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Un-Repeal: Reviving the Arms Control Impact Statements

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UN-REPEAL: REVIVING THE ARMS CONTROL IMPACT STATEMENTS

*David A. Koplow**

From the late 1970s into the early 1990s, U.S. federal law mandated the executive branch to prepare annual analytical documents known as Arms Control Impact Statements (ACIS). These instruments – obviously patterned after the Environmental Impact Statements (EIS), which had been inaugurated only a few years previously – were intended to prod the national security community to undertake more rigorous, multi-dimensional study of major weapons programs, and to provide Congress and the American public with enhanced, timely information about key arms procurement decisions.

However, unlike the EIS process – which rapidly became institutionalized, and which has proliferated to multiple tiers of government and around the world over the past fifty years – the ACIS process was a conspicuous failure. It was widely regarded as a meaningless exercise, consuming immense bureaucratic resources and hardly ever changing any outcomes – a colossal waste of time. The statute that created the ACIS operation was amended to abolish the entire program after only a decade and half of fitful operation.

This Article undertakes to compare the starkly different case histories of the ACIS and EIS programs, with an eye to revival of the former in an appropriately modified form. It analyzes the goals of the legislation and the key features accounting for success and failure, and makes recommendations for a modern revival of ACIS that are based upon lessons learned in other contexts. The proposal seeks to underscore the concept that arms control is a key element in sound national security policy, to promote more systematic, wide-ranging analysis in support of key national decision-making, and to empower the legislative branch, as well as the public, to participate in policy debates in a more informed, timely manner.

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INTRODUCTION

From the late 1970s into the early 1990s, U.S. federal law mandated the executive branch to prepare annual analytical documents known as Arms Control Impact Statements (ACIS). These instruments – obviously patterned after the Environmental Impact Statements (EIS), which had been inaugurated via other legislation only a few years previously – were intended to prod the national security community to undertake more rigorous, multi-dimensional study of major pending weapons programs, and to provide Congress and the American public with enhanced, timely information about key arms procurement decisions.

However, unlike the EIS process – which rapidly became institutionalized, and which has proliferated to multiple tiers of government and around the world over the past fifty years – the ACIS process was a conspicuous failure. It was widely regarded as a meaningless exercise, generating intense interagency wrangling, consuming immense bureaucratic resources, and hardly ever changing any outcomes – a colossal waste of time. The statute that created the ACIS operation was amended to abolish the entire program after only a decade and half of fitful operation.

What accounts for the stark differences between the fates of these two facially similar impact assessment programs? Why has the environmental analysis become a standard, well-accepted part of the U.S. legal and cultural landscape, despite the inherent costs and delays it imposes, while the comparable process for organized scrutiny of weapons decisions foundered? What factors explain the success of the EIS as a fixture in American jurisprudence and the corresponding collapse of the ACIS as an American artifact? In particular, is there scope for a revival of the program of mandatory systematic governmental study and public explanation of major weapons programs, borrowing and suitably adapting some of the lessons from the previous failure, as well as from the modern world of environmental law?

This Article undertakes to compare the case histories of ACIS and EIS, and then sets out how the former might be reinstated in a modified form. First, Section I presents the saga of the late, largely unlamented arms control impact statute, which was in force from 1976 through 1993, generating eighteen iterations of uneven studies submitted to Congress. This section identifies the original goals of the legislation's key sponsors, explains what the law required, and describes how the executive branch half-heartedly responded. It analyzes the limited efficacy of the annual documents; the ACIS process generated plenty of interagency controversy and copious bureaucratic churning, but little overall programmatic effect, because the resulting instruments were too often brief, conclusory, and repetitive. Finally, this section describes how the statutory obligation to prepare ACIS was repealed, tearing down what had simply become a Potemkin Village of boilerplate description, instead of deep analysis.

Section II turns to the case study of environmental law, presenting the 1969 National Environmental Policy Act (NEPA)¹ and its progeny, which established the EIS process. Importantly, environmental assessment is a “procedural” obligation in that it requires punctilious, all-azimuth analysis of a proposed major federal action, its environmental consequences, and its alternatives. But NEPA does not by itself establish substantive standards or restrictions on emissions, land uses, hazardous waste management, or the preservation of species. Notably, the NEPA framework applies even to national security-related programs, and an accompanying executive order extends comparable coverage to certain U.S.-based actions that have environmental effects abroad. Importantly, NEPA has triggered an avalanche of litigation, especially by generating resistance from sponsors of programs that were hindered or made more expensive. Nevertheless, the process of detailed, laborious environmental evaluation has been woven into U.S. popular and business culture, as a grudgingly accepted, but now irresistible burden.

For further comparison, Section III briefly considers some other types of “impact assessment” programs that currently exist in U.S. and international law and practice (even if they are not always labeled as such). Comparing the trajectories of these diverse copycat arrangements can help shed light on the prospects for an ACIS renaissance.

Section IV presents the heart of the matter: a proposal for a modern version of the ACIS mechanism, with a few new twists intended to incorporate the lessons of environmental and other practice areas to the special problem of national security. This section advocates for the advantages of rigorous analysis and public disclosure of new and evolving weapons and associated programs, and describes the critical social, political, military, and economic values that such a revived process would promote. This section is organized around a series of policy and strategy questions that would have to be resolved in the construction of a new program for this highly structured arms control analysis. These questions include asking what sorts of national security activities should be subject to these investigations, when in their development cycles these analyses should be conducted, who would participate in the drafting and revision of the statements, and whether judicial review should be allowed to test in court the adequacy of the proffered documentation.

Section V provides a glimpse of the possible practical application of the Article’s recommendations, projecting how a newly revised ACIS obligation might function with respect to current and emerging issues. More specifically, this section will examine new proposals for the development and fielding of lethal autonomous weapon systems, anti-satellite weapons, or anti-personnel land mines. It also describes the hypothetical operation of the new ACIS proposal for some conspicuous national security programs that do not directly involve U.S. weapons procurements. These include a new nuclear agreement with Iran, the adoption of advanced cyber

1. National Environmental Policy Act of 1969, Pub. L. No. 91-190, 83 Stat. 852 (1970) (codified as amended at 42 U.S.C. §§ 4321-4370m).

active defense maneuvers, and recent diplomacy dealing with the international trade in conventional arms.

Finally, the conclusion offers some closing thoughts, including the obvious point that this topic is more complicated than simply seeking to “apply the NEPA process to arms control.” The two sets of circumstances are so different that the goals, procedures, and tactics that inspire success in one venue will not all directly convey into a distinct universe. But even if there are no automatic solutions, there is much to learn from environmental law that can undergird the reestablishment of a viable and lasting procedure for meaningful arms control impact analysis.

I. THE ARMS CONTROL IMPACT STATEMENTS

In 1975, Congress expanded the 1961 Arms Control and Disarmament Act² – which had earlier established the U.S. Arms Control and Disarmament Agency (ACDA)³ – by grafting on a new section 36, to institute a novel mechanism for enhanced analysis of major new weapons programs.⁴ Under this innovative provision, the executive branch, led by ACDA, was mandated to prepare “a complete statement analyzing the impact of [proposed major weapons programs] on arms control and disarmament policy and negotiations.”⁵

2. Pub. L. No. 87-297, 75 Stat. 631 (1961) (codified at 22 U.S.C. §§ 2551- 2591).

3. ACDA was a small, specially focused agency, housed inside the Department of State’s headquarters building, and while generally closely aligned with State, still legally independent. It was statutorily authorized to serve as the government’s lead agency for developing and executing policy regarding arms control, disarmament, and non-proliferation; for conducting international negotiations in those fields; and for implementing procedures for verification of compliance with the resulting international agreements. *Id.* § 2; see DUNCAN L. CLARKE, *POLITICS OF ARMS CONTROL: THE ROLE AND EFFECTIVENESS OF THE U.S. ARMS CONTROL AND DISARMAMENT AGENCY* (1979); Arms Control and Disarmament Agency, hearings before Subcomm. on Nat’l Sec. Policy and Sci. Devs. of the H. Comm. on Foreign Affs., 93d Cong., 2d sess. 183-231 (1974) [hereinafter 1974 Hearings] (reprinting staff review of arms control legislation and organization, assessing the origins and then-current status of ACDA and the extent to which it had achieved the stature and pursued the goals that Congress originally intended).

4. Foreign Relations Authorization Act, Fiscal Year 1976, Pub. L. No. 94-141, § 146, 89 Stat. 756, 758 (1975) (codified at 22 U.S.C. § 2576 (1982)) [hereinafter sec. 36]. A nearly contemporaneous companion for sec. 36 was created by the 1976 Arms Export Control Act, which established a requirement for the executive branch to submit to Congress annual and special arms control impact statements for contemplated international sales of conventional weapons. An interagency process was established to prepare these documents, somewhat similar to that described in this Article. See International Security Assistance and Arms Export Control Act of 1976, Pub. L. No. 94-329, 90 Stat. 729, §§ 25(a)(4), 36(b)(1)(D) (1976); Exec. Order No. 11,958, 3 C.F.R. 79 (1977), reprinted in 22 U.S.C. § 2751; Clarke, *supra* note 3, at 89-94.

5. Sec. 36, *supra* note 4, § (b)(2); Clarke, *supra* note 3, at 190-205; see Betty Goetz Lall, *Arms Control Impact Statements: A New Approach to Slowing the Arms Race?*, 6 ARMS CONTROL TODAY 1, 3-4 (July/Aug. 1976) (suggesting that the statutory requirement to focus on a weapon’s consistency with “policy” could be problematic, because if a particular program is inconsistent with a national policy that currently stands in favor of pursuing arms control, the political result might be a decision to alter the policy, rather than to abandon the weapon).

Congressional sponsors, led by Senator Hubert H. Humphrey (D-Minn.) and Representative Clement J. Zablocki (D-Wisc.),⁶ anticipated that these Arms Control Impact Statements would promote three important national security objectives. The primary legislative purpose was to ensure that the arms control perspective would be fully integrated into the government's annual decision-making about significant new weapons research, development, and deployment. The second goal was to enhance congressional and public access to crucial current information and analysis about these important defense developments and their policy ramifications. Third, sponsors wanted to upgrade the role of ACDA within the executive branch, strengthening that small agency in the internecine debates with its much larger bureaucratic rivals.⁷ Despite considerable resistance from the executive branch (expressed by the Departments of Defense and State, as well as by the ACDA leadership), the new section 36 rapidly worked its way through the congressional process in the fall of 1975, and was heralded as a major accomplishment.⁸

6. Philip M. Boffey, *Arms Control: Impact Statements Called a "Farce" and a "Mockery,"* 194 SCIENCE 36 (1976) (describing the goals that Sen. Humphrey, Rep. Zablocki, and other congressional leaders had for the ACIS program, and its inspiration in the environmental impact statement process).

7. GENERAL ACCOUNTING OFF., ID-77-41, STATEMENTS THAT ANALYZE EFFECTS OF PROPOSED PROGRAMS ON ARMS CONTROL NEED IMPROVEMENT 18 (1977) [hereinafter GAO 1977]; Nancy-Ann E. Min, *Toward More Intelligent National Security Policy Making: The Case for Reform of Arms Control Impact Statements*, 54 GEO. WASH. L. REV. 174 (1985); Clarke, *supra* note 3, at 192 (identifying four goals); 1974 Hearings, *supra* note 3, at v (House Committee Chair Rep. Clement J. Zablocki expresses concern that the initial effectiveness of ACDA has been diminished and the agency has gone into eclipse); AMY WOOLF & JAMES D. WERNER, CONG. RSCH. SERV., R45306, EVALUATION OF FISCAL YEAR 1979 ARMS CONTROL IMPACT STATEMENTS: TOWARD MORE INFORMED CONGRESSIONAL PARTICIPATION IN NATIONAL SECURITY POLICYMAKING, report for the Subcomm. on Int'l Sec. and Sci. Affs. of the H. Comm. on Int'l Rels., 95th Cong., 2d sess. 12 (1979) [hereinafter CRS 1979 Analysis] (discussing ACIS legislation in the context of a wide range of legislation adopted in the mid-1970s to give Congress a stronger voice in national affairs); Arms Control Implications of Current Nat'l Def. Programs, hearings before Subcomm. on Arms Control, Oceans, Int'l Operations, and Env't of S. Foreign Rels. Comm., 96th Cong., 1st sess. 73 (1979) [hereinafter 1979 Hearings] (statement of Paul Walker that one purpose of ACIS was to transform ACDA from a "David" into a "Goliath"); Philip M. Boffey, *Arms Control Agency: New Law Seeks to End Its Period of "Eclipse,"* 190 SCIENCE 1275 (1975); Robert C. Gray, *The Coordination of Arms Control Policy and the Weapons Acquisition Process: The Case of Arms Control Impact Statements*, 2 ARMS CONTROL 218, 218-20 (1981); *see also* Lall, *supra* note 5, at 1 (arguing that "the people responsible for arms control and disarmament policy and negotiations often have not had up-to-date information about new weapons systems" and the ACIS requirement could help ensure that relevant information was available in a timely fashion); JAMES E. GOODBY, HOOVER INST., THE US ARMS CONTROL AND DISARMAMENT AGENCY IN 1961-63: A STUDY IN GOVERNANCE (2017), https://www.hoover.org/sites/default/files/research/docs/goodby_the_us_arms_control.pdf (discussing early history of ACDA).

8. Clarke, *supra* note 3, at 190-93; Min, *supra* note 7, at 179-85; *The Arms Control Impact Statement Process*, ARMS CONTROL TODAY, July/August 1976, p. 4 (discussing the legislative origins of sec. 36 and noting that most executive branch agencies had recommended to President Gerald Ford that he veto the bill); 1974 Hearings, *supra* note 3, at 39-40 (presenting early draft of the ACIS statutory language), 74-75 (discussing earlier Harrington Amendment concept for what became the ACIS legislation), 102 (comparing the idea of ACIS to EIS), 155 (ACDA director Fred C. Ikle opposes the idea of ACIS); Boffey 1975, *supra* note 7 (quoting former deputy direct of ACDA as calling the ACIS requirement "the most

Under this legislation, the new ACIS requirement would apply to:

- a) any program for research, development, testing, deployment, or modernization of U.S. nuclear weapons;
- b) any comparable program dealing with non-nuclear weapons, where the total program cost was estimated to exceed \$250 million or where the annual costs were expected to exceed \$50 million; and
- c) any other program that the Director of ACDA “believes may have a significant impact on arms control and disarmament policy or negotiations.”⁹

important legislative change in the structure of arms control matters since the passage of [the original arms control legislation] itself”).

9. Sec. 36, *supra* note 4, § (a). The full text of sec. 36 reads:

ARMS CONTROL IMPACT INFORMATION AND ANALYSIS

Sec. 36. (a) In order to assist the Director in the performance of his duties with respect to arms control and disarmament policy and negotiations, any Government agency preparing any legislative or budgetary proposal for-

(1) any program of research, development, testing, engineering, construction, deployment, or modernization with respect to nuclear armaments, nuclear implements of war, military facilities or military vehicles designed or intended primarily for the delivery of nuclear weapons.

(2) any program of research, development, testing, engineering, construction, deployment, or modernization with respect to armaments, ammunition, implements of war, or military facilities, having-

(A) an estimated total program cost in excess of \$250,000,000, or (B) an estimated annual program cost in excess of \$50,000,00, or

(3) any other program involving weapons systems or technology which such Government agency or the Director believes may have a significant impact on arms control and disarmament policy or negotiations, shall, on a continuing basis, provide the Director with full and timely access to detailed information, in accordance with the procedures established pursuant to section 35 of this Act, with respect to the nature, scope, and purpose of such proposal.

(b) (1) The Director, as he deems appropriate, shall assess and analyze each program described in subsection (a) with respect to its impact on arms control and disarmament policy and negotiations, and shall advise and make recommendations, on the basis of such assessment and analysis, to the National Security Council, the Office of Management and Budget, and the Government agency proposing such program.

(2) Any request to the Congress for authorization or appropriations for-

(A) any program described in subsection (a)(1) or (2), or (B) any program described in subsection (a) (3) and found by the National Security Council, on the basis of the advice and recommendations received from the Director, to have a significant impact on arms control and disarmament policy or negotiations, shall include a complete statement analyzing the impact of such program on arms control and disarmament policy and negotiations.

A. Early ACIS Practice

The first ACIS package, covering fiscal year 1977, was delivered to Congress in August 1976.¹⁰ Unfortunately, this scanty inaugural submission established what was to become an enduring precedent, as the ACISs “were judged to be too few in number, too sparse in content, and too late to be of any use in congressional deliberations over the funding of major defense programs.”¹¹ Of the estimated seventy programs that would be eligible for coverage in an ACIS, only sixteen were studied and analyzed. And most of those statements were only two paragraphs long, entirely superficial, and dealing only with the positive aspects of the

(3) Upon the request of the Committee on Armed Services of the Senate or the House of Representatives, the Committee on Appropriations of the Senate or the House of Representatives, the Committee on Foreign Relations of the Senate, or the Committee on International Relations of the House of Representatives or the Joint Committee on Atomic Energy, the Director shall, after informing the Secretary of State, advise such committee on the arms control and disarmament implications of any program with respect to which a statement has been submitted to the Congress pursuant to paragraph (2).

(c) No court shall have any jurisdiction under any law to compel the performance of any requirement of this section or to review the adequacy of the performance of any such requirement on the part of any Government agency (including the Agency and the Director).

Sec. 36, *supra* note 4; *see also* 1974 Hearings, *supra* note 3, at 166 (statement by Arms Control Association critiquing the idea that the fundamental trigger for ACIS should be the cost of a program, rather than other factors that might raise significant arms control implications and suggesting that activities other than Defense or ERDA weapons programs should be the subject of ACIS, such as arms sales or CIA activity).

10. 122 Cong. Rec. 30,975-76 (1976) (reprinting the first unclassified eleven ACIS analyses of Department of Defense programs).

11. GAO 1977, *supra* note 7, at 3; Boffey 1976, *supra* note 6; Barry R. Schneider, *Stonewalling on the Arms Control Impact Statements*, BULL. OF THE ATOMIC SCIENTISTS, January 1977, p. 5.

programs.¹² Exacerbating the problem, the documents were delivered after Congress had already completed the FY 1977 budget authorization process.¹³

The second ACIS submission (for FY 1978) was filed shortly thereafter, on January 18, 1977;¹⁴ it was only an incremental improvement. This package included twenty-six statements and an accompanying list of seventy-six other programs meeting the statutory criteria, but which the executive branch determined (without explanation) had no *prima facie* arms control impact and were therefore not worthy of discussing in detail.¹⁵ Again, neither the legislative branch nor outside observers were satisfied with this barebones implementation of the ACIS paradigm.¹⁶ The

12. 122 Cong. Rec. 30,975-76 (1976). The eleven ACIS presentations from the Department of Defense dealt with Trident submarine weapons, air-launched cruise missiles, maneuvering re-entry vehicles, and other important and complicated programs, but each ACIS described its subject in only one long paragraph, and then concluded that it was consistent with existing arms control treaties and negotiations. Key congressional leaders complained they “were frankly appalled at the statements...The 16 statements are not, in any sense, complete. They certainly are not analytical. They dealt only at the shallowest level with impact on arms control and disarmament negotiations and they do not deal at all with impact on policy.” Other members of Congress concurred, “The statements provided do not comply with the law and are unacceptable.” CONG. RSCH. SERV., Clement J. Zablocki, U.S. House of Representatives Committee on International Relations, Foreword, Congressional Research Service, Analysis of Arms Control Impact Statements Submitted in Connection with the Fiscal Year 1978 Budget Request vii (April 1977 [hereinafter CRS 1977 Analysis]; 122 Cong. Rec. September 17, 1976, S 30,972 (comments of Sen. Sparkman, criticizing the ACIS submissions as too late, too brief, and unsubstantial), 30,973-74 (reprinting letter from Congressional Research Service describing what would be required in a meaningful ACIS).

13. GAO 1977, *supra* note 7, at 3; Lall, *supra* note 5, at 2 (quoting Sen. Hubert Humphrey, one of the key sponsors of the ACIS legislation, complaining that the delayed submission of such a paltry 1976 set of documents would undermine trust between the executive and legislative branches, and “is a violation of the law.”); Clarke, *supra* note 3, at 196-97; Robert Lyle Butterworth, *The Arms Control Impact Statement: A Programmatic Assessment*, 8 POL’Y STUD. J. no. 1, fall 1979, p. 76, 77 (characterizing Congress as viewing the first ACIS submission as “insulting,” resulting from executive branch “stonewalling”).

14. *Arms Control Impact Analyses for Fiscal Year 1978* submitted January 18, 1977, reprinted in CRS 1977 Analysis, *supra* note 12, at 378-411.

15. GAO 1977, *supra* note 7, at 9; Philip M. Boffey, *Arms Control Impact Statements Again Have Little Impact*, 196 SCIENCE 1181 (June 10, 1977), <https://www.science.org/doi/10.1126/science.196.4295.1181>; Letter from Charles R. Gellner to S. Foreign Rels. Comm., in CRS 1977 Analysis, *supra* note 12, at 1, 183-211 (critiquing list of Department of Defense programs for which no ACIS was submitted); Butterworth, *supra* note 13, at 78 (saying “the degree of improvement was slight” from the first ACIS package to the second.)

16. After evaluating the second set of ACIS submissions, two key senators wrote [W]e conclude that the latest statements still do not comply with the law and are unacceptable as a model for future submissions. The submitted statements are neither complete nor adequately analytical. They do not deal in any comprehensive way with the impact of the programs covered upon arms control policy and negotiations. They clearly have not served the purpose envisioned in the legislation of being an integral part of the decision akin process within the executive branch, nor could they be of particular value to the Congress in making its own appraisals and in participating in the formulation of arms control policy. A further problem with the statements is that of secrecy. When classification is necessary for full and detailed discussion, as we noted in our

articulation of more useful documentation in this early phase was stymied by various ambiguities in the statute and even more by persistent push-back from the Department of Defense and the Energy Research and Development Administration (ERDA) (the forerunner of today's Department of Energy, which was responsible for much of the research, development, testing and production of nuclear weapons).¹⁷

B. *Evolving ACIS Practice.*

In subsequent presidential administrations, the ACIS process ebbed and flowed, in parallel with national politics and with the oscillating attitudes of executive and legislative branch officials regarding overall arms control policy. The mechanism eventually benefitted from legislative tweaks that attempted to resolve some of the uncertainties in the original enactment,¹⁸ and from the prodding of a helpful Congressional Research Service “model” of how the documents should be structured.¹⁹

response to the first submissions, specific statements should be provided in classified and unclassified form. Every effort should be made to provide unclassified information to the fullest extent possible.

