS students performing an exercise during a program module. Photo: © E. Isoaho

In addition, the MAS ETH MPP program launched the knowledge community "Mediation Exchanges", which offers MAS ETH MPP alumni, current students and strategic partners a platform for networking and topic exchange. Two "Mediation Exchanges" took place in July and December, respectively:

- 1/2020: "The Peace Process in Colombia" with Juanita Millan, member of the UN Standby Team of Senior Mediation Advisers
- 2/2020: "Ripeness Theory as a Tool for Peace Mediation in Today's World" with Prof. Laurie Nathan, Kroc Institute for International Peace Studies

The program also held several virtual meetings with representatives of its Strategic Advisory Board (UN, Switzerland, Germany, Sweden, Finland) during 2020 to initiate the inception process for the next program cycle (2021 – 2023) and to plan for a formal Advisory Board meeting in 2021.

Modules:

- Module 2: Mediation Methods Negotiation / Mediation Theories and Skills (March 9 – 20, 2020)
- Module 3: Mediation Content Substance of Peace Processes and Peace Agreements (November 2 – 20, 2020)

DAS ETH in Military Science

The two-semester continuing education program Diploma of Advanced Studies ETH in Military Science (DAS MILWISS) is aimed at prospective professional officers who already have a university degree or equivalent qualification. Admitted are Swiss, but also representatives of friendly foreign armies who were simultaneously accepted into the diploma course of the Military Academy (MILAK) at the ETH Zurich (DLG).

The program DAS MILWISS is accredited at the ETH School for Continuing Education and comprises selected military science subjects supplemented by security policy. It is conducted in cooperation between the Department of Humanities, Social and Political Sciences (D-GESS) of ETH Zurich and MILAK.

On February 21, 2020, 18 graduates of the Bachelor's degree program of the Military Academy (MILAK) at ETH Zurich 2016–2020 as well as one participant of the class 2015–2019 received the federal diploma as professional officer of the Swiss Armed Forces on the occasion of the diploma ceremony in the ETH Auditorium Maximum. A participant in the MILAK diploma course from the 2014–2016 program also received his diploma.

CAS / DAS ETH in Cyber Security

This program takes a multidisciplinary approach that examines both technical and strategic-political aspects of information and cybersecurity. In addition to an introduction to the subject and a seminar on a current cybersecurity topic, lecturers from the Department D-GESS offer a course on political, strategic, governmental and military aspects of cybersecurity. Unfortunately, no course could take place in 2020 due to the coronavirus pandemic.

NADEL Center for Development and Cooperation

The NADEL Center for Development and Cooperation combines empirical social science research with an interdisciplinary teaching program and various transfer programs for practice and thus pursues the goal of contributing to effective and sustainable development cooperation.

The CSS cooperates with the NADEL in two courses, which are held every two years:

- Mediation Process Design Supporting Dialog and Negotiation
- > Fragile Contexts Politics, Security and Development

Both courses will be offered again in 2021.

Participation of the CSS at:

 Consensus Oriented Ways of Dealing with Conflict: Dialogue, Negotiation, Mediation (October 20, 2020 – input from Simon Mason)

About the Center for Security Studies (CSS)

The CSS is committed to researching Swiss and international security issues. Its activities are structured into the pillars of research, teaching, and think tank. The CSS was founded in 1986 by Prof. em. Dr. Kurt R. Spillmann and has developed into a national center of competence for security policy with an international impact. Its work is independent, of practical relevance, and based on solid academic inquiry. The CSS combines research with policy consultancy to bridge the gap between academia and practice. It trains highly qualified young talents and serves as a point of contact and source of information for the interested public.

Management, employees

Since 2002, the CSS has been headed by Prof. Dr. Andreas Wenger. He is professor for Swiss and International Security Policy at ETH Zurich and program director of the MAS ETH Mediation in Peace Processes. The CSS employs a total of about 60 staff members.

Partner network

The CSS has a large network of national and international partners from academia, administration, policy, the media, and the private sector. ■

CSS Internship

Each year, the CSS offers six-week internships for four students from master's or bachelor's programs who are in their final year of study. Due to the coronavirus pandemic, the internships in 2020 could only be carried out to a limited extent.

Strategic partnership

Since 2004, the CSS has been jointly supported by ETH Zurich and the Federal Department of Defence, Civil Protection and Sport (DDPS). Another partnership with the Federal Department of Foreign Affairs (FDFA) was established in 2012. Advisory boards comprising representatives of the two sponsoring bodies support the CSS Management in developing its strategic orientation. The CSS is part of the Department of Humanities, Social and Political Sciences (D-GESS) at ETH Zurich. Together with the chairs in Political Science at ETH Zurich and the University of Zurich, it has formed the Center for Comparative and International Studies (CIS) since 1997. ■

Alumni

Former employees of the CSS are organized in the Alumni Section CSS of the ETH Alumni. In addition to various benefits, they regularly receive information from the ETH Alumni Association and, in particular, invitations to selected CSS events. Unfortunately, last year's annual meeting had to be cancelled due to the coronavirus pandemic.

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