



**HAL**  
open science

# The next generation(s) of Europeans facing nuclear weapons: forgetful, indifferent but supportive?

Benoît Pelopidas

► **To cite this version:**

Benoît Pelopidas. The next generation(s) of Europeans facing nuclear weapons: forgetful, indifferent but supportive?. 2017. hal-03458812

**HAL Id: hal-03458812**

**<https://sciencespo.hal.science/hal-03458812>**

Preprint submitted on 30 Nov 2021

**HAL** is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

# THE NEXT GENERATION(S) OF EUROPEANS FACING NUCLEAR WEAPONS: FORGETFUL, INDIFFERENT, BUT SUPPORTIVE?

---

BENOÎT PELOPIDAS

---

## I. INTRODUCTION

This paper is a first effort at eliciting the attitude of the next generation of EU citizens towards nuclear weapons.<sup>1</sup> In doing so, it offers a first assessment of three frequent assumptions about EU citizens' attitudes towards nuclear weapons, that there is: (a) decreasing popular knowledge about the danger of nuclear weapons, (b) decreasing concern about and interest in the issue, and (c) continued and sufficient tacit support for current policies. The paper explores the reasons for the limited engagement of EU citizens in these debates, and it assesses the existence of nuclear exceptionalism in these attitudes.

It is based on a large poll of 10 455 EU citizens aged 14–30 years, across the 28 European Union (EU) states, conducted in July and August 2015, as a proxy for the next generation of EU citizens. The youngest participants will not be allowed to vote for a party with a platform on the matter in France or the United Kingdom, but will be affected by the decisions for most of their lives. The oldest participants reached voting age more than ten years after the end of the cold war and in the shadow of the terrorist attacks on the United States of 11 September 2001, which makes this cohort interesting for getting a sense of the change of attitude towards nuclear weapons after the end of the cold war. The poll involved questions on political and ethical attitudes towards nuclear weapons, as well as on an understanding of the nuclear past. The range of questions used had not been posed to the European public before.

<sup>1</sup> The results of the poll are available at <[https://reportsdashboardclient.daliaresearch.com/#/dataset\\_users/65415640-fa6a-0133-cf11-0a81e8b09a82/datasets/d3a030d0-fa6a-0133-d08e-0a81e8b09a82/reports/1f26c900-fa6b-0133-d1f1-0a81e8b09a82/charts/23ff8e20-fa6b-0133-d1fd-0a81e8b09a82](https://reportsdashboardclient.daliaresearch.com/#/dataset_users/65415640-fa6a-0133-cf11-0a81e8b09a82/datasets/d3a030d0-fa6a-0133-d08e-0a81e8b09a82/reports/1f26c900-fa6b-0133-d1f1-0a81e8b09a82/charts/23ff8e20-fa6b-0133-d1fd-0a81e8b09a82)>. For raw data, please contact the author.

## SUMMARY

The post-cold war generation of citizens is forgetting nuclear weapon-related dangers and becoming indifferent to the issue. At the same time, the absence of mass grass-roots, anti-nuclear protest suggests tacit support for current nuclear weapon policies. These three common diagnoses are potentially contradictory and, more importantly, are only assumptions. This paper is the first systematic attempt at assessing the attitude of the under 30s generation of European Union (EU) citizens with regard to nuclear weapons. It is based on a poll of over 10 000 citizens across the 28 EU member countries.

The paper finds that none of these assumptions holds. Except for the cases of near nuclear use, the lack of knowledge about nuclear danger is not that widespread; it only increases slowly and not uniformly. Similarly, the lack of popular engagement in the nuclear weapon debate does not mean support for existing policies. In this paper, the sentiment of support is assessed with a set of three criteria: the feeling of safety attained from nuclear weapons; satisfaction with policies taken in one's name; and acceptance of vulnerabilities arising from the possession of nuclear weapons. This paper finds that overall support in these areas is below 30 per cent in every country for which there was a representative sample of respondents. Neither do the youth express a lack of concern, but rather a strong feeling of inability to affect the outcome. This suggests the need for both a research agenda and a reform of EU educational policies aimed at this generation on nuclear weapons.

## ABOUT THE AUTHOR

Benoît Pelopidas teaches at Sciences Po in Paris, where he holds the junior chair of excellence in security studies. He is also an affiliate of the Center for International Security and Cooperation (CISAC) at Stanford University and a visiting fellow at Princeton University's Woodrow Wilson School of Public and International Affairs and its Program on Science and Global Security.

The paper is divided into four sections. Section two discusses the rationale for and limitations of this study. Section three discusses and assesses the poll's findings in relation to the pre-existing common assumptions about public attitudes to current nuclear weapon policies. Given a fair understanding of nuclear vulnerability and a very limited level of support for current policies, this section also investigates why there is not more public participation in the limited existing debates about nuclear weapons, and why there appears to be few efforts at starting a new debate, broadening the existing one or developing a mass protest movement on the issue. It shows that this lack of public participation is in large part driven by a feeling of powerlessness and not by a lack of care for the issue, which is contrary to a common preconception that often coexists with the idea of citizens' ignorance on these matters. Section four summarizes the findings and considers their implications for further research and future policy.