Letter from Sen. John Sparkman, chair of S. Comm. on Foreign Rels., and Clifford P. Case, ranking member, to Paul C. Warnke, Director of ACDA (March 25, 1977), *reprinted in* CRS 1977 Analysis, at iv, v; Boffey 1977, *supra* note 15; Letter from Charles R. Gellner to S. Foreign Rels. Comm., *in* CRS 1977 Analysis, *supra* note 12, at 1, 29-34 (discussing individual ACIS submission, highlighting points not addressed, absence of contrary opinions, and points left unclear); CRS 1979 Analysis, *supra* note 7, at 8.

17. General Accounting Office, ID-78-48, IMPROVED PROCEDURES NEEDED FOR IDENTIFYING PROGRAMS REQUIRING ARMS CONTROL IMPACT STATEMENTS, 13-16 (September 27, 1978), <https://www.gao.gov/assets/id-78-48.pdf> [hereinafter GAO 1978]; Boffey 1977, *supra* note 15; 1979 Hearings, *supra* note 7, at 73, 75 (comments of Paul Walker regarding obstruction by executive agencies); Gray, *supra* note 7, at 221 (citing hostility of ERDA and the Department of Energy to the entire ACIS process during the Gerald Ford Administration). Regarding the role played by ERDA and the Department of Energy in U.S. nuclear weapons programs, *see* Alice Buck, DEP'T OF ENERGY, *A History of the Energy Research and Development Administration* (March 1982), <https://www.energy.gov/sites/default/files/ERDA%20History.pdf>; CONG. RSCH. SERV., R45306, *The U.S. Nuclear Weapons Complex: Overview of Department of Energy Sites* (March 31, 2021) (describing the Department of Energy's role in U.S. nuclear weapons programs); DEP'T OF ENERGY OFF. OF SCI., *Legislative History*, <https://science.osti.gov/lp/Laboratory-Directed-Research-and-Development/Legislative-History> (last visited Apr. 9, 2022).

18. In 1978, sec. 36 was amended to ensure the early availability of unclassified statements to Congress and the public; to require that dual-use technology with potential military applications would be addressed; and to allow the discussion of similar programs together as aggregates, in order to reduce workload in writing ACIS texts. Clarke, *supra* note 3, at 194; Rep. Clement J. Zablocki & Sen. Charles H. Percy, *Foreword to Fiscal Year 1982 Arms Control Impact Statements* iii (Feb. 1981); 1979 Hearings, *supra* note 7, at 65 (comments of Paul Walker, applauding the analysis of aggregates of programs, and recommending that this approach be carried further); Gray, *supra* note 7, at 224; Letter from Charles R. Gellner to S. Foreign Rels. Comm., *in* CRS 1977 Analysis, *supra* note 12, at 1, 8-11 (suggesting ideas for improvement in the ACIS process); CRS 1979 Analysis, *supra* note 7, at 3, 39, 155-56 (discussing ACIS for functional aggregates of military programs); CRS 1979 Analysis, *supra* note 7, at 14-16 (advocating discussion of aggregates of programs in an ACIS).

19. Charles R. Gellner, *Library of Congress, Comments on Arms Control Impact Statement Procedures* (March 14, 1977), *in* *Fiscal Year 1978 Arms Control Impact Statements* 1-21 (April 1977) (providing seven

The Jimmy Carter Administration was more forthcoming, with the annual ACIS package becoming longer, more detailed, and more analytical. According to Nancy-Ann Min, a leading chronicler of this period, these ACISs were “palpably more balanced,” in presenting negative perspectives or concerns about the impacts of some of the programs, even while the bottom-line assessment was invariably that the weapon in question was deemed “not inconsistent with” U.S. arms control policy and ongoing international negotiations.²⁰ The four Carter-era ACIS packages ranged between 268 and 552 pages in length; an estimated 48,000 person hours were required to prepare the 1979 iteration.²¹ Most of the Carter Administration ACIS packages were submitted weeks after the target dates. But the administration’s final presentation, on January 15, 1981, prompted the Congressional recipients, including Rep. Zablocki, to applaud:

This submission represents the first time since enactment of Public Law 95-338 in 1975 that the ACIS report has been submitted as required together with the fiscal year 1982 defense budget request. The fiscal year 1982 ACIS submitted to the Congress are generally well written, informative, and sufficiently analytical to provide useful insights into the arms control implications of major weapons programs, as was envisioned by the Congress in 1975. The timely submission and quality of this report should contribute to better congressional and executive branch decisionmaking regarding the potential impact of defense programs on the future direction of our country’s national security and arms control policies.²²

model ACIS analyses of contemporary weapon programs); CRS 1977 Analysis, *supra* note 12, at 215-348; see Lall, *supra* note 5, at 1; Boffey 1977, *supra* note 15 (commenting on the model ACIS); Gray, *supra* note 7, at 222 (noting that the Congressional Research Service studied the substance of the early ACIS documents, while the General Accounting Office focused on the governmental process that generated them).

20. Min, *supra* note 7, at 199; CRS 1979 Analysis, *supra* note 7, at iv, 1, 6 (commending the ACIS submitted by the Carter Administration); Butterworth, *supra* note 13, at 78 (describing the FY 1979 ACIS package as an improvement, but noting that the interagency process for generating the documents was still acrimonious, so the finished product “is most often described by participants as the result of attrition and exhaustion rather than consensus”); Clarke, *supra* note 3, at 200 (noting that during the 1976 presidential campaign, Jimmy Carter had pledged to “abide by the spirit as well as the letter” of sec. 36).

21. 1979 Hearings, *supra* note 7, at 4, 8 (statement by Barry M. Blechman, also noting that the 1980 ACIS package required 44,000 person hours), 77 (submission by ACDA, noting that for FY 1980, 500 program elements met the statutory requirements for ACIS, and 160 were analyzed); Clarke, *supra* note 3, at 200 (observing that under Carter, ACDA greatly increased its ACIS staff, to between sixteen and twenty analysts).

22. Rep. Clement J. Zablocki & Sen. Charles H. Percy, *Foreword* to FY 1982 ACIS, *supra* note 18, at iii.

The Ronald Reagan Administration tacked in the opposite direction regarding ACIS. It drastically reduced the ACDA staff hours devoted to the project, while vigorously increasing the military programs that would be addressed by those annual evaluations.²³ The subsequent ACIS submissions were generally shorter and less detailed; some were submitted on a timely basis, while others were months late.²⁴ As had become standard, the documents were delivered in both classified and unclassified form.²⁵ Also, the ACDA Director's cover letter generally continued to reflect rote comments to the effect that arms control assessment was not an exact science, that it was necessarily a subjective process, based on incomplete information, and that the statements incorporated alternate points of view. The submittal package also routinely concluded that "all of the programs analyzed...are consistent with current U.S. security and arms control policy."²⁶

C. Concluding ACIS Practice

The end of the cold war in 1990-91 and the consequent revolutions in global political and security relationships could have inspired a new "golden age" for ACIS. It could have triggered a renewed emphasis upon the intended careful and critical analysis of the bigger-picture and longer-term implications of weapons programs, with a corresponding imperative to escape "business as usual" in defense procurement. In fact, however, the annual ACIS packages did not rise to that

23. Min, *supra* note 7, at 202-03.

24. Compare *Fiscal Year 1983 Arms Control Impact Statements* (1982) (submitted on time, 391 pages), *Fiscal Year 1985 Arms Control Impact Statement* (1984) (383 pages), *FY 1987 ACIS*, *supra* note 19 (144 pages, plus appendices), and *Fiscal Year 1988 Arms Control Impact Statements* (1987) (submitted two months late, 211 pages, plus appendices).

25. See, e.g., *ACIS 1987*, *supra* note 19, at v (submittal letters by Kenneth L. Adelman presenting classified and unclassified versions of ACIS), *FY 1988 ACIS*, *supra* note 24, at v; 122 Cong. Rec. 30,974 (1976) (reprinting letter from Congressional Research Service complaining that the 1976 ACIS package was initially presented entirely in classified form, and then reprinting the later unclassified versions); 1979 Hearings, *supra* note 7, at 66, 75 (comments of Paul Walker, critiquing excessive classification and deletions in ACIS). Note the ACIS submissions were initially drafted in classified form, and then numerous excisions were made prior to public release, with many passages marked as "Deleted." An alternative approach, employed for some other types of documents, would have been to prepare both classified and unclassified versions of the documents *ab initio*, so that the publicly released version could have been a complete narrative, without the intermittent marked deletions, which impede comprehension. See *Fiscal Year 1980 Arms Control Impact Statements* 68-71 (1979) (indicating there are so many deletions in the discussion of outer space programs that the text is virtually meaningless).

26. See, e.g., Letter of Submittal from George M. Seignious II, *reprinted in FY 1980 ACIS*, *supra* note 25, at v; Letter of Submittal from Eugene V. Rostow, *reprinted in FY 1983 ACIS*, *supra* note 24, at v; Letter of Submittal from Kenneth L. Adelman, *reprinted in FY 1985 ACIS*, *supra* note 24, at v; and *FY 1988 ACIS*, *supra* note 24, at v; *contra* 1979 Hearings, *supra* note 7, at 7 (statement of Barry M. Blechman, observing that arms control assessments are always uncertain, as changing technology adds to the difficulty of making hard and fast judgments); 1979 Hearings, *supra* note 7, at 65 (comments of Paul Walker, critiquing "on the one hand - on the other hand" style of writing in ACIS), 77 (response by ACDA to Walker's comments).

opportunity. They became even more scanty and unenlightening, not responding to the rapidly-shifting worldwide political conditions and remaining oddly removed from the decision-makers' needs for sharp, substantive analysis.²⁷ Despite congressional urging to give ACIS new gusto, the executive branch seemingly lost interest in the undertaking, other than instituting a few modest tweaks in the statements' format.²⁸

Eventually, the participants mutually concluded that the entire enterprise had run its course, and the Fiscal Year 1994 submission completed the arc of ACIS with a package comprising only forty-two pages that addressed a mere seventeen programs.²⁹ The statutory provision for ACIS, in Section 36 of the ACDA statute,

27. In the post-cold war environment, the annual ACIS submissions shrank from 209 pages in FY 1991, to 119 pages in FY 1992, to 57 pages in FY 1993, to 42 pages in FY 1994. *Arms Control Impact Statements for Fiscal Years 1991, 1992, 1993, and 1994*; see Rep. Dante B. Fascell & Sen. Claiborne Pell, *Foreword to Fiscal Year 1991 Arms Control Impact Statements* iii-iv (1990) ("Given the sweeping changes occurring in the political and military environment, it is disappointing that the ACIS give no attention to the possibility that weapon system plans could be affected by these changes. Indeed, this mission serves to give the impression that the ACIS have become almost completely removed from the realities of decision-making in a changing world. We strongly urge that the Director of the Arms Control and Disarmament Agency take a personal interest in and give new direction to the ACIS process so that the 1991 statements have both relevance and value."); NEW PURPOSES AND PRIORITIES FOR ARMS CONTROL: REPORT TO SHERMAN M. FUNK, INSPECTOR GENERAL OF ACDA 33 (1992) [hereinafter Report to IG].

28. Rep. Dante B. Fascell & Sen. Claiborne Pell, *Foreword to Fiscal Year 1992 Arms Control Impact Statements* iii-iv (1991) (acknowledging some positive modifications in the ACIS formatting, but arguing that "[n]onetheless, the statements would benefit from a sharper, more substantive analysis. In reading the statements, it is evident that the ACIS are influenced by an interagency clearance process which tends, unless well controlled, to avoid issues rather than clarify them . . . We would suggest that the Arms Control and Disarmament Agency should start afresh with its next impact statements. ACDA should be expected to be willing, even eager, to take a serious look at arms control considerations which are raised by various military programs. It should be possible to be insightful and informative without contradicting current policy decisions. Each of the executive branch agencies has its interests to protect and its own particular obligations. But, each agency should also be in the forefront of those advocating strong and effective arms control. The ACIS could and should be an important part of that effort."); Rep. Dante B. Fascell & Sen. Claiborne Pell, *Foreword to Fiscal Year 1993 Arms Control Impact Statements* iv (1992) (concluding that "[o]n the whole, the FY 93 Arms Control Impact Statements do not to any significant degree reflect the impact of the collapse of the Soviet Union on U.S. weapons systems and U.S. arms control policy."); see also Gray, *supra* note 7, at 227 (reporting that by 1979, there was already "a growing belief that the ACIS process had gotten out of control"); Report to IG, *supra* note 27, at 33 ("There is universal agreement in the executive branch that arms control impact statements are meaningless. The same view is held by many on the Hill.")

29. See Rep. Lee Hamilton & Sen. Claiborne Pell, *Foreword to Fiscal Year 1994 Arms Control Impact Statements* iii (1993) (observing that in view of immense post-cold war changes, "Congress and the executive branch are rethinking the relevance of many arms control activities including the ACIS. Legislation pending before the Congress would strengthen and revitalize ACDA and refocus those engaged in the preparation of the ACIS on newer, potentially more productive arms control challenges. Accordingly, this may be the last volume in the ACIS series."); S. REP. NO. 103-172, at 13 (1993) (noting that even in the greatly reduced final version, the production of ACIS required 7,750 person-hours annually within the executive branch, which could have been reallocated to other priorities).

was substantially abolished in 1994.³⁰ The agency itself was merged into the Department of State, dissolving its independent identity in 1997-99.³¹

D. *Requiem for ACIS.*

Upon reflection, the original goals for the concept of ACIS retain their validity and importance, but they were never realized or even approached in practice.³² There is little evidence that the perennial statement-writing fracas contributed to better decision-making within the executive branch, nor that it provided useful reams of otherwise unobtainable information for the edification of Congressional or public audiences, nor that it contributed to augmenting the stature of ACDA within the inner councils of government.³³

The biggest recurrent problem with the ACIS mechanism was the inescapable bureaucratic fact that the documents were always generated via an intensely antagonistic interagency process that required consensus (i.e., unanimity) among oppositional organizations. The nearly invariant pattern involved ACDA (as drafter) battling against the Departments of Defense and Energy (as proponents of the controversial programs) with the Department of State being largely a passive observer, and the National Security Council staff attempting to broker acceptable compromises.³⁴ The executive branch enforced a rigid internal discipline, forbidding

30. S. REP. NO. 103-172, *supra* note 29, at 13 (supporting repeal of sec. 36, eliminating the requirement for ACDA to produce ACIS reports).

31. Susan B. Epstein, Steven A. Hildreth, & Larry Nowels, CONG. RSCH. SERV. 97-538, FOREIGN POLICY AGENCY REORGANIZATION IN THE 105TH CONGRESS 7 (November 6, 1998), <https://crsreports.congress.gov/product/pdf/RL/97-538/2>; Spurgeon M. Keeny, Jr., *In Memoriam: ACDA (1961-1997)*, ARMS CONTROL TODAY 2 (April 1997); Liz Dee, *The ACDA-USIA Merger into State – The End of an Era*, ASSOCIATION FOR DIPLOMATIC STUDIES & TRAINING (Oct. 18, 2016), <https://adst.org/2016/10/acda-usia-merger-into-state-end-of-an-era/>.

32. *See supra*, text accompanying notes 6-8 (discussing original goals for ACIS); Gray, *supra* note 7, at 228 (opining that the ACIS process can reasonably claim to have helped accomplish two of its original goals – to inform Congress better, and to enhance the stature of ACDA – but it did not accomplish much on the first goal, to influence government decisions regarding weapon programs); Butterworth, *supra* note 13, at 79-82 (criticizing ACIS failure on all three original goals); Clarke, *supra* note 3, at 100-08 (describing ACDA's persistent problems gaining access to necessary information to participate fully in interagency deliberations).

33. *See Lall, supra* note 5, at 3 (emphasizing the need for the ACIS process to ensure that ACDA was more fully and currently informed about the details of emerging weapons and technologies that could prove problematic for arms control policy and negotiations); CONG. RSCH. SERV., *Fundamentals of Nuclear Arms Control, Part IX – The Congressional Role in Nuclear Arms Control*, June 1986, 26 INT'L LEGAL MATERIALS 258, 273 (1987) [hereinafter *Congressional Role*], p. 22 (noting that the ACIS reports were not adequately utilized by Congress; they were seldom mentioned in debates and did not provoke protests over controversial decisions. Moreover, instead of helping integrate ACDA into the interagency process, the ACIS process antagonized the Department of Defense); Butterworth, *supra* note 13, at 79 (noting only one instance in which an ACIS played a role in a Congressional decision about a pending weapon).

34. *See 1979 Hearings, supra* note 7, at 67 (comments of Paul Walker) (discussing ACDA leadership and interagency coordination in preparing ACIS); Gray, *supra* note 7, at 222-23 (reporting that for the FY 1979 ACIS package, eight of the thirty-two documents had to be referred to the National

public airing of internecine disagreements, so no public dissent was tolerated regarding a statement's bottom line or the underlying analysis.³⁵ The persistent imperative of avoiding public displays of disaffection generated endless rancorous meetings and demanded minute wordsmithing over draft after draft of an evolving ACIS submission to reconcile or to paper over the competing perspectives.³⁶

The timing of the annual ACIS submissions also presented repeated problems. The legislators' original concept was that these documents would be submitted simultaneously with the President's budget, so Congress could exercise its

Security Council for resolution, after the interagency participants had reached deadlock); Butterworth, *supra* note 13, at 79-80 (suggesting that the Departments of Energy and Defense viewed the ACIS process in damage-limiting terms, how to preserve their jurisdictional independence; ACDA and the Department of State saw ACIS in imperialist terms, how to increase their influence in weapons decisions; and the National Security Council staff handled the task as one of conflict management, how to minimize interagency discord). Note that for the first two years, the Department of Defense and ERDA drafted and submitted ACIS regarding their own programs; after that, a National Security Council memorandum assigned ACDA the lead interagency responsibility for the drafting and submission of all ACIS. Clarke, *supra* note 3, at 197-200; 1979 Hearings, *supra* note 7, at 75 (comments of Paul Walker); CRS 1979 Analysis, *supra* note 7, at 5 n.4.

35. 1979 Hearings, *supra* note 7, at 36-37 (noting that some national intelligence estimates do include a presentation of dissenting views, but in ACIS, the practice was for agencies to discuss their varying perspectives until they could reach a common expression). *But see* Gray, *supra* note 7, at 222-26 (citing the FY 1978 additional ACIS for the enhanced radiation ("neutron bomb") warhead for the Lance missile, which concluded that the weapon's impact on ongoing negotiations would be "marginally negative," and citing the skepticism and candor in the accompanying ACIS documents about the air-launched cruise missile and ICBMs); Clarke, *supra* note 3, at 201; CRS 1979 Analysis, *supra* note 7, at 7; Butterworth, *supra* note 13, at 79.

36. *See* 122 Cong. Rec. 30,974 (1976) (reprinting letter from Congressional Research Service discussing the dilemma for the executive branch when there is internal disagreement about the consistency between arms control and a particular new weapon – perhaps the contradiction can be resolved internally, but perhaps the result will be an ACIS that papers over the disagreement with generalized or unspecific language in order to dodge the issue); Barry M. Blechman & Janne E. Nolan, *Reorganizing for More Effective Arms Negotiations*, FOREIGN AFFAIRS 1157, 1168-69 (1983) (writing "Obviously, no administration is going to request funds from the Congress for a weapon system and simultaneously inform the legislators that the system would have an adverse impact on important negotiations."); 1974 Hearings, *supra* note 3, at 155 (ACDA director Fred C. Ikle observing that a president would not allow one agency to issue a formal report containing comments that depart from the administration's formal budget presentation) *But see* *Rise in Soviet Missiles Likely*, WASHINGTON POST, (Apr. 23, 1985), <https://www.washingtonpost.com/archive/politics/1985/04/23/rise-in-soviet-missiles-likely/831c7fe8-42bc-4364-a02b-0eb2e0aa2fe0/> (identifying a public conflict between an ACIS prepared by ACDA and a Pentagon report on the effect that the Strategic Defense Initiative ("Star Wars") might have on arms control negotiations).

Sometimes, the annual submission letter from the ACDA director noted that the ACIS presented alternative points of view. In those instances, the analyses included comments in the form of "some believe X; others believe Y" or comments reflecting the view that a particular weapon program might be beneficial for arms control in some ways and harmful in others. In contrast, other annual ACIS packages did not include presentation of competing views, and simply asserted that the programs being analyzed were fully consistent with U.S. legal obligations and policy objectives. In no case did an ACIS present discussion of "alternatives" to the weapons being discussed, as would occur in an environmental impact statement. *See* cover letter to FY 1980 ACIS, *supra* note 25, at 18, 55, 59-60, 78, 91 (discussing alternative perspectives); FY 1988 ACIS, *supra* note 24, at 51, 69 (one-sided presentation of positive effect of weapons programs on arms control interests).

authorization and appropriations functions with full access to the details of the defense programs and with insight about their arms control implications. In fact, however, the ACIS were repeatedly submitted late, weeks or months after the budget. It became clear that the government agencies were developing the ACIS paperwork only after the key decisions had already been made in favor of proceeding with the affected weapons programs, and the proffered documents were part of the “sales pitch” rather than being part of the deliberative process.³⁷ This timing is in stark contrast to the designed role that an environmental impact statement is intended to play in governmental decision-making, as elaborated in the next Section.

Even when the ACIS instruments were delivered in a timelier fashion, their content did not provide much assistance to congressional recipients. The documents about a particular program were not dramatically different from one year to the next (in part because the underlying weapons activities usually did not evolve rapidly), and the language became routine and repetitive, relying upon rote, conclusory text that had previously survived the interagency clearance process.³⁸

Perhaps it should not be surprising that the ACIS submissions were routinely politicized, to serve the executive branch’s interests. The documents gingerly dealt with large, expensive programs, described as being fundamental to the President’s strategic vision during some of the most consequential phases of the cold war and its aftermath.³⁹ So there was a lot at stake, both in budgetary and geopolitical terms. The ACIS mechanism proceeded without much outside engagement, with no routine interim input generated from the public or from Congress until that year’s package was finalized and submitted. Even if the ACIS packages from the Carter Administration were generally longer, more detailed, and more deeply analytical than the submissions of its Republican predecessor and successor, the difference in efficacy was small.