## II. THE RATIONALE AND LIMITATIONS OF THE STUDY

### Common assumptions about public attitudes to nuclear weapons

Before examining the data from the poll in more detail, it is useful to review some of the existing common assumptions about European public attitudes to nuclear weapons. In different ways, the assumptions and the overall concern about nuclear forgetting suggest an understanding that nuclear weapon policies should not be conducted without popular understanding of them, or at least not against popular consent. There is also the expectation that knowledge of and concern over nuclear danger will be absent or fade away over time, while it is assumed that support for nuclear weapon policy will remain sufficient.<sup>2</sup> This claim was even made by anti-nuclear scholars such as Ken Booth and Nicholas Wheeler at the time of the

<sup>2</sup> 'A sort of nuclear amnesia set in after 1989,' according to Booth, K., *Theory of World Security* (Cambridge University Press: Cambridge, 2007), p. 318. See also Eisenhardt, N. and Wright, T., 'Generations of change: persuading post-cold war kids that disarmament matters', *Disarmament Forum*, 2010/4, p. 25; and Copel, E. and Norlain, B., 'La dissuasion nucléaire a-t-elle encore un avenir? [Does nuclear deterrence still have a future?], *du grain à moudre* [Grain to be ground], *France Culture*, 13 Apr. 2013.

peace dividends of the post-cold war world.<sup>3</sup> A French understanding of nuclear deterrence goes so far as to explicitly assume that the president's credibility is conditional on the support of the nation and, consequently, so too is the credibility of French nuclear threats.<sup>4</sup>

In reality these attitudes are not known, as most of the literature focuses on foreign and security policy elites rather than the general public.<sup>5</sup> The recent literature on people's attitudes with regard to nuclear weapons focuses almost exclusively on the adult populations in the USA and the UK.<sup>6</sup> (One exception was the 2008 World Public Opinion Survey asking people whether they would support an agreement to eliminate nuclear weapons.)<sup>7</sup> Overall, polling on popular attitudes toward nuclear weapons was much more frequent during the cold war.<sup>8</sup> There is no Eurobarometer survey or world values survey of citizens' attitudes towards nuclear weapons and government polls are not interested in capturing ethical attitudes and understanding of nuclear history.

<sup>3</sup> Booth, K. and Wheeler, N., 'Beyond nuclearism', ed. R. Cowen-Karp, *Security Without Nuclear Weapons: Different Perspectives on Non-nuclear Security* (Oxford University Press: Oxford, 1992), p. 24.

<sup>4</sup> Poirier, L., 'A voix nue' [Naked voice], Interview with Garcin, T. on 'la dissuasion nucléaire' [nuclear deterrence], *France Culture*, 13 Nov. 2008. See also Deniau, X., 'Le suffrage universel et la dissuasion nucléaire' [Universal suffrage and nuclear deterrence], *La Revue des deux mondes*, June–July 1998, pp. 54–55; de Champchesnel, T. and Coste, F., *La communication en matière de nucléaire de défense* [Communication about nuclear issues related to defence], Paris, Les documents du C2SD, no. 86, 2007, p. 45; and Carrère, R., 'Réflexions polémologiques sur la crise nucléaire de Cuba 1962' [Polemological reflections on the nuclear crisis in Cuba 1962], *Etudes polémologiques*, no. 3 (Jan. 1972), pp. 34–35.

<sup>5</sup> Hayes, J., 'Nuclear disarmament and stability and the logic of habit', *Nonproliferation Review*, vol. 22, no. 3–4 (2016), p. 505.

<sup>6</sup> For the USA: Sagan, S., Valentino, B. and Press, D., 'Atomic aversion: experimental evidence on taboos, traditions, and the non-use of nuclear weapons', *American Political Science Review*, Feb. 2013; and CNN, Opinion Research Poll, 9–11 Apr. 2010, <<http://i2.cdn.turner.com/cnn/2010/images/04/12/rel7b.pdf>>. For the UK: Ritchie, N. and Ingram, P., 'Trident in UK politics and public opinion', British American Security Information Council (BASIS), July 2013; Nuclear Education Trust and Nuclear Information Service, 'British military attitudes towards nuclear weapons and disarmament', June 2015, <[http://www.nuclearinfo.org/sites/default/files/Military attitudes to nuclear weapons - full report.pdf](http://www.nuclearinfo.org/sites/default/files/Military%20attitudes%20to%20nuclear%20weapons%20-%20full%20report.pdf)>; and What Scotland Thinks, Opinion polls, <<http://whatscotlandthinks.org/search?query=trident>>.

<sup>7</sup> World Public Opinion Survey, 2008, <<http://nuclearfiles.org/menu/library/opinion-polls/nuclear-weapons/world-publics-eliminating-nukes-2008.pdf>>.

<sup>8</sup> Russett, B., 'Democracy, public opinion and nuclear weapons', eds P. Tetlock et al., *Behavior, Society and Nuclear War* (Oxford University Press: Oxford, 1989), vol. 1.