Procedurally, it is noteworthy (especially for comparison to the analogous environmental documentation, discussed *infra*) that the annual ACIS presentations evolved into a two-tier structure, with some programs being assessed in detail and a

37. 1979 Hearings, *supra* note 7, at 4, 8 (testimony of Barry M. Blechman, noting that the ACIS deal with “programs the administration has already decided to pursue”), 16 (discussing slight changes that the ACIS process may have made in some weapon programs), 83 (supplemental response, indicating that ACIS do not “play a discernible role in the weapon system decision process.”); Gray, *supra* note 7, at 230 (recommending that an ACIS process would be more effective if the analyses and documents were more effectively meshed with the standard military timetable and benchmarks for developing new weapons).

38. For example, the ACIS packages for FY 1980, 1981, 1982 and 1983 all addressed Intercontinental Ballistic Missiles, Submarine-Launched Ballistic Missiles, air-launched missiles, missile defense systems, chemical weapons, and directed energy weapons, often in very similar terms.

39. See, e.g., Letter of submittal by Eugene V. Rostow, *reprinted in* FY 1983 ACIS, *supra* note 24, at v (asserting that the reported programs “are essential to the development or maintenance of the United States military strength necessary to achieve a military balance with our principal adversary, to deter aggression, and to support and enhance international stability. The programs will permit us to pursue arms control objectives in a way which will enhance our security.”).

great many more being mentioned in the briefest fashion.⁴⁰ Likewise, the ACIS submissions were always presented in both classified and unclassified forms.⁴¹ Additionally, ACIS practice concentrated exclusively on weapons programs belonging to the Departments of Defense and Energy; there were few serious attempts to address emerging but unripe technologies,⁴² nor to write about any diplomatic arms control initiatives (or failures to take initiative) on the part of ACDA or the Department of State.

Another point of comparison is the fact that the invariant bottom-line assessment for the annual ACIS submission was a judgment that all the programs were consistent with all existing U.S. legal obligations and with U.S. government arms control policy.⁴³ In contrast, an environmental impact statement does not usually rest upon any such ultimate conclusion – as discussed *infra*, the practice in that field has been for the assessment statement merely to present the relevant facts and analyses, and then to allow the broader political and legal processes to draw and act upon their own conclusions.⁴⁴

That leads to a final aspect of the ACIS system, the lack of an effective “enforcement” procedure. Congressional leaders who might find an annual submission inadequate had little immediate remedy. They could write thunderous letters to the ACDA director,⁴⁵ they could hold oversight hearings, or they could try to extract concessions via other legislative tools.⁴⁶ But there was no recourse to courts⁴⁷ and no other handy tool for punishing poor behavior. Similarly, the general

40. See, e.g., FY 1980 ACIS, *supra* note 25, at 251 (presenting “abbreviated” ACIS, explaining that “none of these activities is judged to have a significant impact on arms control policy or negotiations”); FY 1988 ACIS, at 142 (listing programs for which an ACIS had been previously submitted and others for which no ACIS was deemed necessary); FY 1990 ACIS, at 112 (same).

41. See *supra*, text accompanying note 25 (presenting examples of ACIS in classified and unclassified form).

42. See *infra* note 18 (discussing ACIS regarding dual-use technologies).

43. See, e.g., FY 1994 ACIS, Letter of Submittal from Thomas Graham, Jr., Acting Director of ACDA, in FY 1994 ACIS, June 23, 1993, v (concluding that all studied programs “are consistent with current U.S. security and arms control policies.”); Letter of Submittal from Ralph Earle II, *reprinted in* FY 1980 ACIS, *supra* note 25, at v (asserting both that the studied programs were “consistent with” existing U.S. legal obligations and “not inconsistent with” U.S. arms control policy.)

44. See *infra*, section II.

45. See, e.g., letter from Sens. Sparkman and Case, *supra* note 12, to ACDA director Paul C. Warnke (complaining about low quality ACIS that were submitted before he took office, and expressing the hope that he would devote personal attention to improving that performance); Rep. Clement J. Zablocki, *Foreword to Additional Arms Control Impact Statements and Evaluations for FY 1978* iii (quoting pledge by ACDA Director Paul C. Warnke to do his best to improve the quality and responsiveness of ACIS, assuring the committee that he would carry out the letter and spirit of the law).

46. Boffey 1976, *supra* note 6, at 37 (discussing possible congressional responses to inadequate ACIS submissions); Congressional Role, *supra* note 33, at 12-34 (describing how Congress can influence weapons funding decisions); 1979 Hearings, *supra* note 7, at 67 (comments of Paul Walker, suggesting tactics Congress could use to obtain better ACIS submissions).

47. Sec. 36, *supra* note 4, (c) (“No court shall have any jurisdiction under any law to compel the performance of any requirement of this section or to review the adequacy of the performance of any such

public – the other intended beneficiary of meaningful ACIS submissions – was also largely bereft of any mechanism for effective engagement or enforcement.

In sum, it is hard to identify any significant positive accomplishments or any adequate payoff for the *Sturm und Drang* that generated an ACIS.⁴⁸ Congressional leaders had high hopes for a concept that had produced such important accomplishments in the field of environmental law, but the transplantation proved unsuccessful, and the arms control statutory obligation was terminated with barely a whimper of protest. The next Section of this Article, therefore, turns to address environmental law, the home base of the assessment statement process, to inquire how the mechanism came to play such a profound, enduring role in that milieu.

II. Environmental Impact Statements

The genesis of the ACIS process was inspired by the resounding success of the seemingly similar, pathbreaking mechanism in the realm of environmental law: the program for rigorous, highly structured environmental analysis mandated by NEPA and its progeny.⁴⁹ This section of the Article does not purport to provide a comprehensive portrait of environmental law, or a catalog of the ever-growing cavalcade of NEPA litigation. Instead, it seeks simply to identify the salient characteristics of the statutory scheme and the key features of environmental assessment programs that might be most relevant for a comparison to the world of arms control.

At the highest level, the national environmental policy grandly declared by Congress was “to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans.”⁵⁰ This statute does not independently impose substantive obligations or restrictions – those are largely the province of other environmental legislation and regulation, implanting specified tolerances for emissions into air and water, for preservation of endangered species,

requirement on the part of any Government agency.”); Boffey 1976, *supra* note 6, at 37 (observing that the specification against any private right of action had been inserted into sec. 36 “at the insistence of congressional ‘hawks’ who feared that lawsuits might be filed to block military programs whose impact statements were deemed deficient”).

48. 1979 Hearings, *supra* note 7, at 13, 16 (statement of Walter Slocombe, concluding that “we are not convinced that whatever additional measure of arms control sensitivity these statements may generate within the executive branch is sufficient to offset the costs, chiefly in time, incurred in their preparation or in the very difficult and time-consuming interagency coordination process required”), 18-19 (witnesses agree that the interagency clearance process for ACIS “has not produced a product worth the vast resources that have gone into it”).

49. See generally DANIEL R. MANDELKER, NEPA LAW AND LITIGATION (2d ed., 2021).

50. NEPA, *supra* note 1, § 101 (42 USC § 4331(a)); see also Weinberger v. Cath. Action of Haw., 454 U.S. 139, 143 (1981) (Justice Rehnquist identifying two primary goals of NEPA: to inject environmental considerations into federal agency decision-making and to inform the public).

for restoring contaminated lands, etc.⁵¹ Instead, NEPA is regarded as “procedural,” in requiring a deliberative and public decision-making process before the federal government undertakes actions that might carry important implications for the natural environment.⁵²

Accordingly, for any “major Federal actions significantly affecting the quality of the human environment,” a “detailed statement” must be prepared utilizing “a systematic, interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts”. This statement is to evaluate “(i) the environmental impact of the proposed action, (ii) any adverse environmental effects which cannot be avoided should the proposal be implemented, (iii) alternatives to the proposed action, (iv) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and (v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.”⁵³ Compliance with this novel environmental assessment obligation is mandatory, not discretionary, for federal agencies.⁵⁴

In short, NEPA does not by itself preclude the federal government from approving and undertaking actions that would negatively impact the environment in important ways. Instead, it merely prevents the government from doing so out of ignorance, in secret, and without paying due attention to the alternatives and the long-range consequences.⁵⁵ Several features of the NEPA process may therefore carry useful lessons for its arms control counterpart, including both ideas to borrow and to avoid.

51. See Clean Air Act, 42 U.S.C. §§ 7401-7671(q). (1970); Clean Water Act, 33 U.S.C. §§ 1251-1387(1972); Endangered Species Act, 16 U.S.C. §§ 1531-1544 (1973); Resource Conservation and Recovery Act, 42 U.S.C. § 6901-6992(k)(1976). Mandelker, *supra* note 49, § 2:4 (explaining that in legislating NEPA, Congress intended to require federal agencies to emphasize environmental protection more fully, but Congress did not anticipate how important the EIS process would become); Linda Luther, CONG. RSCH. SERV., RL33152, THE NATIONAL ENVIRONMENTAL POLICY ACT (NEPA): BACKGROUND AND IMPLEMENTATION 7 (Jan. 10, 2011) (describing NEPA as an “action-forcing” statute, rather than as a regulatory statute that would establish standards for protection of air, water, wetlands, etc.).

52. 40 C.F.R. § 1500.1 (2022) (describing NEPA as a procedural statute that “does not mandate particular results or substantive outcomes”); Mandelker, *supra* note 49, §§ 2:5, 10:10 (observing that the text of NEPA could have been construed to carry substantive content, but that has not been the prevailing interpretation), 10:1 (explaining that NEPA’s “procedural” nature does not mean that a reviewing court assesses the procedures that an agency followed in preparing an EIS, but that the court will examine the adequacy of the EIS).

53. NEPA, *supra* note 1, § 102 (42 U.S.C. § 4332(A), (C)).

54. Mandelker, *supra* note 49, § 1:1.

55. STEPHEN DYCUS, NATIONAL DEFENSE AND THE ENVIRONMENT 13 (1996) (“An agency is free in principle to make a foolish decision but not an uninformed one.”) [hereinafter Dycus]

A. Tiers of Review⁵⁶

The NEPA program allows considerable flexibility; not every covered project requires a single, full-length EIS. In a nutshell, there are three tiers of review. First, agencies' NEPA procedures can identify some activities as Categorically Excluded, based on a published record that no significant environmental impacts are anticipated or that other similar undertakings in the past have not generated significant effects.⁵⁷ Second, if there may be anticipated environmental impacts, then the analytical process typically begins with an "Environmental Assessment." This is a pilot document that addresses the scope of the government's contemplated action and alternatives to it, ultimately producing a short written evaluative document that is generally informed by public comment.⁵⁸ The Environmental Assessment ordinarily leads to either a Finding of No Significant Impact, which would usually be the end of the analytical process, or a determination that the third tier, a full EIS, should be prepared next.⁵⁹

Even then, however, NEPA provides different types of documentation. For example, in a very large, wide-scale undertaking, there could be a "programmatic" EIS to address the overall national scope, supplemented by a family of "site specific" EISs or environmental assessments to address the program's special aspects at particular locations.⁶⁰

Usually, an EIS is a single document, done one time for the project (unlike the original ACIS, which were submitted annually). However, if something significant changes with the government's contemplated action, or with its

56. 40 C.F.R. § 1501.11 (2022); Mandelker, *supra* note 49, §§ 9:12 (discussing tiering). *See also* Id. at 9:14 (discussing the "segmentation problem"—when to combine two or more proposed federal actions into a single action for EIS purposes), 9:20 (discussing multistage projects); Luther, *supra* note 51, at 15.

57. 40 C.F.R. §§ 1501.4, 1508.1(d) (2022); Mandelker, *supra* note 49, §§ 2:15, 7:16 (noting several statutory categorical exclusions), 7:15 (noting voluminous litigation about the propriety of a categorical exclusion); COUNCIL ON ENV'T QUALITY, *A Citizen's Guide to NEPA: Having Your Voice Heard* 10 (Jan. 2021), <https://www.energy.gov/sites/default/files/2021/01/f82/ceq-citizens-guide-to-nepa-2021.pdf> [hereinafter *Citizen's Guide*]; Luther, *supra* note 51, at 14.

58. 40 C.F.R. §§ 1501.5, 1501.10 (2022) (prescribing that an Environmental Assessment should be no longer than seventy-five pages and be completed within one year); Mandelker, *supra* note 49, § 7:19; *Citizen's Guide*, *supra* note 57, at 10-11; Luther, *supra* note 51, at 18.

59. 40 C.F.R. 1501.6 (2022); Mandelker, *supra* note 49, §§ 7:19, 7:21; *Citizen's Guide*, *supra* note 57, at 8, 12-13; Luther, *supra* note 51, at 16-18.

60. *See e.g.*, U.S. Army, Program Manager for Chemical Demilitarization, *Chemical Stockpile Disposal Program, Final Programmatic Environmental Impact Statement* (January 1988), <https://babel.hathitrust.org/cgi/pt?id=uiug.30112104107609&view=1up&seq=1> (programmatic EIS for the overall campaign to destroy U.S. chemical weapons); J.W. Terry, et. al., OAK RIDGE NAT'L LABORATORY, *Disposal of Chemical Agents and Munitions Stored at Pueblo Depot Activity, Colorado: Final Phase I Environmental Report* (April 1995), <https://digital.library.unt.edu/ark:/67531/metadc619399/> (one of the supplemental site-specific EISs for the particular locations where the activities would occur); Mandelker, *supra* note 49, §§ 8:58, 9:2-9:4. *See, e.g.*, *Kleppe v. Sierra Club*, 427 U.S. 390 (1976); Dycus, *supra* note 55, at 14-15.

anticipated or newly discovered environmental effects, it may be necessary to prepare a supplemental EIS.⁶¹

Another variant is the “legislative EIS,” an analysis prepared by the executive branch to accompany a document – such as a treaty submitted to the Senate – where the initial proposed major federal action would occur inside the Congress, rather than with the physical breaking of ground.⁶²

B. Coverage

The concept of a “major” federal action, and the concept of an action that “significantly” affects the environment have been read expansively.⁶³ In parallel, the concept of a “federal” action has also acquired a capacious ambit, embracing not only construction and other projects conducted directly by federal agencies themselves, but also agency rule-making and permitting activities that empower other actors, as well as state and local programs that are funded with federal assistance.⁶⁴ Notably, a proposed program will also demand thorough environmental assessment if it is likely to generate a high level of public controversy, even apart from the raw scale of its environmental effects.⁶⁵ An advanced emerging new technology, such as the once-

61. 40 C.F.R. § 1502.9(d) (2022); Mandelker, *supra* note 49, §§ 7-21, 10:68, 10:70 (discussing supplemental EIS); Citizen’s Guide, *supra* note 57, at 16-17; Natural Res. Def. Council, Inc. v. U.S. Army Corps of Eng’rs, 399 F. Supp. 2d 386 (S.D.N.Y. 2005).

62. 40 C.F.R. §1506.8 (2022); Mandelker, *supra* note 49, §§ 4:30, 5:22 (discussing environmental review of international agreements on commercial trade), 8:33 (observing that NEPA’s requirement for impact statements on proposed legislation is “a much-neglected provision,” and few cases have addressed it); Pub. Citizen v. U.S. Trade Representative, 5 F.3d 549 (D.C. Cir. 1993); U.S. DEP’T OF THE AIR FORCE, *Legislative Env’tl Impact Statement: Strategic Arms Reduction Treaty* (Dec. 1991), available at [https://books.google.com/books?id=mt43AQAAMAAJ&pg=PP7&lpq=PP7&dq=Legislative+Environmental+Impact+Statement:+Strategic+Arms+Reduction+Treaty+\(LEIS+START\)+\(Dec.+1991\)&source=bl&ots=uErjxdqFeX&sig=ACfU3U3tULY8DNs_1cenkm7I9BFqS7e_pg&hl=en&sa=X&ved=2ahUKewiG-uCxpMryAhXjkOAKHdjVAYwQ6AF6BAGUEAM#v=onepage&q=Legislative%20Environmental%20Impact%20Statement%3A%20Strategic%20Arms%20Reduction%20Treaty%20\(LEIS%20START\)%20\(Dec.%201991\)&f=false](https://books.google.com/books?id=mt43AQAAMAAJ&pg=PP7&lpq=PP7&dq=Legislative+Environmental+Impact+Statement:+Strategic+Arms+Reduction+Treaty+(LEIS+START)+(Dec.+1991)&source=bl&ots=uErjxdqFeX&sig=ACfU3U3tULY8DNs_1cenkm7I9BFqS7e_pg&hl=en&sa=X&ved=2ahUKewiG-uCxpMryAhXjkOAKHdjVAYwQ6AF6BAGUEAM#v=onepage&q=Legislative%20Environmental%20Impact%20Statement%3A%20Strategic%20Arms%20Reduction%20Treaty%20(LEIS%20START)%20(Dec.%201991)&f=false); U.S. DEP’T. OF THE AIR FORCE, *Strategic Arms Reduction Treaty II (START II) Supplemental Legislative Environmental Impact Statement* (May, 1993); U.S. ARMS CONTROL AND DISARMAMENT AGENCY, *Environmental Assessment for the Convention on the Prohibition of Military or Other Hostile Use of Environmental Modification Techniques* (undated, issued in 1978).

63. 40 C.F.R. § 1508.1(g) (2022) (defining the “effects” that must be addressed, to include those that are reasonably foreseeable, that are reasonably closely connected to the proposed action, and that address ecological, aesthetic, historic, cultural, economic, social or health aspects); Mandelker, *supra* note 49, chapter 8, §§ 8:27 (discussing as a federal “action” an agency’s decision *not* to act), 8:37; Citizen’s Guide *supra* note 57, at 14-15; Luther, *supra* note 51, at 14-15.

64. 40 C.F.R. § 1508.1(q) (2022); Scis. Inst. for Pub. Info., Inc. v. Atomic Energy Comm’n, 481 F.2d 1079 (D.C. Cir. 1973) (affirming broad scope of EIS requirement); Mandelker, *supra* note 49, §§ 1:4, 8:19, 8:20; Luther, *supra* note 51, at 11-13.

65. 40 C.F.R. § 1508.27(b)(4) (2022) (former citation); Mandelker, *supra* note 49, § 8:53 (noting that the “controversy” requirement is grounded in CEQ regulations, not in the NEPA statute); Hanly v. Kleindienst, 471 F.2d 823 (2d Cir. 1972) (noting that Council on Environmental Quality guidelines suggest that formal impact statements should be prepared for proposed actions in which the environmental

promising liquid metal fast breeder nuclear reactor, is also an appropriate subject for environmental analysis, even before it fully ripens.⁶⁶ In rare instances, a statutory waiver or exemption will remove a project or a cluster of actions, from NEPA's coverage.⁶⁷ A federal agency is required to comply simultaneously with both NEPA and its own substantive statutes – neither source of law provides an authority to dodge the requirements of the other.⁶⁸

In many instances, NEPA controversies present a “mixed” question of law and fact – a reviewing court may be required to apply the statutory standard to the contents of a particular proffered EIS to determine whether the document's analysis is sufficiently broad and detailed to satisfy the legal criteria.⁶⁹

C. Timing

Environmental impact assessment is supposed to be undertaken at the outset of a project, early enough so that its results can be factored into the agency's planning process in a timely fashion.⁷⁰ The idea is precisely not to require the generation of an after-the-fact paper trail that would justify a decision that the agency had already made. Instead, the key concept is that the U.S. government will make

impact is likely to be highly controversial); William Murray Tabb, *The Role of Controversy in NEPA: Reconciling Public Veto with Public Participation in Environmental Decisionmaking*, 21 WM. & MARY ENV'T L. & POL'Y REV. 175 (1997) (proposing a multi-factor test to guide agencies and courts in determining whether a major federal project is highly controversial such that it affects agency duties under NEPA); Stephen Dycus, *Nuclear War: Still the Gravest Threat to the Environment*, 25 VT. L. REV. 753 (2001) (arguing for an EIS to address the potentially catastrophic effects of nuclear war, even if the probability of occurrence is low).

66. *Scientists' Inst. for Pub. Info., Inc. v. Atomic Energy Comm'n*, 481 F.2d 1079 (D.C. Cir. 1973); Mandelker, *supra* note 49, at 9:9.

67. *Illegal Immigration Reform and Immigrant Responsibility Act of 1996*, § 102(c)(1), 104 Pub. L. No. 208, 110 Stat. 3009 (1996); *see* 8 U.S.C.A. § 1103 note; Mandelker, *supra* note 49, §§ 2:40 (discussing statute exempting from NEPA and other environmental laws the construction of a border wall along the southern U.S. border), 2:42 (discussing federal legislation aimed at speeding economic recovery from the 2008 Great Recession, for which Congress considered, but did not adopt broad waivers from NEPA, but did adopt a provision requiring more expeditious NEPA review); 2:51 (describing a series of executive orders aimed at streamlining NEPA procedures and shortening the review timetables).

68. NEPA directs federal agencies to interpret and administer other federal law in a manner consistent with NEPA policies. NEPA, *supra* note 1, § 104 (42 USC § 4334); Mandelker, *supra* note 49, §§ 1:1, 2:21.

69. *See Hanly v. Kleindienst*, 471 F.2d 823 (2d Cir. 1972); *see also Marsh v. Ore. Nat. Res. Council*, 490 U.S. 360 (1989); Mandelker, *supra* note 49, §§ 3:6, 8:4.

70. 40 C.F.R. §§ 1501.2 (2022) (rule requiring agencies to “Apply NEPA early in the process”), 1502.5 (2020); *see also* Mandelker, *supra* note 49, §§ 8:14, 8:17 (addressing the challenging question of at what point a “proposal” for agency action has arisen, requiring assessment under NEPA); *Kleppe v. Sierra Club*, 427 U.S. 390, 417 (1976) (Marshall, J. concurring in part) (“But an early start on the [environmental impact] statement is more than a procedural necessity. Early consideration of environmental consequences through production of an environmental impact statement is the whole point of NEPA, as the Court recognizes.”).

better choices if it assembles and relies upon all types of relevant information as crucial inputs, before or while the matter is resolved. NEPA can help arrest the powerful momentum that a major proposal can accumulate, especially once significant financial and political capital has already been poured into it.⁷¹

D. Content

The statute and regulations require a “systematic, interdisciplinary” study of environmental consequences, integrating natural, social, and environmental sciences.⁷² Congress insisted upon a fact-based approach, so decision-makers could not rely upon intuition or bias, but would have to leaven their agency’s initial orientation with a study of alternative perspectives. An agency is required to take a “hard look” at the tradeoffs at stake, not automatically deferring to the simplest, most direct routes toward accomplishment of its substantive agenda.⁷³ The cumulative effects of disparate parts of a program are to be assessed together, and both direct and indirect effects must be included.⁷⁴

In addition, the proponent is required to identify reasonable alternatives to the initially favored course of action,⁷⁵ to consider measures that could mitigate adverse environmental effects,⁷⁶ and to solicit and respond to responsible opposing

71. Mandelker, *supra* note 49, § 7:14; Citizen’s Guide, *supra* note 57, at 6.

72. NEPA, *supra* note 1, § 102(2)(A); 40 C.F.R. § 1502.6 (2022).

73. See *Balt. Gas & Elec. Co. v. Nat. Res. Def. Council, Inc.*, 462 U.S. 87, 97, 100 (1983); *ROBERTSON V. METHOW VALLEY CITIZENS*, 490 U.S. 332, 350 (1989).

74. See Mandelker, *supra* note 49, §§ 1:6 (suggesting that recent Supreme Court decisions may have diluted NEPA’s “hard look” requirement.), 10:53, 10:55 (discussing treatment of cumulative effects in an EIS), 10:63 (discussing bias and predetermination flaws in an EIS); Nina M. Hart & Linda Tsang, CONG. RSCH. SERV., IF11549, *THE LEGAL FRAMEWORK OF THE NATIONAL ENVIRONMENTAL POLICY ACT* (Sept. 22, 2021) (discussing 2020 CEQ regulations that narrow the consideration of cumulative effects of a proposed action).

75. NEPA, *supra* note 1, §§ 102(2)(C)(iii), 102(D) (42 USC § 4332 (C), (E)); 40 C.F.R. § 1501.9(e)(2), 1502.14 (2022); *Nat. Res. Def. Council, Inc. v. Morton*, 458 F.2d 827 (D.C. Cir. 1972); *Vt. Yankee Nuclear Power Corp. v. Nat. Res. Def. Council, Inc.*, 435 U.S. 519 (1978); *Monroe Cnty. Conservation Council, Inc. v. Volpe*, 472 F.2d 693, 697 (2d Cir. 1972) (describing the analysis of alternatives as the “linchpin” of NEPA); Mandelker, *supra* note 49, §§ 9:21, 3:8 (describing “hard look” as the standard applicable both to the agency’s analysis of environmental consequences and to a court reviewing the agency’s work), 10:29 (discussing judicial review of an agency’s consideration of alternative courses of action in an EIS); Citizen’s Guide, *supra* note 57, at 13 (explaining that the agency must present and evaluate reasonable alternatives, defined as those that are practical or feasible from the technical and economic standpoint; a reasonable range of feasible alternatives must be presented in sufficient detail to permit effective comparisons). NEPA analysis can consider two different types of alternatives. A primary alternative is a substitute that would accomplish the agency’s objectives via a different action. A secondary alternative would concede that the agency’s proposed action is necessary but suggest that it be carried out in a different manner. Mandelker, *supra* note 49, §§ 9:21, 10:33 (discussing reasonable alternatives), 10:34, 10:35 (primary and secondary alternatives).

76. 40 C.F.R. § 1502.16(a)(9) (2022); Mandelker, *supra* note 49, §§ 8:67, 10:60.

voices.⁷⁷ The agency is also required to prepare a “concise public record of decision,” to explain the rationale for its ultimate choice.⁷⁸

Notably, an EIS is mandated to study and publicize *all* the environmental effects of a proposed program – including those that would be beneficial as well as those anticipated to be harmful.⁷⁹ In that context, it is noteworthy that objections (and litigation) regarding an EIS can spring from parties such as real estate developers or others who might promote the government’s original contemplated action and want it to proceed untrammled, just as from environmentalists, who might resist the proposal.⁸⁰ In an appropriate case, an EIS must also give due consideration to possible environmental effects that are unlikely to occur, but that would carry very large adverse results if they did occur.⁸¹

E. Author

The particular federal agency that sponsors the proposed action ordinarily takes the lead in drafting an EIS, but it is required to consult other cooperating agencies that have relevant jurisdiction or special expertise.⁸² The Environmental Protection Agency (EPA) also reviews, comments on, and publishes other agencies’ environmental assessments.⁸³ In addition, the Council on Environmental Quality (CEQ) has the authority to promulgate binding regulations that shape the EIS process and to resolve disagreements among affected agencies.⁸⁴

77. 40 C.F.R. §§ 1503.1, 1503.4 (2022); Mandelker, *supra* note 49, § 10:65 (discussing agency’s responsibility to obtain and respond to comments).

78. 40 C.F.R. § 1505.2 (2022); Mandelker, *supra* note 49, § 7:27.

79. 40 C.F.R. §§ 1501.3(b)(2), 1508.1(g)(1) (2022).

80. See Mandelker, *supra* note 49, §§ 1:6 (observing that the overall litigation success rate for pro-environment plaintiffs was slightly higher than that for pro-development plaintiffs), 8:43 (requirement to study beneficial effects).

81. Mandelker, *supra* note 49, § 8:52; *City of New York v. U.S. Dep’t of Transp.*, 715 F.2d 732 (2d Cir. 1983).

82. NEPA, *supra* note 1, § 102(C), 42 USC § 4332(C); see also 40 C.F.R. § 1501.7 (2022); Mandelker, *supra* note 49, § 7:4 (discussing lead and cooperating agencies); Luther, *supra* note 51, at 21-22. NEPA’s strategy was that having the proponent do the drafting of an EIS would integrate NEPA’s goals more effectively into each agency’s institutional outlook. That aspiration has been somewhat weakened by the practice of having outside contractors prepare the EIS. Citizen’s Guide, *supra* note 57, at 5 (noting that many federal agencies have established internal offices dedicated to NEPA policy and program oversight).

83. Citizen’s Guide, *supra* note 57, at 17.

84. Exec. Order No. 11,991, 42 Fed. Reg. 26,967 (May 24, 1977); see, e.g., 40 C.F.R. §§ 1500-1508 (2022) (CEQ’s NEPA implementing regulations); Mandelker, *supra* note 49, at 2:9, 7:29; Citizen’s Guide, *supra* note 57, at 6; Luther, *supra* note 51, at 9-10.

F. Public Comment

The sponsoring agency ordinarily prepares a draft EIS, making it available for public comment; the agency then responds to those comments before finalizing the document.⁸⁵ Unlike the original ACIS process, there is no mechanism for transmitting an EIS (or an annual package) to Congress; the environmental process is much more decentralized.

Federal agencies prepare thousands of Environmental Assessments and hundreds of Environmental Impact Statements annually.⁸⁶

In response to these procedures, a cottage industry of private scientific and other consultants has arisen, with competing experts marshaled to prepare and critique a draft EIS and to support or oppose any proposed action, based on differing professional perspectives about the technical accuracy and completeness of the analysis. Some critics complain about the danger of bias and the artificiality of this emerging slice of the national economy, but it has surely helped to upgrade the state of the art in environmental analysis.⁸⁷

G. National Security

There is no general or categorical NEPA exception for national security or defense-related projects.⁸⁸ The EIS process has applied to programs involving, for example, storage of nuclear missiles,⁸⁹ testing nuclear weapons,⁹⁰ destruction of

85. 40 C.F.R. §§ 1503.1, 1503.4, 1506.6 (2022); Mandelker, *supra* note 49, §§ 7:23, 7:24, 7:26 (describing opportunities for public engagement on agencies' environmental documents; comments can come from federal, tribal, state, and local agencies, as well as the public); Citizen's Guide, *supra* note 57, at 17-21; Luther, *supra* note 51, at 23.

86. Citizen's Guide, *supra* note 57, at 7. See, e.g., ENV'T PROT. AGENCY, *Environmental Impact Statement (EIS) Database*, <https://cdxapps.epa.gov/cdx-enepa-II/public/action/eis/search> (last visited Apr. 9, 2022); Dycus, *supra* note 55, at 14 (estimating 10,000-20,000 environmental assessments and about 450 EISs per year).

87. See Mandelker, *supra* note 49, §§ 7:10, 10:37 (discussing the requirement that an EIS contain factual data and scientific judgment).

88. Dycus, *supra* note 55, at 11-30 (presenting multiple applications of NEPA to defense activities); Mandelker, *supra* note 49, § 5:15; Lakshman D. Guruswamy & Jason B. Aamodt, *Nuclear Arms Control: The Environmental Dimension*, 10 COLO. J. INT'L ENV'T L. & POL'Y 267, 309-10 (1999). *But see* McQueary v. Laird, 449 F.2d 608 (10th Cir. 1971) (suggesting national defense exemption for storage of chemical and biological warfare agents). Regarding the danger of terrorist attacks, most courts have ruled that an EIS need not evaluate the potential danger that future terrorism might impose against a proposed project. Mandelker, *supra* note 49, at 8:54. *But see* San Luis Obispo Mothers for Peace v. Nuclear Regul. Comm'n., 449 F.3d 1016, 1034 (9th Cir. 2006).

89. See, e.g., *Concerned About Trident v. Rumsfeld*, 555 F.2d 817 (D.C. Cir. 1976); *Weinberger v. Cath. Action of Haw.*, 454 U.S. 139 (1981).

90. See *Comm. for Nuclear Resp., Inc. v. Seaborg*, 463 F.2d 783 (D.C. Cir. 1971).

excess nuclear weapons pursuant to a treaty,⁹¹ and transporting chemical weapons.⁹² Occasionally, proponents of a project that carries great national importance have advocated for a dedicated *ad hoc* statutory exemption from ordinary EIS duties. However, those have been remarkably rare, and in almost every instance, concerted study of the environmental aspects of a major federal weapons-related action has turned out to be compatible with the decision-making timetable and outcomes.⁹³

The question of security classification initially proved problematic for the EIS process, but sufficient experience has now been gained so agencies, courts, and outsiders have adapted. Now, when a document with classified information is generated, selected portions, a separable annex, or the entire instrument can be properly withheld from public view.⁹⁴

91. See e.g., U.S. DEP'T OF THE ARMY, *Environmental Assessment for the Proposed Elimination of Intermediate-Range and Shorter-Range Missiles Pursuant to the INF Treaty* (1988); CORPS OF ENGINEERS, DEP'T OF THE ARMY, *Pershing Missiles, Elimination, Pueblo, Co., et al.: Finding of No Significant Impact*, 53 Fed. Reg. 6189 (March 1, 1988).

92. See *Greenpeace USA v. Stone*, 748 F. Supp. 749, 758-61 (D. Haw. 1990) (holding that NEPA did not apply to a presidential agreement with West Germany to transport nerve gas stored in West Germany to a Pacific atoll for destruction but suggesting the impact statement may be needed for actions taken abroad that affect this country or where there is a total lack of environmental assessment).

93. Mandelker, *supra* note 49, § 5:6 (listing statutes that provide full or partial exemption from NEPA for particular agencies or projects); Dycus, *supra* note 55, at 21 (noting that 1988 Base Realignment and Closure Act waived certain NEPA's environmental review requirements); Citizen's Guide, *supra* note 57, at 17 (describing FAST-41 legislation creating an expedited environmental review process for selected projects); Stephen Dycus, *NEPA Secrets*, 2 N.Y.U. ENV'T L.J. 300 (1993) (quoting then-Secretary of Defense Dick Cheney saying that "[d]efense and the environment is not an either/or proposition. To choose between them is impossible in this real world of serious defense threats and genuine environmental concerns.") [hereinafter Dycus, *Secrets*]; see also 11 U.S. DEP'T OF STATE, FOREIGN AFFAIRS MANUAL § 724.3(g), <https://fam.state.gov/fam/11fam/11fam0720.html> (establishing "Circular 175" procedures for U.S. government agencies to seek authorization to initiate or conclude treaty negotiations and specifying that "[a]n action memorandum dealing with an agreement that has a potential for adverse environmental impact should contain a statement indicating whether the agreement will significantly affect the quality of the human environment.").

94. Dycus, *supra* note 55, at 24-26 (discussing secret environmental reviews); see also Dycus, *Secrets*, *supra* note 93, at 308 (noting numerous NEPA cases that dealt with classified materials); 40 C.F.R. § 1507.3(f)(1) (2022) (outlining how agencies should proceed when dealing with classified information); *Weinberger v. Cath. Action of Haw.*, 454 U.S. 139, 146-47 (1981) (litigation over EIS related to classified information regarding facilities for storage of nuclear weapons); Mandelker, *supra* note 49, § 5:15; William R. Mendelsohn, *In Camera Review of Classified Environmental Impact Statements: A Threatened Opportunity?*, 23 B.C. ENV'T AFF. L. REV. 679, 695-97 (1996); F.L. McChesney, *Nuclear Weapons and "Secret" Impact Statements: High Court Applies FOIA Exemptions to EIS Rules*, 12 ENV'T L. REP. 10007 (1982), <https://elr.info/sites/default/files/articles/12.10007.htm>; Environmental Oversight of Classified Federal Research: Hearing before the S. Comm. on Gov't Affs., 104th Cong. (March 12, 1996), <https://sgp.fas.org/othergov/gao.html> (statement by Bernice Steinhardt, Assoc. Dir., Energy, Res., and Scis., Res., Community, and Econ. Dev. Div.). To facilitate work on classified documents, the Environmental Protection Agency has routinely had on staff an EIS reviewer with high-level security clearances. Personal email correspondence with the author on September 22, 2021, from Dinah Bear, former General Counsel, Council on Environmental Quality and Anne Norton Miller, former Director of the Office of Federal Activities, EPA.

Executive Order 12114 of 1979 supplements the statutory scheme regarding “Environmental Effects Abroad of Major Federal Actions.”⁹⁵ It requires a proponent agency to prepare suitable public documentation regarding U.S.-based activities that may significantly affect the quality of the human environment either in the “global commons” (areas beyond any country’s national jurisdiction) or, in certain circumstances, inside a foreign country.⁹⁶

H. Judicial Review

A critical feature of the EIS process – and a decisive difference with the original ACIS program – is the possibility for judicial review to test the adequacy of the agency’s study and documentation. Although the statute does not explicitly provide for access to court, this recourse has been a prominent feature of NEPA case law since the earliest days, and it has generated an unabating flood of litigation.⁹⁷ Sometimes the proceedings have become intensely politicized, and sufficiently protracted and expensive as to burden all the participants and to delay indefinitely any resolution of the fate of the proposed program.⁹⁸ Sometimes, federal legislation has provided relief from stringent judicial review.⁹⁹

95. Exec. Order No. 12,114, 44 Fed. Reg. 1957 (Jan. 4, 1979); *see also* Mandelker, *supra* note 49, § 5:20; *Env’t Def. Fund, Inc. v. Massey*, 986 F.2d 528 (D.C. Cir. 1993) (applying the executive order to U.S. activities in Antarctica).

96. The executive order requires an environmental assessment or other documentation, rather than a full EIS, and it contains several important exemptions. Unlike the NEPA statute, this executive order does not permit judicial review. Exec. Order 12,114, *supra* note 95, §§ 2-3 (actions included), 2-4 (types of documents to prepare), 2-5 (exemptions), 3-1 (unavailability of judicial review); Mandelker, *supra* note 49, at § 5:20.

NEPA’s statutory applicability to federal actions that carry extraterritorial environmental effects has been controversial. *See* Mandelker, *supra* note 49, §§ 5:18, 5:19 (remarking that “it is fairly clear that NEPA applies to actions in the global commons where no nation has sovereignty.”), 5:21; *see* Dycus, *supra* note 55, at 26-30; *Env’t Def. Fund, Inc. v. Massey*, 986 F.2d 528 (D.C. Cir. 1993); *Consejo de Desarrollo Economico de Mexicali, AC v. United States*, 438 F. Supp. 2d 1207, 1234-36 (D. Nev. 2006), *vacated and remanded*, 482 F.3d 1157 (9th Cir. 2007); Dycus, *Secrets*, *supra* note 93, at 313-14.

97. *See* *Calvert Cliffs’ Coordinating Comm., Inc. v. Atomic Energy Comm’n*, 449 F.2d 1109, 1129 (D.C. Cir. 1971) (affirming judicial review of federal agencies’ compliance with NEPA’s EIS requirement); Mandelker, *supra* note 49, §§ 1:5, 2:4, 4 (discussing NEPA litigation); Luther, *supra* note 51, at 1-2 (noting that no federal agency has enforcement authority for NEPA, so judicial review is the best available recourse).

98. 40 C.F.R. § 1501.10 (2022) (regulation establishing time limits on environmental reviews, providing that an environmental assessment should ordinarily be completed within one year and an EIS within two years); *see* Mandelker, *supra* note 49, §§ 2:17, 7:3 (discussing efforts to streamline the EIS procedures); David E. Adelman & Robert L. Glicksman, *Presidential and Judicial Politics in Environmental Litigation*, 50 ARIZ. ST. L.J. 3, 3-4 (2018); Richard J. Lazarus, *The Power of Persuasion Before and Within the Supreme Court: Reflections on NEPA’s Zero for Seventeen Record at the High Court*, 2012 U. ILL. L. REV. 231, 232 (2012); Luther, *supra* note 51, at 9, 26-31.

99. Mandelker, *supra* note 49, § 2:29 (discussing legislation streamlining ordinary NEPA procedures for selected highway projects, including mitigating the opportunities for judicial review); Luther, *supra* note 51, at 29-31 (describing efforts to expedite the NEPA process).

Occasionally, a key early procedural hurdle in the EIS litigation has been the question of “standing to sue.” The legal issue has been determining the circumstances under which aggrieved individuals or organized groups of environmental activists are deemed to present a cognizable “injury in fact” which would entitle them to challenge the proposed major federal action.¹⁰⁰

I. Conclusion

NEPA, and the associated administrative, legislative, and judicial maelstrom surrounding it, have irrevocably changed U.S. culture. Opponents still rail against the whole EIS process, blaming it for blocking or delaying projects or making them more cumbersome and expensive. Critics have vigorously challenged the concept behind the statute and the execution of its mandates. Nevertheless, this innovative law has endured, and detractors now acknowledge that environmental assessment is inevitably going to be a staple part of any big project. Even NEPA’s proponents would not claim that the legislation has achieved all of the goals articulated for it in 1969, but over fifty years, the EIS has successfully insinuated itself into American law and practice.¹⁰¹

III. OTHER TYPES OF IMPACT STATEMENTS

NEPA’s success has inspired legions of copycats -- in U.S., foreign, and international law -- adapting the concept of formalized impact assessment to facilitate an organized social response to a diverse array of challenges. Some of these knock-offs do not adopt the formal moniker of “impact assessment,” and some of them get pretty far afield from this Article’s central concerns, but this section surveys some of the leading exemplars. These illustrate that it is not something special about environmental law that makes this mechanism work.¹⁰² Moreover, they help demonstrate the recurrent value of the “close look” strategy in making hard public policy decisions, and they suggest some features that might be profitably borrowed for a revived ACIS process.

A. U.S. State Legislation

The most overt replication of the federal NEPA has been the enactment, in sixteen U.S. states of corresponding laws that apply similar study and documentation

100. See Mandelker, *supra* note 49, §§ 4:9, 4:18, 4:19, 12.8 (discussing standing to sue under various states’ versions of NEPA).

101. See Mandelker, *supra* note 49, §§ 11:2 (presenting views of NEPA’s detractors and defenders), 11:5 (discussing academic writing that evaluates NEPA’s effectiveness).

102. See Mandelker, *supra* note 49, § 2:25 (discussing environmental review requirements in numerous other U.S. statutes).

requirements to major actions proposed by that state's government.¹⁰³ These "little NEPAs" vary considerably, with California's being the most aggressive.¹⁰⁴

B. Other Countries

Daniel R. Mandelker has observed that "Environmental assessment is an American innovation that has spread worldwide."¹⁰⁵ By one count, at least 183 countries have mimicked in their own domestic law some variant of the concept of mandatory pre-decisional rigorous environmental impact assessment of proposed government activities.¹⁰⁶ Prominent examples include members of the European Union, the United Kingdom, and Canada, each of which incorporates its own variations and special features.¹⁰⁷

C. International Law

Treaties offer several expressions of the NEPA procedural strategy of requiring authorities to take a pre-decisional "hard look" at a contentious environmental or other issue, without necessarily mandating a thumb on either side of the scale regarding the ultimate substantive outcome. Three examples are most illuminating, beginning with one that is closest in character to an EIS and culminating with one that bears similarities to an ACIS.

The first illustration comes from the 1982 U.N. Convention on the Law of the Sea (UNCLOS),¹⁰⁸ which serves grandly as a "constitution for the oceans," in

103. See COUNCIL ON ENV'T. QUALITY, *States and Local Jurisdictions with NEPA-Like Environmental Planning Requirements*, <https://ceq.doe.gov/laws-regulations/states.html> (last visited Apr. 9, 2022) (linking to state and local laws echoing NEPA).

104. Mandelker, *supra* note 49, §§ 1:7,12 (generally discussing state environmental assessment laws), 12.3 (California), 12.4 (New York).

105. Mandelker, *supra* note 49, § 13:1.

106. Tseming Yang, *The Emergence of the Environmental Impact Assessment Duty as a Global Legal Norm and General Principle of Law*, 70 HASTINGS L.J. 525, 527 (2019); COUNCIL ON ENV'T QUALITY, *International Environmental Impact Assessment*, https://ceq.doe.gov/get-involved/international_impact_assessment.html (listing countries that maintain some NEPA-like requirements for environmental assessment); NETH. COMMISSION FOR ENV'T ASSESSMENT, *Why ESIA/SEA?*, <https://www.eia.nl/en/our-work/why-esiasea> (last visited Apr. 9, 2022) (presenting interactive map showing increase over time in national laws requiring environmental assessment). See generally, INT'L ASS'N FOR IMPACT ASSESSMENT, *About IALA*, <https://iaia.org/about.php> (last visited Apr. 9, 2022) (describing the work of this global network of diverse professionals promoting the use of organized impact assessment tools for informed public policy decision-making).

107. Mandelker, *supra* note 49, § 13; see Council Directive 85/337/EEC, of June 27, 1985 on the Assessment of the Effects of Certain Public and Private Projects on the Environment, 1985 O.J. (L 175) 40, <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:51993PC0575&rid=8>.

108. United Nations Convention on the Law of the Sea, Dec. 10, 1982, 1833 U.N.T.S. 3, 397 [hereinafter UNCLOS]. There are 168 parties to this treaty; the United States is not a party. *Law of the*

regulating human activities on, under, and over the global waterways. It deals comprehensively with enterprises such as fishing, mining, and navigation, all of which have profound environmental consequences. Accordingly, UNCLOS article 206 specifies:

When States have reasonable grounds for believing that planned activities under their jurisdiction or control may cause substantial pollution of or significant and harmful changes to the marine environment, they shall, as far as practicable, assess the potential effects of such activities on the marine environment and shall communicate reports of the results of such assessments in the manner provided in article 205.¹⁰⁹

Accompanying provisions require that states shall, “endeavour, as far as practicable, directly or through the competent international organizations, to observe, measure, evaluate and analyse, by recognized scientific methods, the risks or effects of pollution of the marine environment”¹¹⁰ and that states “shall publish reports of the results obtained pursuant to article 204 or provide such reports at appropriate intervals to the competent international organizations, which should make them available to all States.”¹¹¹ All these provisions resonate with NEPA, which had been enacted shortly before the UNCLOS negotiations commenced.

Second, veering away from the focus on environmental issues, a rather different sort of comparison comes from the 2013 Arms Trade Treaty.¹¹² It attempts to regulate the burgeoning international commercial market for eight categories of major conventional weapons (including tanks, combat aircraft, and warships, as well as small arms and light weapons).¹¹³ In view of the many legitimate purposes that international traffic in these armaments can serve, as well as the potential for aggravating local arms races and human rights violations, the negotiating states could not agree to categorically prohibit or restrict the transfers,¹¹⁴ nor to create some sort

Sea, UNITED NATIONS TREATY COLLECTION, https://treaties.un.org/Pages/ViewDetailsIII.aspx?src=TREATY&mtdsg_no=XXI-6&chapter=21&Temp=mtdsg3&clang=_en (last visited Apr. 9, 2022).

109. UNCLOS, *supra* note 108, art. 206.

110. UNCLOS, *supra* note 108, art. 204.

111. UNCLOS, *supra* note 108, art. 205.

112. Arms Trade Treaty, June 3, 2013, 3013 U.N.T.S., <https://www.thearmstradetreaty.org/hyper-images/file/TheArmsTradeTreaty1/TheArmsTradeTreaty.pdf> [hereinafter ATT]. As of March 2022, there are 111 parties to this treaty; the United States is not a party. *Arms Trade Treaty*, UNITED NATIONS TREATY COLLECTION, <https://treaties.un.org/doc/Publication/MTDSG/Volume%20II/Chapter%20XXVI/XXVI-8.en.pdf> (last visited Apr. 9, 2022).

113. ATT, *supra* note 112, art. 2.

114. In some circumstances, the treaty does directly prohibit a proposed arms transfer: if the transfer would violate U.N. Security Council sanctions, if it would violate a treaty, or if the weapons

of international body that would be authorized to permit, ban, or limit them. Instead, the treaty's key article requires that each party contemplating an arms export:

shall, in an objective and non-discriminatory manner, taking into account relevant factors, including information provided by the importing State in accordance with Article 8 (1), assess the potential that the conventional arms or items:

- a. would contribute to or undermine peace and security;
- b. could be used to:
 - i. commit or facilitate a serious violation of international humanitarian law;
 - ii. commit or facilitate a serious violation of international human rights law;
 - iii. commit or facilitate an act constituting an offence under international conventions or protocols relating to terrorism to which the exporting State is a Party; or
 - iv. commit or facilitate an act constituting an offence under international conventions or protocols relating to transnational organized crime to which the exporting State is a Party.¹¹⁵

The state contemplating an export makes a unilateral judgment about these variables, but there are bottom-line legal consequences: "If, after conducting this assessment and considering available mitigating measures, the exporting State Party determines that there is an overriding risk of any of the negative consequences in paragraph 1, the exporting State Party shall not authorize the export."¹¹⁶

In undertaking this independent assessment, the exporting state is required to consider "whether there are measures that could be undertaken to mitigate risks identified"¹¹⁷ above, and it "shall make available appropriate information about the authorization in question, upon request, to the importing State Party."¹¹⁸ If, after a

would be used in the commission of war crimes, genocide, or crimes against humanity. ATT, *supra* note 112, art. 6.

115. ATT, *supra* note 112, art. 7.1.

116. ATT, *supra* note 112, art. 7.3.

117. ATT, *supra* note 112, art. 7.2

118. ATT, *supra* note 112, art. 7.6.

party has authorized a particular export, it “becomes aware of new relevant information, it is encouraged to reassess the authorization after consultations, if appropriate, with the importing State.”¹¹⁹

Again, in a manner comparable to NEPA, the Arms Trade Treaty does not directly prohibit the arms sales in question here; instead, the strategy is to require the putative exporter to think in good faith about the proposal in a serious, organized way, to take all relevant factors into account, and to document its choices.¹²⁰ Critics complain that this “self-judging” aspect of the ATT has severely undercut the treaty’s effectiveness. Exporting states have routinely found it easy enough to justify all their contemplated international transfers; the treaty’s mechanisms have not, in practice, greatly inhibited illegitimate or unwise weapons traffic.¹²¹ But, again, the point of the comparison is to suggest that a legal requirement for rigorous, wide-ranging evaluation can be applicable even in circumstances where weapons policies and defense priorities are at stake.

A third illustration, again quite distant from environmentalism, is found in art. 36 of the 1977 First Additional Protocol to the 1949 Geneva Conventions.¹²² It establishes an obligation to assess any new weapon, prior to its use in combat, for consistency with the law of war.

119. ATT, *supra* note 112, art. 7.7.

120. See also the domestic U.S. law on international arms sales, 22 U.S.C § 2765 (requiring annual reports to Congress justifying international arms sales, including an analysis of “the United States national security considerations involved in expected sales or licensed commercial exports to each country, an analysis of the relationship between anticipated sales to each country and arms control efforts concerning such country and an analysis of the impact of such anticipated sales on the stability of the region that includes such country”). *Id.* at (a)(3).

121. CONTROL ARMS, ATT MONITOR REPORT 2020 16-17 (Daniel Mack, Carina Solmirano, & Katherine Young eds., 2020), https://attmonitor.org/wp-content/uploads/2020/11/EN_ATT_Monitor-Report-2020_Online.pdf (critiquing arms transfers where the weapons were later used to commit atrocities); AMNESTY INT’L & PROJECT PLOUGHSHARES, “No Credible Evidence” — Canada’s Flawed Analysis of Arms Exports to Saudi Arabia (2021), https://ploughshares.ca/wp-content/uploads/2021/08/NoCredibleEvidence_EN.pdf (critiquing Canada’s self-assessment of its compliance with the Arms Trade Treaty); Dan Sabbagh, *UK Authorised L1.4bn of Arms Sales to Saudi Arabia After Exports Resumed*, THE GUARDIAN (Feb. 9, 2021), <https://www.theguardian.com/world/2021/feb/09/uk-authorised-14bn-of-arms-sales-to-saudi-arabia-after-exports-resumed>; Rayhan Uddin, *Saudi Arabia Arms Sales: Which Countries Are Still Exporting?*, MIDDLE EAST EYE (Feb. 19, 2021), <https://www.middleeasteye.net/saudi-uae-coalition-arms-sales-country-breakdown>; William Pons, *Defeating the Object and Purpose of the Arms Trade Treaty: An Analysis of Recent U.S. Arms Sales to Saudi Arabia*, 35 AM. UNIV. INT’L L. REV. 133 (2019).

122. Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of International Armed Conflicts (Protocol 1), adopted June 8, 1977, art. 36, 1125 U.N.T.S. 3, https://www.un.org/en/genocideprevention/documents/atrocities-crimes/Doc.34_AP-I-EN.pdf [hereinafter AP1]. There are 118 parties to this treaty; the United States is not a party. *Protocol Additional*, UN TREATIES, https://treaties.un.org/Pages/showDetails.aspx?objid=08000002800f3586&clang=_en (last visited Apr. 9, 2022).

In the study, development, acquisition or adoption of a new weapon, means or method of warfare, a High Contracting Party is under an obligation to determine whether its employment would, in some or all circumstances, be prohibited by this Protocol or by any other rule of international law applicable to the High Contracting Party.¹²³

Although the United States is not a party to this treaty, internal U.S. law has long established a parallel obligation for legal review prior to the procurement or deployment of any new weapon. The standard protocol for this legal review generally adheres to the international criteria, asking whether the weapon's intended use is calculated to cause superfluous injury; whether the weapon is inherently indiscriminate; and whether the weapon falls within a class of weapons that has been specifically prohibited. In addition, the analysis may identify particular measures that should be adopted in order to help ensure compliance with law of war obligations, such as advising about special training programs or about the promulgation of specific military doctrine or rules of engagement related to the new weapon.¹²⁴

While it is impossible to determine how in-depth these internal legal reviews have generally been (or to know how many systems have flunked the analysis), this type of mandatory assessment partially resonates with the mixed law and policy appraisal of an EIS. The comparison illustrates the viability of a procedure that requires a deliberative pause, insisting upon a mandatory careful review, even of a weapons-related program that has proceeded quite far down the developmental path.

D. Miscellaneous Assessments

Finally, it is noteworthy that the vocabulary and format of formalized "impact assessment" have generally caught the *zeitgeist* of modern U.S. society, with NEPA's conceptual structure being adapted in multiple, diverse contexts far removed from environmentalism.

For example, federal agencies have long been required to undertake a Regulatory Impact Analysis prior to the issuance of new administrative regulations, to promote a rational process for collecting, organizing, and analyzing data about the

123. AP1, *supra* note 122, at 21; see also INT'L COMM. OF THE RED CROSS, *A Guide to the Legal Review of New Weapons, Means and Methods of Warfare: Measures to Implement Article 36 of Additional Protocol I of 1977* (January 2006), https://www.icrc.org/en/doc/assets/files/other/irrc_864_icrc_geneva.pdf.

124. U.S. DEP'T OF DEF., DIRECTIVE 5000.01, THE DEF. ACQUISITION SYSTEM § sec. 1.2.v (2020); U.S. DEP'T OF DEF., DIRECTIVE 2060.01, IMPLEMENTATION OF, AND COMPLIANCE WITH, ARMS CONTROL AGREEMENTS, (2020); U.S. DEP'T OF DEF., LAW OF WAR MANUAL JUNE 2015 337-39 (2016); MICHAEL MEIER, U.S. DELEGATION STATEMENT ON "WEAPON REVIEWS", (APR. 13, 2016), <https://geneva.usmission.gov/2016/04/13/u-s-statement-at-the-ccw-informal-meeting-of-experts-on-lethal-autonomous-weapons-systems/>.

possible impacts and burdens of various new policy options, and to promote evidence-based public policy decision-making.¹²⁵ Health Impact Assessment is defined as "a combination of procedures, methods, and tools by which a policy, program, or project may be judged as to its potential effects on the health of a population, and the distribution of those effects within the population."¹²⁶ A Small Business Economic Impact Statement is a public document, required by some U.S. states, to reveal how a government agency has formally evaluated the costs of a proposed new regulation on small businesses, and how those costs can be mitigated.¹²⁷ The U.S. government must file a Competitive Impact Statement to accompany any consent judgment in an antitrust case, to explain to the public the case and the nature of the proposed resolution.¹²⁸ A Disparity Impact Statement will "measure and inform how different services will be delivered to, and received by, underserved groups within the general population," thereby clarifying existing inequalities and plans to ensure fair access and quality of service.¹²⁹ An Agricultural Impact Statement is required in some states when a public project involves acquiring or significantly affecting farmland (more than five acres).¹³⁰

As a thousand different forms of impact statements bloom, there can be no guaranty that a formalized, fact-based, all-encompassing analytical procedure, accompanied by public disclosure and debate, can automatically dramatically improve public policy. But there is certainly evidence of widespread support for the tactic, and diverse commitments to implementing it in all sorts of venues.¹³¹ The next

125. Exec. Order No. 12,866, Regulatory Planning and Review, September 30, 1993, 58 Fed. Reg. 51735-44 (1993); OFF. OF THE ASSISTANT SEC'Y FOR PLAN. AND EVALUATION, U.S. DEP'T OF HEALTH AND HUM. SERVS., GUIDELINES FOR REGULATORY IMPACT ANALYSIS (2016); OFF. OF INFO. AND REGUL. AFFS., OFF. OF MGMT. AND BUDGET, REGUL. IMPACT ANALYSIS: A PRIMER (2011).

126. WORLD HEALTH ORG., EUR. CTR. FOR HEALTH POL'Y, HEALTH IMPACT ASSESSMENT: MAIN CONCEPTS AND SUGGESTED APPROACH 4 (1999); WORLD HEALTH ORG., *Health Impact Assessment*, https://www.who.int/health-topics/health-impact-assessment#tab=tab_1 (last visited Mar. 27, 2022).

127. See WASH. GOVERNOR'S OFF. FOR REG. INNOVATION AND ASSISTANCE, *Attorney General's RFA Guidance*, Small Business Economic Impact Statements – Frequently Asked Questions, https://www.oria.wa.gov/site/alias__oria/934/Regulatory-Fairness-Act-Support.aspx (last visited Apr. 9, 2022).

128. Section 2(b) of the Antitrust Procedures and Penalties Act, 15 U.S.C. § 16(b).

129. POLICY RESEARCH ASSOCS., *Creating Disparity Impact Statements to Optimize Early Diversion in Reducing Disparities* (Oct. 19, 2018), <https://www.prainc.com/disparity-impact-statements-early-diversion/>.

130. WIS. DEPT. OF AGRIC., TRADE AND CONSUMER PROT., *Agricultural Impact Statements (AIS)*, https://datcp.wi.gov/Pages/Programs_Services/AgriculturalImpactStatements.aspx.

131. As another point of comparison, the Department of State annually prepares a variety of detailed analytic reports on vital public policy issues, such as various countries' human rights practices, sponsorship of terrorism, and compliance with arms control treaties. These are not "impact statements" in the sense addressed in this Article, and they evaluate the behaviors of other countries, rather than of the United States itself. But they do illustrate the heuristic value of rigorous, fact-based analysis and of public presentation of the results. See U.S. DEP'T OF STATE, *Country Reports on Human Rights Practices*, <https://www.state.gov/reports/2021-country-reports-on-human-rights-practices/> (last visited May. 13,

section of this Article, therefore, turns to the possibility of re-establishing a cognate mechanism in the one field where this format of rigorous analysis and documentation was previously applied with a conspicuous lack of success. It will attempt to marshal the lessons learned from environmental and other impact statements and argue in support of a revived Arms Control Impact Statement procedure.

IV. A NEW ARMS CONTROL IMPACT STATEMENT

This Article proposes a new ACIS process, which Congress should establish, presumably through new comprehensive federal legislation, based upon the several partial precedents addressed above.¹³² This section is organized around a series of questions that will have to be resolved in the development of such a revived ACIS program, based upon the successes and shortcomings of NEPA, the original ACIS, and other similar schemes.

A. What Subjects Should an ACIS Address?

The first significant question is which sorts of proposed governmental programs, activities, and other decisions should require the development of a new ACIS. In other words, what should be the scope of a new statute's mandatory oversight?

The two primary precedents differ in important ways here. NEPA tersely addresses "major federal actions," with no further statutory elaboration; it has been left to the Council on Environmental Quality and the courts to define the contours of that mandate, with the result being a very wide remit. Of course, EISs have been prepared for significant construction, engineering, and licensing projects, but some form of environmental documentation has also been filed for activities such as the negotiation and conclusion of treaties that limit nuclear weapons.¹³³ In contrast, the original ACIS legislation applied to three designated categories: nuclear weapons; expensive weapons; and a catch-all category of other weapons that the director of

2022); U.S. DEP'T OF STATE, *State Sponsors of Terrorism*, <https://www.state.gov/state-sponsors-of-terrorism/> (last visited Apr. 9, 2022); U.S. DEP'T OF STATE, *2021 Adherence to and Compliance With Arms Control, Nonproliferation, and Disarmament Agreements and Commitments* (Apr. 15, 2021), <https://www.state.gov/2021-adherence-to-and-compliance-with-arms-control-nonproliferation-and-disarmament-agreements-and-commitments/>.

132. It could also be possible to establish important portions of this proposal through executive branch action, without requiring legislation, at least as an initial matter, but further consideration of that procedural route is beyond the scope of this Article.

133. DAVID A. KOPLOW, *BY FIRE AND ICE: DISMANTLING CHEMICAL WEAPONS WHILE PRESERVING THE ENVIRONMENT* 89-90 (1997) (describing environmental documentation for arms control treaties).

ACDA believed “may have a significant impact on arms control and disarmament policy or negotiations.”¹³⁴

This Article proposes a broad initial scope for the new iteration of ACIS, to sweep into the program a wide array of activities, subject to the possibility (noted *infra*) that some of them could be disposed of in relatively abbreviated fashion. Starting at the highest level, the reach of the inquiry should extend beyond the original ACIS’s focus on “arms control and disarmament policy and negotiations”¹³⁵ to explicitly embrace a full spectrum of issues and concerns. This should include arms control, disarmament, proliferation, national and global security, crisis and arms race stability, deterrence, counterterrorism, U.S. military and intelligence budgets, “confidence-building measures,” existing and prospective treaties and non-legally binding regimes, and more.¹³⁶

In particular, major weapons programs (involving both nuclear and non-nuclear weapons, and implicating more or less than \$250 million) could have significant arms control impact, as could programs that are not directly or immediately related to weapons, but that involve “dual-use” technology that could be rapidly adapted for warlike applications.¹³⁷ Aside from U.S. government procurement activities, international sales and other transfers of major weapons should be studied in similar fashion, along with proposed decisions to alter the terms of international cooperative regimes that coordinate various states’ export control

134. Sec. 36, *supra* note 4, (a)(3). Note that for this catch-all category, an ACIS is required only if the National Security Council concurred with the ACDA director’s judgment that the program would have a significant impact on arms control policy and negotiations. *Id.* (b)(2)(B); see Lall, *supra* note 5, at 1-3 (suggesting that the true objective should be to assess a program’s consistency with arms control (and non-proliferation, etc.), not necessarily its consistency with the current U.S. government *policy* concerning arms control (and non-proliferation, etc.)) Of course, those factors will overlap, but if the current government policy is to oppose meaningful arms control, it could endorse unwise weapon programs).

135. Sec. 36, *supra* note 4, (b)(2).

136. For convenience, this diverse set of interests can still be referred to by a catch-all term such as “arms control,” and the familiar caption of “ACIS” can still be used.

137. The Department of Justice, Office of Legal Counsel, determined in 1978 that the original ACIS statute did not require an ACIS for new technology programs that were not designed or intended to be applied as weapons, even if that technology might foreseeably be later turned to weapons uses. Memorandum Op. by the Dep’t of Justice Off. Of Legal Couns. for the Gen. Couns., Dep’t of Energy 78-12 (Feb. 27, 1978). This statutory standard was later amended, to apply the ACIS requirement even for technologies for which the potential weapons applications had not yet ripened. Pub. L. No. 95-338, § 2(B), 92 Stat. 458 (1978) (substituting “technology with potential military application or weapons systems” for “weapons systems or technology.”); see also 1979 Hearings, *supra* note 7, at 7, 17 (statement of Barry M. Blechman, observing that the FY 1980 ACIS package included, for the first time, a discussion of a non-weapon technology, inertial confinement fusion; for FY 1981, several non-weapon technologies were included); CRS 1979 Analysis, *supra* note 7, at 133, 149 (discussing ACIS consideration of non-weapons and dual-capability programs of the Department of Energy, such as inertial confinement fusion.); *cf.* Scis. Inst. for Pub. Info., Inc. v. Atomic Energy Comm’n, *supra* note 66 (holding that an EIS was required for the development of a liquid metal fast breeder reactor, even though the program was still in the research phase).

regulations for weapons and associated components, services, and technologies.¹³⁸ In some instances, non-hardware innovations, such as the development of new military “tactics, techniques, and procedures” (TTPs)¹³⁹ and the training of foreign military units and individuals would also be relevant.¹⁴⁰

The concept of new ACISs would require careful analysis of activities that might be expected to have a “positive” effect on arms control and disarmament,¹⁴¹ as well as those that might threaten to move in an adverse direction. The rigorous comparison of alternatives (including the “no action” alternative)¹⁴² could also illuminate a broader range of options that might be pursued. In this spirit, proposals to initiate or conclude (or not) the negotiation of a new arms control treaty or a non-legally binding regime, such as the Joint Comprehensive Plan of Action with Iran, would be evaluated in this way, as well as proposals to amend or withdraw from such accords. Likewise, programs or agreements designed to create new surveillance technologies and procedures (to enable better verification of compliance with current and future arms control regimes) should be subject to an ACIS. Similarly, the procedure should also apply to any reverse program intended to enhance the concealment ability to escape effective international monitoring.¹⁴³

138. See ATT, *supra* note 112; see also Daryl G. Kimball, *U.S. Reinterprets MTCR Rules*, ARMS CONTROL TODAY (Sept. 2020) (reporting Donald Trump Administration’s announcement of unilateral reinterpretation of rules of the Missile Technology Control Regime (a leading mechanism for coordinating export control rules among high-tech countries) in order to expedite sales of unmanned aerial vehicles); ARMS CONTROL ASSOC., *The Wassenaar Arrangement at a Glance, Arms Control Association Fact Sheet* (Dec. 2017), <https://www.armscontrol.org/factsheets/wassenaar> (discussing non-legally-binding mechanism for coordinating exports of weapons-related materials); GOV’T OF AUSTR., *The Australia Group*, <https://www.dfat.gov.au/publications/minisite/theaustraliagroupnet/site/en/index.html> (last visited Apr. 1, 2022) (describing informal forum for coordination of participating states’ export control restrictions on chemical and biological weapons materials).

139. The House committee report on the original ACIS legislation specified that the requirement would apply even to “items of a ‘seminal’ nature, such as major philosophical or doctrinal changes in defense posture or new weapons concepts.” H.R. Rep. No. 94-281, at 6 (1975); CRS 1979 Analysis, *supra* note 7, at 49, 63, 74-76 (analyzing the arms control implications of adopting a “launch on warning” strategy for U.S. nuclear missiles).

140. Alex Horton, *U.S. Military Once Trained Colombians Implicated in Haiti Assassination Plot, Pentagon Says*, WASH. POST (July 15, 2021) <https://www.washingtonpost.com/national-security/2021/07/15/colombia-haiti-us-military/>; Mark Mazzetti, Julian E. Barnes and Michael LaForgia, *Saudi Operatives Who Killed Khashoggi Received Paramilitary Training in U.S.*, N.Y. TIMES (June 22, 2021) <https://www.nytimes.com/2021/06/22/us/politics/khashoggi-saudi-kill-team-us-training.html>; RICHARD F. GRIMMETT & MARK P. SULLIVAN, CONG. RSCH. SERV., RL30532, U.S. ARMY SCHOOL OF THE AMERICAS: BACKGROUND AND CONGRESSIONAL CONCERNS (2001).

141. See *The Arms Control Impact Statement Process*, ARMS CONTROL TODAY 5 (July/Aug. 1976) (recommending that an ACIS could usefully analyze positive arms control developments, such as improved monitoring capabilities); cf ATT, *supra* note 112, art. 7.1(a) (requiring an exporter to assess the potential that the proposed transfer “would contribute to or undermine peace and security”) (emphasis added).

142. Mandelker, *supra* note 49, § 10:32 (discussing evaluation of the no action alternative).

143. See, e.g., Treaty on Open Skies, Mar. 24, 1992, S. Treaty Doc. No. 102-37 (1992) (under the heading, “Basic Elements of Open Skies”). This treaty allows parties to conduct unrestricted aerial

Writ large, the assignment is to cast a critical, intellectually honest eye at the 360-degree effects of proposed federal actions on the whole family of arms control and national security policy, negotiations, and future prospects. The key is to consider the long-term dynamic effects of the government's choices today.¹⁴⁴

B. *When Should an ACIS Be Done?*

The second question is when, and how frequently during a program's lifecycle an impact assessment should be undertaken. Again, the two primary models differ sharply. Critical to the NEPA concept is the requirement to initiate the environmental assessment at the outset of a decision-making process so that the results can be factored into the government's evolving choices. Ordinarily, there is only one EIS for a particular project, unless changed circumstances require a revisit. In contrast, the original ACIS studies were undertaken much later – typically after the weapons procurement program was approaching maturity – and the executive branch kept the program under annual re-appraisal. This led to some of the annual statements becoming basically *pro forma* repetition of prior analyses.

The proposal here draws upon both models, requiring two ACIS submissions of somewhat different character. The first would occur at the outset of the program when the government is trying to decide whether to initiate research on a new weapon concept, or whether to undertake negotiation of a new treaty. The second submission would be required when the project is nearing completion and the decision is whether to proceed with production and deployment of the weapon, or

overflight of neighboring states, employing sophisticated multi-spectral sensors in order to monitor military-related activity, as a safeguard against surprise attacks. The United States and Russia have recently withdrawn from the treaty. Open Skies Consultative Commission, *Conference of States Parties to the Open Skies Treaty discusses U.S. intent to withdraw from the Treaty*, ORG. FOR SEC. AND COOP. IN EUR. (July 7, 2020), <https://www.osce.org/oscc/456646>; *Conference of States Parties to the Open Skies Treaty discusses Russian Federation's intent to withdraw from the Treaty*, ORG. FOR SEC. AND COOP. IN EUR. (July 20, 2021), <https://www.osce.org/oscc/493411> (website of the implementing organization for the Open Skies Treaty, with pages detailing U.S. and Russian intent to withdraw from the treaty); Arms Control Association, *The Open Skies Treaty at a Glance* (June 2021), <https://www.armscontrol.org/factsheets/openskies>; Patrick Tucker, *Why Open Skies Is an Old Fashioned Treaty Worth Keeping*, DEF. ONE (Oct. 9, 2019), <https://www.defenseone.com/technology/2019/10/why-open-skies-old-fashioned-treaty-worth-keeping/160496/>. In a similar vein, the ACIS should evaluate not only a program's consistency with *current* arms control policy, but also its compatibility with possible *future* arms control undertakings. For example, if a proposed new missile could carry both nuclear and conventional warheads, it might offer substantial financial efficiencies, but that interoperability could frustrate any future attempts to negotiate international restraints on the system, because it might be impossible to verify the armaments on an individual missile.

144. Cf. Lauren Woods, *The Top US Diplomat on Arms Control Commits to "Values-Based Security Partnerships" — Here's How to Do That*, JUST SEC. (July 30, 2021), <https://www.justsecurity.org/77644/the-top-us-diplomat-on-arms-control-commits-to-values-based-security-partnerships-heres-how-to-do-that/> (asserting that a governmental "focus on values and effectiveness would be a deeply needed correction to the current trajectory of U.S. security cooperation, which has largely failed to weigh the human rights and security risks of assistance to foreign security forces" and has wrongly prioritized short-term tactical goals over longer-term diplomatic and human rights aims).

whether to sign a nearly-final international agreement.¹⁴⁵ A new or supplemental ACIS should be explored if something important changes later in the program's life cycle – either a significant change in the weapon (such as its cost, the numbers to be procured or transferred abroad, or the way the weapon is to be used) or a change in the international political situation (such as an alteration in the nature of a foreign adversary or partner state).¹⁴⁶ In addition, there should also be a mechanism for keeping an eye on evolving programs that have passed the first ACIS milestone, but have not yet arrived at the second. If important modifications are being made that could indelibly affect the future course of the project, then they should be subject to review before it becomes too late to undo their effects. But there would not be an annual ACIS for any program.¹⁴⁷

C. *What Should Be the Scope of an ACIS?*

Once it is determined that the new ACIS process should be triggered, what exactly should the assessment and documentation address? Of course, this issue is somewhat indeterminate. The appropriate scope of an ACIS will inevitably depend upon its subject, as some types of programs and projects will require bespoke foci for the research and analysis. But more broadly, this question goes to the heart of the ACIS process by implicating the requirement for a broad-based, well-informed, and skeptical “hard look” at the government's proposed action.

The starting point is that the new ACIS would be regarded as essentially “procedural,” in the same way as an EIS and the original ACIS.¹⁴⁸ That is, this process does not dictate or constrain the substantive decisions about whether to proceed with the proposed program or activity – it merely makes those decisions more informed and more public. Other laws such as treaties, statutes, regulations, and other authorities do impose more or less rigid substantive limits on weapons and related undertakings, and the ACIS process would not displace or supplement them. The United States would still be obligated to comply with the existing and evolving corpus of its international law commitments regarding, for example, constraints on

145. This two-step sequence is somewhat similar to the weapons review process under Additional Protocol 1, art. 36 and under comparable domestic U.S. law. AP1, *supra*, note 122 text accompanying note 123. It is also reminiscent of the two-step mechanism established under the “Circular 175” procedure in U.S. law, requiring a formal documentation of authority to initiate a treaty negotiation, and subsequently of authority to conclude and sign the agreement. See U.S. DEP'T OF STATE, *Circular 175 Procedure*, <https://2009-2017.state.gov/s/l/treaty/c175/index.htm> (last visited Apr. 1, 2022).

146. See Mandelker, *supra* note 49, at (discussing preparation of a supplemental EIS when there has been a substantial change in circumstances); ATT, *supra* note 112, art. 7.7 (providing that “If, after an authorization has been granted, an exporting State Party becomes aware of new relevant information, it is encouraged to reassess the authorization after consultations, if appropriate, with the importing State.”).

147. See 1979 Hearings, *supra* note 7, at 3,8 (statement of Barry M. Blechman, questioning the requirement for annual ACIS on each program).

148. *Supra* note 52.

nuclear, chemical, and biological weapons.¹⁴⁹ Conversely, the new ACIS would not compel the United States to honor any of the international accords that it has decided, in the exercise of national sovereignty, not to join, such as the widely-accepted treaties on anti-personnel land mines, cluster munitions, or the abolition of nuclear weapons.¹⁵⁰

The essential feature of an impact analysis is to require the leaders and their support staffs to structure the decision-making process in a rigorous, even-handed way, not relying solely upon the proponent's druthers, the bureaucracy's momentum, or the boss's seat-of-the-pants instincts. They would be required to adopt a long-term perspective, anticipating how other key actors (including allies, adversaries, and others) might dynamically respond to the proposed U.S. action over time, and what the likely implications of those action/reaction cycles might be. They would have to consider deeply – not just as a throw-away debating point – the counterarguments and the viable alternatives to the preferred course of action.¹⁵¹

The new ACIS would require in-depth analysis, writing the evaluations with care, and citing evidence. The process would have to be interdisciplinary, consulting, as appropriate, the perspectives of political science, foreign relations, economics, game theory, military science, law, history, futurology, diplomacy, natural sciences, and more. The government would also be required at the end of the process to articulate the reasons for its decision and explain its rationale.¹⁵²

Unlike the original ACIS – and like the EIS – the revised ACIS would not require presentation of a definitive bottom-line judgment that the proposed program was or was not consistent with current U.S. policies, practices, obligations, and goals. Instead, the documents would simply present the relevant facts and analyses, teeing

149. See Treaty on Measures for the Further Reduction and Limitation of Strategic Offensive Arms, U.S.-Russ., Apr. 8, 2010, T.I.A.S. No. 11-205 (entered into force Feb. 5, 2011); Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction, Jan. 13, 1993, T.I.A.S. No. 97-525 (entered into force Apr. 29, 1997); Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction, Apr. 10, 1972, 26 U.S.T. 583 (entered into force Mar. 26, 1975).

150. Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on Their Destruction, Sept. 18, 1997, 2056 U.N.T.S. 211 (entered into force Mar. 1, 1999) [hereinafter the Ottawa Convention]; Convention on Cluster Munitions, Dec. 3, 2008, 2688 U.N.T.S. 39 (entered into force Aug. 1, 2010); Treaty on the Prohibition of Nuclear Weapons, Sept. 20, 2017, 57 I.L.M. 350 (entered into force Jan. 22, 2021).

151. Cf. Mandelker, *supra* note 49, at 748-54 (discussing a prior CEQ requirement that agencies undertake a "worst case" analysis, when accurate data were unavailable about the likely array of possible outcomes of a proposed action).

152. See letter from Charles R. Gellner, Senior Specialist, Congr. Rsch. Serv., *quoted in* letter from Sens. Sparkman & Case, *supra* note 16 (explaining that "[a]nalysis implies an examination of such matters as causes, effects, purposes, accompanying circumstances, alternatives, reasons in favor or against, costs versus benefits, and historical evolution. To put it in other ways, an analysis of impact might explore historical, political, economic and military factors, or it might be concerned with long-range, or medium and short-term elements.").

up the most controversial points for consideration within national and international political venues.¹⁵³

D. Who Should Participate in the Drafting and Development of an ACIS?

Again, the most squarely applicable precedents press in opposite directions on the question of which federal agencies should routinely participate in the articulation of a new ACIS. Under NEPA, the initiative ordinarily falls to the one agency that is the lead proponent of the anticipated action. Occasionally, other agencies may also participate as their interests are implicated.¹⁵⁴ The original ACIS process, on the other hand, was always a fully interagency affair. Sometimes the sponsor of the weapon program (the Department of Defense or the Department of Energy) undertook the initial drafting; sometimes ACDA took the lead. In either event, the evolving ACIS was discussed and edited collectively by the national security agencies (including the White House). The result, critics complained, was too often a “least common denominator” document that reflected the executive branch’s collective “party line,” rather than preserve contrasting and dissenting views.¹⁵⁵

The 1999 abolition of ACDA¹⁵⁶ – and the seeming improbability of its revival today¹⁵⁷ – alters the bureaucratic landscape that would accommodate a new ACIS process. There is no permanent institutional “skeptic” to challenge the views of the “hard line” departments that would usually be the principal sources of

153. 1979 Hearings, *supra* note 7, at 68 (comments of Paul Walker, suggesting that ACIS do not need to include a bottom-line conclusion); CRS 1979 Analysis, *supra* note 7, at 10 (questioning what type of presentation of conflicting opinions and data would be most useful in an ACIS). For comparison, *see* UNCLOS, *supra* note 108, includes both a “procedural” requirement for environmental impact analysis, arts. 204-06, and a “substantive” obligation to prevent, reduce, and control various sources of pollution, arts. 207-12.

154. Mandelker, *supra* note 49, § 2:18 (noting that each federal agency adopts its own rules for implementing NEPA, including regulations proposed by the U.S. Arms Control and Disarmament Agency on Oct. 21, 1980, to implement its own NEPA obligations, 45 Fed. Reg. 69510 (1980)).

155. For comparison, the process for evaluating the legality of a new weapon has traditionally been solely the responsibility of the Department of Defense, without regular interagency input. *See*, for example, DEP’T OF THE ARMY, *Legal Review of Weapons and Weapon Systems*, AR §§ 27-53 (Oct. 23, 2019).

156. *See The ACDA-USCI Merger into State — The End of an Era, ASS’N FOR DIPLOMATIC STUD. AND TRAINING* (Mar. 18, 2022), <https://adst.org/2016/10/acda-usia-merger-into-state-end-of-an-era/>.

157. *See, e.g.*, James E. Goodby & David A. Koplow, *An Ambitious Arms Control Agenda Requires a New Organization Equal to the Task*, BULL. OF THE ATOMIC SCIENTISTS (Jan. 26, 2021), <https://thebulletin.org/premium/2021-01/an-ambitious-arms-control-agenda-requires-a-new-organization-equal-to-the-task/>; Rebecca Davis Gibbons, *Bring Back the Arms Control and Disarmament Agency*, BELFER CTR. (Oct. 3, 2019), <https://www.belfercenter.org/publication/bring-back-arms-control-and-disarmament-agency>; Leon Ratz, *Organizing for Arms Control: The National Security Implications of the Loss of an Independent Arms Control Agency*, BELFER CTR. (Sept. 2013), <https://www.belfercenter.org/sites/default/files/legacy/files/Organizing%20for%20Arms%20Control%20-%20Web%203.pdf>.

information about new weapon programs. On the other hand, some of the traditional tensions inside the executive branch and with the Congress regarding the original ACIS routine stemmed from the fact that it was ACDA, the persistent institutional gadfly, that was the central node for the project. And sometimes, ACDA may have soft-peddled some of its instinctive vigor in the ACIS process, due to a desire to retain good working relationships with the other bureaucratic entities.¹⁵⁸

In a revised ACIS process, several different agencies might be called upon to initiate the review for different types of programs and activities. As before, the Department of Defense and the Department of Energy would be expected to lead the drafting enterprise regarding most new weapons, including decisions to conduct research, testing, production, and deployment. Components of the Intelligence Community might likewise initiate some new ACIS, and comment on others. The Department of State would be expected to lead the preparation of documents about proposals to undertake or resist negotiation of new arms control treaties, and to contribute most authoritatively about the likely foreign responses to new U.S. weapon programs that were the subject of an ACIS drafted by other agencies. Acting in its coordinating role, the National Security Council staff could also contribute its perspectives to the documents and would be responsible for ensuring that the whole federal national security community participated fully and in a timely manner.

The new ACIS should be conceptualized as a responsibility on the entire executive branch, to ensure the collection of expertise from all the affected stakeholders.¹⁵⁹ Of course, there is always a danger that an enforced groupthink will inhibit creativity and suppress outlying views. Yet, there are also plenty of examples of robust, sustained interagency differences of opinion.¹⁶⁰

It might be theoretically possible to create an outside (or semi-outside) independent review body to adjudicate agencies' competing positions regarding a draft ACIS, and to ensure that the interagency process was honestly collecting and evaluating all the diverse considerations and perspectives. But that is not the proposal here.¹⁶¹ ACDA was not truly that sort of ombudsperson for the original

158. Just as the EPA has many duties beyond the EIS process, the original ACIS process was a relatively small part of ACDA's statutory responsibilities. The maintenance of functional interagency relationships therefore had to be a priority.

159. Like NEPA, the ACIS requirement would not apply to the President, the Congress, or federal courts. 40 C.F.R. 1508.12 (2022).

160. See Eric Rosenbach & Aki J. Peritz, *National Intelligence Estimates*, BELFER CTR. 37 (July 2009), <https://www.belfercenter.org/sites/default/files/files/publication/IC-book-finalasof12JUNE.pdf> (noting that the process of securing interagency agreement on a national intelligence estimate can encounter problems of gridlock, compromise to a "lowest common denominator," and groupthink).

161. As noted above, the General Accounting Office and the Congressional Research Service both undertook thorough evaluations of the early ACIS submissions, assisting the Congress in reviewing the executive branch filings, and the Congressional Research Service drafted "model" evaluations. *Supra* note 19. Agency inspector generals also perform an independent watchdog function. See COUNCIL OF THE INSPECTORS GEN. ON INTEGRITY AND EFFICIENCY, <https://www.ignet.gov/> (last visited April 1, 2022). Another model is provided by the U.S. Privacy and Civil Liberties Oversight Board, an independent agency within the executive branch established to "ensure that the federal government's efforts to prevent

ACIS; the agency was fully part of the executive branch, and the Director served at the pleasure of the president. For comparison, the Council on Environmental Quality has some leadership responsibility to sit on top of the EIS process – it can issue binding regulations interpreting and applying the underlying statute in a way that ACDA never could. But CEQ does not have the authority to insist that an environmental assessment process be initiated or to reject or amend a draft EIS.

E. What Role Should Outsiders Play in Commenting on a Draft ACIS?

In the NEPA process, a draft EIS is ordinarily released for public notice and comment, and the proponent is required to consider and respond to that input before the document is finalized and the decision can be made to proceed with the proposal. In the original ACIS process, there was no minuet of that sort. The executive branch delivered all the statements in a single batch to Congress, and that was the end of the process until the next year's cycle.¹⁶²

This Article tilts toward the NEPA mechanism here, for three related reasons. First, there is the general value of transparency and accountability, in displaying the government's procedures and rationales for all to see. This helps to ensure against an adverse "capture" of the process by interested insiders. Second, is the virtue of public participation, allowing the full-throated democratic process to assert itself before an irrevocable decision is cast on such monumental issues. Third, the wisdom of the crowd may contribute facts or rebuttal ideas that the executive branch has not yet fully considered. The process of social engagement can lead to better decisions.

In a democracy, multiple voices should have a meaningful opportunity to second-guess the agency that initially sponsors a major arms control-related program, and all three branches of government can play their roles. Inside the executive branch, divergent agency perspectives can be marshalled. Congress should review the new ACIS documents when it legislates or provides advice and consent to treaties. As discussed below, judicial review can play an indispensable role, too. One important institutional reform for the legislative branch would be simply to pay more attention to the ACIS documents. If Congress were to take its unique role in the ACIS process more seriously by studying and discussing the submissions, citing them in hearings and in floor debates, and generally holding the executive's feet to the fire,

terrorism are balanced with the need to protect privacy and civil liberties." *History and Mission*, U.S. PRIV. AND CIV. LIBERTIES OVERSIGHT BD., <https://www.pclob.gov/About/HistoryMission> (last visited April 1, 2022). None of these institutions seems appropriate for the mission of reconciling competing interagency perspectives about the arms control impacts of controversial programs.

162. For comparison, under UNCLOS, *supra* note 108, art. 205, a party is required to publish the results of its environmental investigations or to provide reports to other states at appropriate intervals.

that degree of oversight would also prompt better performance by any administration.¹⁶³

F. *Should There Be Judicial Review of a New ACIS?*

In some ways, the topic of judicial review poses the most difficult question for the proposal – whether to promote opportunities for a new wave of protracted litigation and the concomitant delays and costs. There are important competing considerations on both sides.

On the one hand, ACIS litigation would surely threaten to slow the already-cumbersome process of government decision-making in the national security space. Sometimes, it does not matter so much what a decision is – it just matters that there be a decision; the familiar military epigram holds that a “good” solution today is better than a “perfect” solution tomorrow. In addition, for many of the programs addressed here, there is not a genuinely “perfect” answer. These programs are the fodder for persistent, indeterminate political wrangling among domestic and international contestants, which is not so suitable for cool courtroom evaluation. Likewise, there are often significant financial penalties in delay – if procurements are interrupted or modified, then the costs inevitably rise.

Relatedly, a long line of canonical judicial opinions acknowledges the importance of allowing the United States to “speak with one voice” when confronting foreign sovereigns. There can be great value in maximizing the opportunity for the executive branch to construct a policy that is consistent and unequivocal, especially where primordial issues of national security are implicated.¹⁶⁴ Any procedure that delayed or befuddled the President’s ability to achieve closure on a decision would disserve the goals of cohesiveness and responsiveness, which can be critical.

On the other hand, one clear lesson from juxtaposing the EIS and ACIS experiences is that only the availability of judicial review puts real teeth into the assessment process.¹⁶⁵ Despite the facially mandatory obligation for robust, reflective pre-decisional evaluation, the U.S. government will not approach the task with full seriousness if left wholly to its own devices. Only the prospect of having an independent branch looking over its shoulder drives the process forward. Therefore, this Article recommends a statutory provision explicitly applying NEPA-like provisions for judicial review to enforce a new ACIS structure. Similar to NEPA, there should be no provision for the award of monetary damages in ACIS litigation.

163. See Clarke, *supra* note 3, at 201-03 (discussing rare instances of Congress using information from an ACIS during legislative debates or citing failure to complete an ACIS on a particular program as a reason to withhold its funding).

164. See *United States v. Curtiss-Wright Export Corp.*, 299 U.S. 304 (1936); *United States v. Belmont*, 301 U.S. 324 (1937); *United States v. Pink*, 315 U.S. 203 (1942); Sarah H. Cleveland, *Crosby and the One-Voice Myth in U.S. Foreign Relations*, 46 VILL. L. REV. 975 (2001).

165. Mandelker, *supra* note 49, § 3:1 (concluding that “judicial review is the principal means through which NEPA is enforced”).

The relief would ordinarily be injunctive, ordering the lead agency to undertake a more thorough ACIS analytic and drafting process.¹⁶⁶

The time lag for accommodating judicial review of a new ACIS should be modest – the court is not second-guessing the substantive correctness of the government’s decision to procure a new weapon or to initiate a new treaty. Instead, the scope of review focuses precisely on the mechanical completeness of the government’s decision-making process. Did the affected agencies seriously study the program’s likely impact on the entire array of national security values at stake? Did they consider full range of long- and short-term arms control consequences? Did they genuinely give the requisite hard look to all the available alternatives and opposing views?¹⁶⁷

Moreover, it is not as if the existing U.S. governmental process for making all these critical national security choices is currently such a paragon of smooth, timely, consistent operations, which would be suddenly upset by the introduction of this one-and-only exogenous influence. There are already so many imponderables at play and so many disruptive influences that impede and clog the bureaucratic process. A new ACIS might appropriately be regarded as simply a *de minimis* accretion. Finally, it should be noted that these same types of objections were made, and continue to be made, about the launch of the EIS process. Yet the past fifty years’ experience demonstrates how the governmental system can continue to grind forward, even while grudgingly acknowledging the additional requirements.

A final important aspect of this puzzle will generally remain beyond the scope of this Article: Who should have the requisite standing to sue, to vindicate the commitments of a new ACIS process? There are several parties such as arms control NGOs that could possibly vindicate an interest in arms control, occupying a similar role as environmental NGOs, but there would be unique obstacles where the NEPA example would not be informative. Some of the early NEPA litigation turned on questions of standing: suits initiated by economic rivals or by members of Congress generally fared poorly, while citizen groups and public interest organizations (as well as states and tribal authorities) who have actually used the natural resources threatened by a proposed governmental action have often had more success at satisfying the necessary “injury in fact” and other statutory and constitutional tests.¹⁶⁸ However, it would be much harder for an arms control plaintiff to demonstrate that type of specific, personal engagement in a way that would be distinguishable from

166. See *Pye v. Ga. Dep’t of Transp.*, 513 F.2d 290 (5th Cir. 1975); *United States v. 45,149.58 Acres of Land*, 455 F. Supp. 192 (E.D.N.C. 1978); Mandelker, *supra* note 49, §§ 4:8, 4:77.

167. See Mandelker, *supra* note 49, § 10:62 (discussing courts’ general deference to an agency’s decision about the methodology to use in an EIS).

168. Mandelker, *supra* note 49, §§ 4:9 (observing that “Standing to sue under NEPA has not usually been troublesome,” but noting zigzags in Supreme Court attitudes), 4:15; *Sierra Club v. Morton*, 405 U.S. 727 (1972) (allowing standing for users of a national park, but not for the general public or for environmental organizations); *Lujan v. Nat’l Wildlife Fed’n*, 497 U.S. 871 (1990) (discussing “injury in fact”).

the community as a whole. This puzzle will require additional creative thought for a new ACIS process so that the courtroom doors will open up just wide enough.¹⁶⁹

G. What Flexibility Should Be Built into the ACIS Process?

Like NEPA, a new ACIS mechanism should admit a range of variations and escape hatches. For example, there could be a routine for expedited review of a proposed decision that seems superficially to fall within the scope of the ACIS requirement but does not truly present important issues. If that preliminary investigation concluded that the program would carry only minor, remote, or speculative effects on arms control and related values, then a public “Finding of No Significant Impact” could issue and the process would end.¹⁷⁰

Likewise, it should be possible to cluster together a number of similar or related programs that would carry congruent impacts and evaluate them in a single integrated instrument.¹⁷¹ There could also be tiers of review in appropriate circumstances, such as allowing a high-level “programmatic” ACIS, to be supplemented by one or more small-scale ACIS documents to scrutinize local or specific aspects. The equivalent of an Environmental Assessment, disposing of an inquiry relatively quickly, could also be a useful device in a new ACIS process. All of these instruments could be subject to subsequent re-analysis if important features or contexts change.

Of special importance in the national security realm, an ACIS could be prepared in both classified and unclassified form, as the original ACIS submissions were.¹⁷² The classified version (or a detachable classified annex) could include

169. Mandelker, *supra* note 49, §§ 4:24 (discussing the requirement that standing requires a plaintiff to show that he or she is within the “zone of interest” sought to be protected by the statutory scheme allegedly violated), 4:28 (discussing standing for interest-group organizations), 4:30 (discussing proposals for citizens’ suits), 12.8 (discussing standing under several states’ versions of NEPA legislation).

It might also be possible to streamline future ACIS litigation by establishing procedures to concentrate the caseload in a single specialty court, with expert judges and an expedited timetable, but that concept lies outside the scope of this Article. *See* Dycus, *Secrets*, *supra* note 93, at 310.

170. *See* Mandelker *supra*, text accompanying note 59 (regarding a “finding of no significant impact” in environmental practice); 1979 Hearings, *supra* note 7, at 85 (additional responses from Barry Blechman, suggesting that ACIS should focus on major systems, rather than trying to evaluate each program annually).

171. Mandelker, *supra* note 49, § 10:58 (discussing treatment of connected, cumulative, and similar programs and effects in an EIS); Hart & Tsang, *supra* note 74 (noting that revised CEQ regulations in 2020 narrowed the definition of “effects” that must be addressed in an EIS). *See also supra* note 7 (discussing procedures for combining aggregates of programs in the original ACIS mechanism); CRS 1979 Analysis, *supra* note 7, at 19 (considering four options for addressing a military program in an ACIS: prepare an individual statement about it, include the program in an aggregate ACIS, place the program on an exclusion list, and do nothing).

172. Other comparable documents regarding national security policy are routinely prepared in both classified and unclassified versions. *See, e.g.*, DEP’T OF STATE, ADHERENCE TO AND COMPLIANCE WITH ARMS CONTROL, NONPROLIFERATION, AND DISARMAMENT AGREEMENTS AND COMMITMENTS 1 (2021), <https://www.state.gov/wp-content/uploads/2021/04/2021-Adherence-to-and-Compliance-With->

protected information, such as relevant details about a new weapon's performance parameters or intelligence about how a particular foreign state would likely react to a proposed new treaty. The classified version would be submitted to Congress and would not be subject to public or judicial review.¹⁷³

In addition, if a particular vital national security program truly were on such a "fast track" that elaboration of the ordinary full-scale ACIS algorithm would be improvident, a shortcut should be available. Again, the EIS process points the way: in an emergency, where immediate federal action is imperative, an agency can undertake the necessary prompt steps, and then develop an alternative mechanism for satisfying NEPA after the fact. Use of this escape hatch would have to be unusual; the exception should not swallow the rule. Most of the weapons and other programs of greatest interest in this context are multi-year undertakings. While their proponents routinely claim that only a "short fuse" is applicable for their consideration, that is rarely the case.¹⁷⁴

Finally, Congress could legislatively exempt a particular decision, or a category of decisions, from the ACIS process. This is a step that has been frequently advocated, but rarely invoked, for NEPA. Decisions to deploy military forces into combat or for immediate deterrence operations should be subject to those waivers.¹⁷⁵

V. ILLUSTRATIVE APPLICATIONS

It would surely be premature to proffer here an illustrative draft of a sample future ACIS, since any such document would be lengthy, time-sensitive, and based on close collaboration with multiple stakeholders. But in order to demonstrate more vividly the parameters of the proposal, and to suggest how it might add value to the existing governmental processes, this section sketches rough portraits of what might be elaborated in the future as applied to particular weapons and diplomatic initiatives of great current import.

Arms-Control-Nonproliferation-and-Disarmament-Agreements-and-Commitments.pdf; OFF. OF THE SEC'Y OF DEF., MILITARY AND SECURITY DEVELOPMENTS INVOLVING THE PEOPLE'S REPUBLIC OF CHINA, 2020 ANNUAL REPORT TO CONGRESS 1 (2020), <https://media.defense.gov/2020/Sep/01/2002488689/-1/-1/1/2020-DOD-CHINA-MILITARY-POWER-REPORT-FINAL.PDF>.

173. Alternatively, judicial review of a classified ACIS could be permitted *in camera*, as occurs in some other national security contexts. The court would not be authorized to second-guess any intelligence reports or to decide whether a particular threat was overstated, but simply to assess whether the executive branch had faithfully attended to all the relevant ACIS considerations, alternatives, and possibilities for mitigation of adverse effects.

174. In an emergency, where immediate federal action is necessary to safeguard life, property, or resources, so the ordinary environmental assessment process would be impractical, an agency may initiate prompt action and then work with CEQ for alternative mechanisms to satisfy NEPA. 40 C.F.R. § 1506.12 (2022); Mandelker, *supra* note 49, § 5:17.

175. Mandelker, *supra* note 49, §§ 5:13 (discussing situations in which an agency's statutory obligation to complete a particular action within a specified, short timeframe may preclude preparation of an EIS), 7:17 (discussing use, abuse, and proposals to reform NEPA categorical exclusions).

A. Lethal Autonomous Weapon Systems

One of the most contentious current national security debates swirls around the prospect of lethal autonomous weapon systems (LAWS – also known by their opponents as “killer robots”). These are devices in which the weapon itself decides (in various ways) where to travel, how to select appropriate targets, and whether to unleash deadly force. Crucially, this is all done without the control, input, or knowledge of any human being “in the loop.” There are no true fully autonomous anti-personnel weapons in operation today, but there are already instances that come close, such as quite autonomous weapons deployed for anti-missile ship-defense functions. Perhaps more importantly, the clear trend of the research and development is pressing vigorously in this direction.¹⁷⁶ International diplomacy, as usual, lags behind the entrepreneurial researchers, and the United States has played a mixed role – partially piloting the development of the artificial intelligence weaponry, partially engaging in expert-level international deliberations, and partially resisting the convocation of full-fledged negotiations on a treaty that would somehow restrict LAWS.¹⁷⁷

In this situation (or, in truth, some years before the LAWS programs had advanced to their current status), an ACIS process would be valuable. There are multiple divergent factors to consider here: in an appropriate combat situation, LAWS could provide an important military capacity, operating faster than humans could, incorporating multiple sensory inputs, and being free from the distractions of human emotions and bodily functions.¹⁷⁸ Still, no one can be confident that robots

176. DANIEL S. HOADLEY & KELLEY M. SAYLER, CONG. RSCH. SERV., R45178, ARTIFICIAL INTELLIGENCE AND NATIONAL SECURITY 15-16 (2020), <https://sgp.fas.org/crs/natsec/R45178.pdf>; Arthur Holland Michel, *Known Unknowns: Data Issues and Military Autonomous Systems*, UN INST. FOR DISARMAMENT RSCH (2021), <https://unidir.org/known-unknowns>; ALEXANDRE DE GUSMÃO FOUND., *Rio Seminar on Autonomous Weapons Systems* (2020), http://funag.gov.br/biblioteca/download/laws_digital.pdf; Vincent Boulanin et. al., *Artificial Intelligence, Strategic Stability and Nuclear Risk*, STOCKHOLM INT’L PEACE RSCH. INST. 23-30 (2020), <https://www.sipri.org/publications/2020/other-publications/artificial-intelligence-strategic-stability-and-nuclear-risk>.

177. KELLEY M. SAYLER, CONG. RSCH. SERV., IF11150, DEFENSE PRIMER: U.S. POLICY ON LETHAL AUTONOMOUS WEAPON SYSTEMS (2021), [https://crsreports.congress.gov/product/pdf/IF/IF11150#:~:text=Lethal%20autonomous%20weapon%20systems%20\(LAWS,human%20control%20of%20the%20system](https://crsreports.congress.gov/product/pdf/IF/IF11150#:~:text=Lethal%20autonomous%20weapon%20systems%20(LAWS,human%20control%20of%20the%20system); KELLEY M. SAYLER, CONG. RSCH. SERV., IF11294, INTERNATIONAL DISCUSSIONS CONCERNING LETHAL AUTONOMOUS WEAPON SYSTEMS (2021), <https://fas.org/sgp/crs/weapons/IF11294.pdf>.

178. Jessica Cox & Heather Williams, *The Unavoidable Technology: How Artificial Intelligence Can Strengthen Nuclear Stability*, WASH. Q. (Spring 2021); NAT’L SEC. COMM’N ON A.I.: FINAL REP. (2021), <https://www.nsc.gov/wp-content/uploads/2021/03/Full-Report-Digital-1.pdf>; DEF. INNOVATION BD., AI PRINCIPLES: RECOMMENDATIONS ON THE ETHICAL USE OF ARTIFICIAL INTELLIGENCE BY THE DEPARTMENT OF DEFENSE (2019), https://media.defense.gov/2019/Oct/31/2002204458/1/1/0/dib_ai_principles_primary_document.pdf; ROBERT O. WORK, PRINCIPLES FOR THE COMBAT EMPLOYMENT OF WEAPON SYSTEMS WITH AUTONOMOUS FUNCTIONALITIES, CTR. FOR A NEW AM. SEC. (2021), <https://www.cnas.org/publications/reports/proposed-dod-principles-for-the-combat-employment-of-weapon-systems-with-autonomous-functionalities>.

would perform flawlessly in making the excruciating life-or-death choices on the battlefield, and there are profound moral implications in turning over to a computer the ability to take human lives. Who would be responsible, both legally and ethically, when something goes wrong in the execution? Additionally, the United States is hardly the only country interested in exploring and developing LAWS. It seems apparent that unilateral self-restraint will not dissuade others from pursuing the opportunities. But the reverse proposition seems equally valid, because if the United States barrels headlong into the LAWS business, others would surely follow. The ensuing race would propel the world farther and faster in a direction that we all might eventually regret.¹⁷⁹ At this point, the proto-diplomatic enterprise is somewhat stuck; countries are far apart in their perspectives about autonomy, while the bigger picture multinational pursuit of artificial intelligence, enhanced sensors, and robotics threatens to destabilize current thinking.

Even a rigorous ACIS would not provide an ultimate one-size-fits-all solution to this problem. However, it would provide a vehicle for assembling the government's best thinking, testing it against skeptical counterarguments, combining into one document the swirl of military, diplomatic, technical, moral, and other considerations, and exposing all that to the glare of public notice and comment.

B. *Anti-satellite Capabilities*

Equally futuristic – and equally poised for perhaps irrevocable decisions right now – is a cluster of programs aimed at asserting greater military control over outer space. The United States, Russia, China, and others are experimenting with a wide array of anti-satellite (ASAT) weapons and associated new tactics, techniques, and procedures to threaten each other's spacecraft and the vital services they provide to the global economy.¹⁸⁰ The dangers of offensive space control weapons are

179. HUMAN RIGHTS WATCH & INT'L HUM. RIGHTS CLINIC, *Areas of Alignment: Common Visions for a Killer Robots Treaty*, (July 2021), <https://www.hrw.org/news/2021/08/02/areas-alignment>; ICRC Position on Autonomous Weapon Systems, Background Paper, May 12, 2021; Paul Scharre, *Debunking the AI Arms Race Theory*, 4 TEX. NAT'L SEC. REV. 3 (Jun. 28, 2021), <https://tnsr.org/2021/06/debunking-the-ai-arms-race-theory/>; Zachary Fryer-Biggs, *Can Computer Algorithms Learn to Fight Wars Ethically?* WASH. POST (Feb. 17, 2021), <https://www.washingtonpost.com/magazine/2021/02/17/pentagon-funds-killer-robots-but-ethics-are-under-debate/>; HUMAN RIGHTS WATCH, *Crunch Time on Killer Robots: Why New Law Is Needed and How It Can Be Achieved* (December 2021), https://www.hrw.org/sites/default/files/media_2021/11/Crunch%20Time%20on%20Killer%20Robots_final.pdf.

180. BRIAN WEEDEN & VICTORIA SAMSON, GLOBAL COUNTERSPACE CAPABILITIES: AN OPEN SOURCE ASSESSMENT (2022), https://swfound.org/media/207344/swf_global_counterspace_capabilities_2022.pdf; Kaitlyn Johnson et al., CSIS AEROSPACE SEC. PROJECT, SPACE THREAT ASSESSMENT (2022); Elbridge Colby, *From Sanctuary to Battlefield: A Framework for a U.S. Defense and Deterrence Strategy for Space*, CTR. FOR A NEW AM. SEC. (Jan. 2016), <https://www.cnas.org/publications/reports/from-sanctuary-to-battlefield-a-framework-for-a-us-defense-and-deterrence-strategy-for-space>; DEF. INTELLIGENCE AGENCY, CHALLENGES TO SECURITY IN SPACE (2022), https://www.dia.mil/Portals/110/Documents/News/Military_Power_Publications/Challenges_Security_Space_2022.pdf

profound, but it is not too late to take effective arms control measures. Testing is being undertaken currently, but there is not widespread deployment yet, and there have been no uses in combat.

Again, the current situation defies easy solutions. Satellites have become so important to modern militaries that in a future conflict, they could well become priority targets.¹⁸¹ At the same time, physical destruction of satellites would pollute the orbital regime with immense quantities of long-lasting, fast-flying debris that could jeopardize all space operations for decades to come.¹⁸² From the diplomatic perspective, the world has long been politically stymied in efforts even to begin the articulation of an effective arms control regime in space, and a future agreement restricting ASATs would immediately face challenges from ineffable problems with verification of compliance.¹⁸³ Many space assets are dual-use, being capable of adaptation for either peaceful or warlike functions, so the traditional principles of the law of armed conflict are threatened in new ways.¹⁸⁴ A technology that enables delicate functions like “rendezvous and proximity operations” (enabling a spacecraft to closely approach and dock with another satellite) can be used for on-orbit servicing

181. See U.S. DEP’T OF DEF., DEFENSE SPACE STRATEGY SUMMARY 3 (2020); U.S. SPACE FORCE, SPACEPOWER: DOCTRINE FOR SPACE FORCES, SPACE CAPSTONE PUBLICATION 28–44 (2020), https://www.spaceforce.mil/Portals/1/Space%20Capstone%20Publication_10%20Aug%202020.pdf; U.S. JOINT CHIEFS OF STAFF, Joint Publication 3-14, SPACE OPERATIONS II-1 to II-8 (2018); Robert S. Wilson et al., *The Value of Space*, AEROSPACE CORP. 1–12 (2020); Ricky J. Lee & Sarah L. Steele, *Military Use of Satellite Communications, Remote Sensing, and Global Positioning Systems in the War on Terror*, 79 J. AIR LAW & COM. 69 (2014).

182. WHITE HOUSE, NATIONAL ORBITAL DEBRIS RESEARCH AND DEVELOPMENT PLAN (Jan. 2021), <https://trumpwhitehouse.archives.gov/wp-content/uploads/2021/01/National-Orbital-Debris-RD-Plan-2021.pdf>; Raffi Khatchadourien, *The Elusive Peril of Space Junk*, NEW YORKER (Sept. 21, 2020), <https://www.newyorker.com/magazine/2020/09/28/the-elusive-peril-of-space-junk>; Allen Kim, *NASA Admin Warns ISS Space Junk Problem Is Getting Worse After 3 Near Collisions*, CNN (Sept. 23, 2020), <https://www.cnn.com/2020/09/23/us/nasa-iss-space-debris-scen-trnd/index.html>.

183. Brian Weeden & Victoria Samson, *Enhancing Space Security: Time for Legally Binding Measures*, ARMS CONTROL TODAY 6 (Dec. 2020), <https://www.armscontrol.org/act/2020-12/features/enhancing-space-security-time-legally-binding-measures>; Christopher A. Ford, *Arms Control in Outer Space: History and Prospects*, 1 DEP’T OF STATE ARMS CONTROL & INT’L SEC. PAPERS no. 12 (July 24, 2020), <https://www.state.gov/wp-content/uploads/2020/07/T-Paper-Series-Space-Norms-Formatted-T-w-Raymond-quote-2543.pdf>; Theresa Hitchens, *In a First, Sec Def Pledges DoD to Space Norms*, BREAKING DEF. (July 19, 2021), <https://breakingdefense.com/2021/07/exclusive-in-a-first-secdef-pledges-dod-to-space-norms/>.

184. Vasha Agrawal & Anil Maini, *Satellite Technology: Principles and Applications*, O’REILLY, <https://www.oreilly.com/library/view/satellite-technology-principles/9781118636374/c06.xhtml> (last visited Feb. 25, 2021); Chris Woodford, *Satellites*, EXPLAINTHATSTUFF! (Dec. 16, 2020), <https://www.explainthatstuff.com/satellites.html>; G. Ryan Faith, *The Future of Space: Trouble on the Final Frontier*, 175 WORLD AFFS. 82, 84 (Sept./Oct. 2012); Kestutis Paulauskas, *Space: NATO’s Latest Frontier*, NATO REV. (Mar. 13, 2020), <https://www.nato.int/docu/review/articles/2020/03/13/space-natos-latest-frontier/index.html>; Michael N. Schmitt, *International Law and Military Operations in Space*, 10 MAX PLANCK YEARBOOK OF U.N.L. 89, 117 (2006).

(to repair or refuel a limping object) or to inspect or attack it.¹⁸⁵ In addition, many ASAT technologies are quite similar to anti-missile technologies, so any effort to deal effectively with either category would inevitably also implicate the interests of the other, too.¹⁸⁶

In this environment, an ACIS (or a group of ACIS documents) would face a daunting task in seeking to define the problem, to parse its various components, and to generate a consensus analysis. But that sheer difficulty also illustrates the value of the undertaking, because it would present a rare opportunity to think critically about a tremendously important emerging weapons technology before the horse runs irretrievably out of the barn. Multiple types of expertise would have to be marshaled in order to write rigorously about the opportunities, dangers, and alternatives – drawing upon space technology, bilateral and multilateral diplomacy, and private space sector interests.

C. *The Treaty on Land Mines*

Third, consider a somewhat different type of potential ACIS venue, regarding diplomatic action rather than weapon developments. Anti-personnel land mines (APL) have been the subject of two treaties, only one of which the United States has joined. The more ambitious instrument, the Ottawa Convention, completely prohibits any use of these devices, and has been accepted by almost all of the United States' closest allies.¹⁸⁷ The other document, known as Amended Protocol II of the Convention on Certain Conventional Weapons, limits but does not totally bar, APL use. It has attracted the participation of the United States and the other countries that have been major users and stockpilers of the devices.¹⁸⁸ The United

185. Rebecca Reesman & Andrew Rogers, *Getting in Your Space: Learning from Past Rendezvous and Proximity Operations*, AEROSPACE CORP. (May 2018); Anuradha Damale, *Rendezvous Proximity Operations: Not Operating in Isolation*, EUR. LEADERSHIP NETWORK (Aug. 12, 2020); NASA, *Rendezvous, Proximity, and Docking* (2011), https://www.nasa.gov/centers/johnson/pdf/639730main_Proximity_Rendezvous_Docking_FTI.pdf.

186. Ashton B. Carter, *The Relationship of ASAT and BMD Systems*, 114 DAEDALUS 2 (1985); Joan Johnson-Freese, *The Viability of U.S. Antisatellite (ASAT) Policy: Moving Toward Space Control*, INST. FOR NAT'L SEC. STUD. (Jan. 2000), <https://apps.dtic.mil/sti/pdfs/ADA435085.pdf>; Arms Control in Space, *ASAT, BMD, and the 1972 ABM Treaty* (1984), <https://www.princeton.edu/~ota/disk3/1984/8404/840409.PDF> (last visited Apr. 1, 2022).

187. Ottawa Mines Convention, *supra* note 150; see INT'L CAMPAIGN TO BAN LANDMINES, *Landmine Monitor 2020* (Nov. 12, 2020), <http://the-monitor.org/en-gb/reports/2020/landmine-monitor-2020.aspx> (listing 164 parties to the treaty).

188. Convention on Certain Conventional Weapons (Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed To Be Excessively Injurious or To Have Indiscriminate Effects), Oct. 10, 1980, 1342 U.N.T.S. 137 (entered into force Dec. 2, 1983; entered into force for the United States Sept. 24, 1995); U.N. OFF. FOR DISARMAMENT AFFS., *CCW Amended Protocol II*, <https://www.un.org/disarmament/ccw-amended-protocol-ii/> (amended in 1996).

States has repeatedly contemplated joining the Ottawa Convention but has always backed away.¹⁸⁹

A new ACIS could contribute to this prolonged, multi-faceted debate, bringing together the diverse constituencies that have expressed competing interests. First, some experts believe that APL offer unique military advantages by providing protection against infiltration along an exposed flank or a porous national border. Others dispute that judgment, asserting that the mine barrier could be swiftly breached or circumvented.¹⁹⁰ Some experts emphasize how the U.S. posture has separated it from NATO allies, because the treaty blocks close collaboration between mine-using and mine-opposing states. Others emphasize how the national defense of South Korea, another close, longstanding ally, depends on extravagant use of APL throughout the demilitarized zone.¹⁹¹ Some participants in the debate are motivated by humanitarian considerations, stressing that APL tend to detonate most often against civilians, especially children, who do not understand the long-term danger that these small, concealed implements carry. Others assert that the most modern types of APL, preferred by the United States, carry timed self-neutralization features that render them safe and eliminate the prolonged danger to civilians.¹⁹² Some

189. Mary Wareham, *US Should Think Again About Reversing Landmine Policy*, JUST SEC. (Feb. 4, 2020), <https://www.justsecurity.org/68474/us-should-think-again-about-reversing-landmine-policy/>; Jeff Abramson, *U.S. to Revise Landmine Policy*, ARMS CONTROL TODAY (May 2021), <https://www.armscontrol.org/act/2021-05/news-briefs/us-revise-landmine-policy>; Ellen Mitchell, *Bipartisan Group of 21 Lawmakers Push Biden to Ban Most Landmines*, THE HILL (June 23, 2021), <https://thehill.com/policy/defense/559832-bipartisan-group-of-21-lawmakers-push-biden-to-ban-most-landmines>.

190. Press Release, U.S. Dep't of Defense, *Landmine Policy* (Jan. 31, 2020), <https://www.defense.gov/Newsroom/Releases/Release/Article/2071692/landmine-policy/> (stating that "Landmines, including APL, remain a vital tool in conventional warfare that the United States military cannot responsibly forgo."); Stephen D. Biddle, Julia L. Klare, & Jaeson Rosenfeld, *The Military Utility of Landmines: Implications for Arms Control*, INST. FOR DEF. ANALYSES (June 1, 1994); Nick Adde, *U.S. Reintroduction of Landmines Sparks Controversy*, NAT'L DEF. (Mar. 26, 2020), <https://www.nationaldefensemagazine.org/articles/2020/3/26/us-reintroduction-of-landmines-sparks-controversy>; John F. Troxell, *Landmines: Why the Korea Exception Should Be the Rule*, 30 PARAMETERS 82 (2000); Kristian Berg Harpviken & Mona Fixdal, *Anti-Personnel Landmines: A Just Means of War?* 28 SEC. DIALOGUE 271, 280 (Sept. 1997).

191. See Ottawa Convention, *supra* note 150, art. 1.1(c) (obligating treaty parties not to "assist, encourage or induce, in any way, anyone to engage in any activity prohibited to a State Party under this Convention"); South Korea, LANDMINE & CLUSTER MUNITION MONITOR (Oct. 19, 2020), <http://www.the-monitor.org/en-gb/reports/2020/korea,-republic-of/mine-ban-policy.aspx>; U.S. DEP'T OF STATE, *U.S. Landmine Policy*, <https://2009-2017.state.gov/t/pm/wra/c11735.htm> (last visited Apr. 10, 2022) (archived material).

192. See HUM. RIGHTS WATCH, *Questions and Answers on the New US Landmine Policy* ¶ 4 (Feb. 27, 2020), <https://www.hrw.org/news/2020/02/27/questions-and-answers-new-us-landmine-policy#> [hereinafter HRW Q&A]; Friends Committee on National Legislation, Issue Brief: U.S. Policy on Landmines, April 1, 2021; ICBL, Arguments for the Ban, <http://www.icbl.org/en-gb/problem/arguments-for-the-ban.aspx>; John Ismay, The U.S. Army Is Trying to Develop New Land Mines – Ones That Don't Harm Civilians, *New York Times Magazine*, November 13, 2018.

believe that technological alternatives to land mines could be developed, but persistent U.S. research has not yet identified a truly suitable fallback capacity.¹⁹³

This is not an issue about imminent U.S. production and deployment of the weapons in question – the United States has not manufactured new APL since 1997 and has no plans to resume construction.¹⁹⁴ Moreover, the United States has not used APL in any of the widely-varied military engagements it has fought for the past thirty years. But some contend that this past practice does not guaranty that APL will never be needed in the future.¹⁹⁵

So, once again, there is much that an ACIS could address by applying military, diplomatic, technological, humanitarian, and other expertise. It would surely not impose an undue time delay to commit to an all-azimuth review, as the rival treaties have been available for many years. The public could contribute to, and learn from, the ACIS process here, even if some of the most intricate military details and the nuances of alliance relationships might remain classified. Notably, the U.S. government's decision to date *not* to join the Ottawa Convention could be construed as a major federal action, prompting an ACIS (as comparable inaction has been construed under NEPA).¹⁹⁶

D. Other Imminent Choices

Finally, there are numerous other types of arms control-related decisions that could be profitably scrutinized through a new ACIS process. Several of these are newly emerging dangers and opportunities; they are “hot button” issues for some constituencies, but they have not received the type of all-source, authoritative, in-depth critical analysis in a public government evaluation that an ACIS could provide. None of these is, strictly speaking, a decision about U.S. funding for the production or deployment of a new weapon. Therefore, it is not clear whether the original concept of an ACIS would apply to any of them, but this Article's vision of a new ACIS system could attach to all.

193. National Academies of Sciences, Engineering, Medicine, *Alternative Technologies to Replace Antipersonnel Landmines* 35 (2001), <https://nap.nationalacademies.org/catalog/10071/alternative-technologies-to-replace-antipersonnel-landmines>; HRW Q&A, *supra* note 192, at 8.

194. LANDMINE & CLUSTER MUNITION MONITOR, *United States Mine Ban Policy* (Mar. 19, 2020), <http://www.the-monitor.org/en-gb/reports/2019/united-states/mine-ban-policy.aspx>; HRW Q&A, *supra* note 192, ¶ 6.

195. LANDMINE & CLUSTER MUNITION MONITOR, *supra* note 194; *see also* HRW Q&A, *supra* note 192, ¶ 14 (noting that with a single exception in 2002, U.S. forces have not used antipersonnel mines in combat since 1991).

196. In the same way, an ACIS could also suitably analyze U.S. decisions not to join other noteworthy multilateral arms control treaties, such as the Treaty on the Prohibition of Nuclear Weapons, *supra* note 150, or the ATT, *supra* note 112. The treatment of “inaction” has been controversial under NEPA, and the Trump Administration deleted the general regulatory requirement to evaluate an agency's decision not to act on a matter that could have environmental impact. *See* COUNCIL ON ENV'T QUALITY, *Redline Markup of 40 C.F.R. § 1508.18* (July 16, 2020), <https://ceq.doe.gov/docs/laws-regulations/ceq-final-rule-redline-changes-2020-07-16.pdf>.

--The 2015 Joint Comprehensive Plan of Action (the nuclear deal with Iran) carries profound consequences for the Middle East and for nuclear proliferation more broadly. It has been the subject of intense political controversy in the United States and elsewhere, regarding its creation, the subsequent U.S. withdrawal from it, and its possible revival. But since it is a non-legally binding instrument, the JCPOA was never presented for the advice and consent of the U.S. Senate.¹⁹⁷

--In recent years, the U.S. government has raised, and to some extent adopted, a tactic of “defend forward” in the cyber realm. This proactive posture involves a more assertive approach of electronically pursuing malicious cyber actors outside the United States, including the possibility of “hacking back,” to deny an adversary the benefits of a hostile network operation and to disrupt future plans. Any such effort could be quite consequential in the long term, altering global norms about appropriate and acceptable extraterritorial cyber behaviors. To date, heavy classification and the highly technical nature of the operation have obscured full public commentary about it, and there has been no public agnostic presentation about it similar to what an ACIS could provide.¹⁹⁸

--The United States has recently withdrawn from a number of important multilateral arms control treaties, including the 1992 Open Skies Treaty¹⁹⁹ and the

197. U.S. DEP'T OF STATE, *Joint Comprehensive Plan of Action*, <https://2009-2017.state.gov/e/eb/tfs/spi/iran/jcpoa/index.htm> (last visited Apr. 1, 2022); ARMS CONTROL ASSOC., *Joint Comprehensive Plan of Action (JCPOA) at a Glance* Fact Sheet (July 2021), <https://www.armscontrol.org/factsheets/JCPOA-at-a-glance>; David S. Jonas, *Joe Biden Should Renegotiate Iran Nuclear Deal as a Treaty*, WASH. TIMES (Dec. 29, 2020), <https://www.washingtontimes.com/news/2020/dec/29/david-s-jonas-joe-biden-should-treat-iran-nuclear/>; see Robert Einhorn, *Debating the Iran Nuclear Deal: A Former American Negotiator Outlines the Battleground Issues*, BROOKINGS (Aug. 12, 2015), <https://www.brookings.edu/research/debating-the-iran-nuclear-deal-a-former-american-negotiator-outlines-the-battleground-issues/>.

198. Eric Talbot Jensen & Sean Watts, *Due Diligence and the U.S. Defend Forward Cyber Strategy*, LAWFARE (Oct. 20, 2020, 11:06 AM), <https://www.lawfareblog.com/due-diligence-and-us-defend-forward-cyber-strategy>; Erica D. Loneragan, *Operationalizing Defend Forward: How the Concept Works to Change Adversary Behavior*, LAWFARE (Mar. 12, 2020, 3:28 PM) <https://www.lawfareblog.com/operationalizing-defend-forward-how-concept-works-change-adversary-behavior>; Nina Kollars & Jacquelyn Schneider, *Defending Forward: The 2018 Cyber Strategy Is Here*, WAR ON THE ROCKS (Sept. 20, 2018) <https://warontherocks.com/2018/09/defending-forward-the-2018-cyber-strategy-is-here/>; CYBERSPACE SOLARIUM COMM'N, *Report* (2020), <https://www.solarium.gov/report>; see Perri Adams et al., *Responsible Cyber Offense*, LAWFARE (Aug. 2, 2021, 11:22 AM); Michael Schmitt, *Three International Law Rules for Responding Effectively to Hostile Cyber Operations*, JUST SEC. (July 13, 2021), <https://www.justsecurity.org/77402/three-international-law-rules-for-responding-effectively-to-hostile-cyber-operations/>.

199. See Open Skies Treaty, *supra* note 143; AMY F. WOOLF, CONG. RSCH. SERV., IN10502, THE OPEN SKIES TREATY: BACKGROUND AND ISSUES (2021); Bonnie Jenkins, *A Farewell to the Open Skies Treaty, and an Era of Imaginative Thinking*, BROOKINGS (June 16, 2020), <https://www.brookings.edu/blog/order-from-chaos/2020/06/16/a-farewell-to-the-open-skies-treaty-and-an-era-of-imaginative-thinking/>. Note that the executive branch, without congressional participation, also decommissioned the two aircraft that the United States had used for conducting Open Skies overflights, so any subsequent effort to re-join the treaty would now be further impeded. 55TH WING PUB. AFFS., *End of an Era as Final OC-135 Aircraft Officially Retired*, OFFUTT AIR FORCE BASE: NEWS (June 8, 2021),

1987 Treaty on Intermediate-range Nuclear Forces.²⁰⁰ Under the prevailing constitutional interpretation, the President claims a unilateral power to effectuate such departures, without any congressional participation or vote.

--The United States has recently insisted on dramatically relaxing the international standards that control the export of aerial drone technology. The Missile Technology Control Regime is the loose, but quite effective, mechanism for coordinating the national export systems of the leading high-technology weapons suppliers. Because this regime is not legally binding, there is less opportunity for Congress to engage, even though the degradation of the common export standards can have long-term implications.²⁰¹

--The most recent incident to highlight here is the September 2021 so-called “AUKUS” deal, through which the United States and the United Kingdom agreed to sell nuclear submarines and missiles to Australia. The transaction roiled relations with France, which had undertaken to supply Australia with alternative weapons, and raised substantial concerns about undercutting global non-proliferation standards. Reportedly, President Joe Biden was not fully informed about the deal before it was concluded, and he later admitted that the entire transaction was “clumsy.” Again, a revived ACIS process might not have halted the sale – there are important justifications militating in favor of expanded military cooperation in the western Pacific. But it might have altered the arrangement’s proliferation-related provisions, and it could have helped ensure that all the critical security variables were taken fully into account in a timely, high-level manner.²⁰²

<https://www.offutt.af.mil/News/Article/2650127/end-of-an-era-as-final-oc-135-aircraft-officially-retired/>.

200. Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Elimination of Their Intermediate-Range and Shorter-Range Missiles, U.S.-U.S.S.R., Dec. 8, 1987, 1657 U.N.T.S. 485; Michael R. Pompeo, *U.S. Withdrawal from the INF Treaty on August 2, 2019*, U.S. DEP’T OF STATE (Aug. 2, 2019), <https://2017-2021.state.gov/u-s-withdrawal-from-the-inf-treaty-on-august-2-2019/index.html>; Shannon Bugos, *U.S. Completes INF Treaty Withdrawal*, ARMS CONTROL TODAY, (Sept. 2019); AMY F. WOOLF, CONG. RSCH. SERV., IF11051, U.S. WITHDRAWAL FROM THE INF TREATY: WHAT’S NEXT?, (2020).

201. See, e.g., *MTCR Guidelines*, MISSILE TECH. CONTROL REGIME, <https://mtcr.info/mtcr-guidelines/>; *Missile Technology Control Regime (MTCR) Frequently Asked Questions*, U.S. DEP’T OF STATE: BUREAU OF INT’L SEC. AND NONPROLIFERATION, <https://www.state.gov/remarks-and-releases-bureau-of-international-security-and-nonproliferation/missile-technology-control-regime-mtcr-frequently-asked-questions/> (last visited Mar. 25, 2022); Kelsey Davenport, *Missile Technology Control Regime at a Glance*, ARMS CONTROL ASSOC. (Mar. 2021), <https://www.armscontrol.org/factsheets/mtcr>; Mike Stone, *U.S. Relaxes Rules to Export More Aerial Drones*, REUTERS (July 24, 2020), <https://www.reuters.com/article/us-usa-arms-trump/u-s-relaxes-rules-to-export-more-aerial-drones-idUSKCN24P2IC> (discussing the Trump Administration’s decision to loosen restrictions on eligible governments to buy U.S. drones under the Missile Technology Control Regime).

202. Shayan Karbassi, *Legal Mechanisms of AUKUS Explained*, LAWFARE (Sept. 24, 2021), <https://www.lawfareblog.com/legal-mechanisms-aukus-explained>; George M. Moore & Frank N. Von Hippel, *Nuclear Subs in Australia Will Challenge the Nonproliferation Regime*, THE HILL (Sept. 22, 2021), <https://thehill.com/opinion/international/573441-nuclear-subs-down-under-will-challenge-the-nonproliferation-regime-and>; James M. Acton, *Why the AUKUS Submarine Deal Is Bad for Nonproliferation*

The bottom line in each of these miniature case studies, is that sometimes, detailed examination of a proposal and its alternatives would do more than merely provide ammunition to those who would automatically oppose the action. Instead, it can generate a better, more well-reasoned, publicly debated governmental choice.

CONCLUSION

The fundamental goals motivating the establishment of the original ACIS process remain in place – with even increased urgency – today. It is more valuable than ever to ensure that national security decision-making in this richly complicated era is imbued with diverse facts and rigorous scrutiny, fully reflecting the long-term, wide-angle perspectives of arms control, non-proliferation, crisis stability, alliance politics, and more. Equally critical is the value of accountability in ensuring that the executive branch monopoly on information and analysis is shared in a timely fashion with the Congress and the public, to help guard against myopia or bias.²⁰³

Skeptics may ask what impact can all this analysis really have? There can be no magic solution here. If a President does not want to pursue arms control – if the executive branch does not believe this perspective can help promote national security and global stability – then no ACIS procedure could compel it to happen. Conversely, if the President does want arms control, and does value it as a worthy tool in support of diplomacy, then the ACIS apparatus is largely unnecessary – the system will reliably advance that viewpoint independently.²⁰⁴

Most of the time, however, the situation will not be as stark as either of those polar extremes, and the inner councils of the executive branch will incorporate a wide range of beliefs, predictions, predilections, and awareness about arms control and national security. In that situation, a practiced routine for rigorous, broad, public, structured analysis of the nuanced alternative policies can play a useful role.²⁰⁵

– *And What to Do About It*, CARNEGIE ENDOWMENT FOR INT’L PEACE: COMMENT (Sept. 21, 2021), <https://carnegieendowment.org/2021/09/21/why-aukus-submarine-deal-is-bad-for-nonproliferation-and-what-to-do-about-it-pub-85399>; Ellen Mitchell, *Kerry: Biden “Had Not Been Fully Aware” of Submarine Deal’s Impact on France*, THE HILL (Oct. 5, 2021, 2:06 PM); *Biden: We Were Clumsy over France Submarine Row*, BBC NEWS: US & CAN. (Oct. 30, 2021) <https://www.bbc.com/news/world-us-canada-59085806>.

203. The third goal of the original ACIS, to enhance the bureaucratic heft of ACDA, has been rendered moot by that agency’s demise. 1979 Hearings, *supra* note 30. *But see* Blechman & Nolan, *supra* note 36, at 1168-69 (arguing that the ACIS process actually diminished ACDA’s bureaucratic standing, because it cast the agency as a stereotypical opponent of all weapons, serving congressional interests rather than those of the administration, and leading other agencies to cut ACDA out of internal deliberations).

204. Gray, *supra* note 7, at 223, 232 (suggesting that an ACIS process is unnecessary if the national leadership wants to pursue arms control, and is insufficient if the leadership is opposed). Environmentalism, too, experiences oscillations with national politics. *See* Mandelker, *supra* note 49, § 2:17 (noting widely different success rates in NEPA cases litigated before judges appointed by Republican and Democratic presidents).

205. In the same way, if there are vigorous proponents (or opponents) of arms control in the Congress, then enhanced access to information and analysis, via a new ACIS, can strengthen their hand, too, in influencing national debates.

The proposed new ACIS program recommended here is quite ambitious and far-reaching. Many might prefer instead to confine the scope of such an innovation, at least initially, to a more tightly focused ambit. For example, it would be plausible for a re-enactment of the statute to retain only the original ACIS mandate, to address solely the national weapons programs, eschewing coverage of other actions such as treaty negotiations and withdrawals. Others might sharpen the program even more narrowly, to address only a program's effects on nuclear non-proliferation, to zoom in on a topic of greatest current concern.²⁰⁶ Likewise, it might be possible to mandate a cap on the number of ACIS statements to be prepared per cycle, with negotiation among executive and legislative branch officials to identify annually the twenty to fifty programs most deserving of specialized study and reporting in the coming year.²⁰⁷

The perspective here, however, is that the original ACIS program received such a harsh black eye, and is today held in such low esteem, that any proposed re-establishment faces strong push-back. Accordingly, it is appropriate to aim high, with the most aggressive version of the proposal before it (inevitably) gets whittled away by the political process.

Some of the spirit animating the enhanced interest in reviving ACIS in 2022 springs from fresh appreciation of the difficulty in trying to anticipate the far-flung arms control implications of today's weapons decisions. A salient illustration of this problem derives from Henry Kissinger's famous comment at a press backgrounder in 1974. There Kissinger was reflecting upon the prior U.S. decision to develop and deploy MIRV (Multiple Independent Reentry Vehicle) weapons during the SALT I negotiations and upon how the subsequent pursuit of those weapons by the U.S.S.R. had complicated the global security situation and jeopardized the negotiation of a follow-on treaty. He commented, "I would say in retrospect that I wish I had thought through the implications of a MIRVed world more thoughtfully in 1969 and 1970 than I did."²⁰⁸ In like manner, the executive branch, the Congress, and the public should also all think through more thoughtfully the implications of modern weapons and policy choices in a timely, expert fashion, and should use an enhanced ACIS process to equip themselves to do so.

A revived ACIS process today, like the fifty years of EIS process, will not provide a panacea, resolving all decisional problems in an efficient, cost-free fashion. Arms control, like environmentalism, should not "win" all public policy contests –

206. The author is indebted to James E. Goodby for this suggestion. As the original ACIS legislation was evolving, the Senate version of the bill would have confined its applicability only to nuclear arms. Clarke, *supra* note 3, at 192.

207. Letter from Charles R. Gellner, in CRS 1977 Analysis, *supra* note 12, at 1, 5 (contemplating that annual preparation of perhaps fifty ACIS documents per year might enable the executive branch and the Congress to concentrate on the most important programs without becoming overwhelmed).

208. Fred Kaplan, *We're About to Launch a Costly And Crazy Arms Race in Space*, WASH. POST, (Oct. 16, 1983); see also Gray, *supra* note 7, at 218 (suggesting that an ACIS process could have enabled the United States to avoid the problems that MIRV has created for ICBM vulnerability).

there are times when other social values and commitments should properly take priority. But because of NEPA, environmentalism is always at the table; it cannot be blithely disregarded. Arms control, in like fashion, should be formally and vividly present in all national security decision making councils. A new ACIS process – un-repealing the 1994 abolition of the original mandate – could help make that happen.