Such polls are most often limited to measuring support for the policy of the day in its own terms.

### Why it matters

Understanding what public attitudes are to nuclear weapons is important beyond the rationales presented above.

First, the two most common claims about them may be incompatible. If knowledge and concern are diminishing below a certain level or if people do not form opinion based on adequate information, what is the validity of the popular support that is being claimed?

Second, scholarship conveys that popular movements have had a significant impact on nuclear weapon policies worldwide, which suggests that they may have an impact today or tomorrow.<sup>9</sup>

Third, France, the UK and the USA are in the process of making decisions that would commit present and future EU citizens to live in a nuclear-armed state and/or continent for 40 years without giving them a say, either because they are under voting age or because they are not born yet.<sup>10</sup>

In July 2016, the UK Parliament voted to replace the four Vanguard class submarines currently carrying the country's nuclear weapons (Trident) with the same number of successor submarines (472 votes for; 117 against).

The French budget for nuclear forces is expected to double by 2025 but so far neither the presidential hopefuls nor the parliament suggests that citizens will be presented with a choice in the foreseeable future. (As of October 2016, 101 out of 925 French members of parliament and senators have signed a petition calling for a referendum on France's participation in an international treaty to ban nuclear weapons.)<sup>11</sup>

<sup>9</sup> See Knopf, J., *Domestic Society and International Cooperation: The Impact of Protest on US Arms Control Policy* (Cambridge University Press: New York, 1998); Wittner, L., *The Struggle Against the Bomb* (Stanford University Press: Stanford, 1993, 1997, 2003), vol. 3; and Cameron, J., 'From the grass roots to the summit: the impact of suburban protest on US missile defense policy, 1968–72', *International History Review*, vol. 36, no. 2 (2014).

<sup>10</sup> See Ritchie, N. and Pelopidas, B., 'European nuclear nationalism', eds N. Hynek and M. Smetana, *Global Nuclear Disarmament: Strategic, Political and Regional Perspectives* (Routledge: London, 2016).

<sup>11</sup> See 'Action des citoyens pour le désarmement nucléaire' [Citizens' action for nuclear disarmament], <<http://www.acdn.net/spip/spip.php?article1028&lang=en>>.

The USA is also currently planning to replace its nuclear weapons stationed in Europe with a new generation of weapons by 2022, even if President Trump has not taken a firm stance on this issue.<sup>12</sup>

In summary, there are numerous reasons for taking the time to find out about and understand public attitudes to nuclear weapons: the need for popular support as a condition for the credibility of nuclear weapon policies, the possible inconsistency of existing claims about attitudes towards them, the potential impact of popular mobilization on such policies, a concern for democracy as a representative regime, and the impact of the decision on future citizens who are not given a voice.

### The methodology and definitions used in the study

By asking a new set of questions, the paper aims to identify ways of restoring the agency of European political communities in nuclear weapon politics, at a time when political rhetoric on the subject tends to deny it or make it invisible. Such rhetoric is either instrumental (the general public supports government policy), or contemptuous (the general public is ignorant and/or volatile and creates obstacles and resistance to policy implementation), or paternalistic (policymakers do not need to consult the general public, only to communicate the rationale for what they do). It works towards restoring that agency by assessing the reality of our above-mentioned preconceived assumptions about the next generation and by questioning why it is not as engaged in the nuclear weapon debate as the generation of adults in the 1980s.

In this paper, active support for the current nuclear weapon policies of European governments is defined as combining four elements: (a) a full understanding of nuclear vulnerability; (b) the idea that nuclear vulnerability is acceptable, possibly as the necessary price to pay for something or in order to avoid an outcome deemed worse than nuclear death; (c) a possible expression of satisfaction with the current policies conducted in the name of the citizens; and (d) a sense that nuclear weapons make citizens feel safe when they belong to their state or its allies.

<sup>12</sup> Kristensen, H., 'Most nuclear weapon sites in Europe do not meet US security requirements, USAF Report', FAS Strategic Security Blog, 19 June 2009, <<https://fas.org/blogs/security/2008/06/usaf-report-mostnuclear-weapon-sites-in-europe-donot-meet-us-security-requirements/>>; and Schlosser, E., 'The H-Bombs in Turkey', *New Yorker*, 17 July 2016.

The first element (a) emphasizes that support based on an underestimation of the danger should not be considered as support.

The second element (b) derives from a common justification of nuclear vulnerability in the USA during the cold war: being taken over by communists was perceived as worse than dying in a nuclear war. This attitude is most clear in President Eisenhower's statement to the British Ambassador to the USA, Sir Harold Caccia, in December 1959: 'the President said that speaking for himself, he would rather be atomized than communized.'<sup>13</sup> This paper investigates whether there is a post-cold war analogue to the 'better dead than red' slogan as a component of popular support for existing policies.

The third element (c) recognizes that support can exist without being explicitly manifested.

The fourth element (d) is based on the primary mission of and justification for the nuclear weapons stationed in Europe, at least since the 1974 Ottawa Declaration: to contribute to the deterrent capability of the North Atlantic Treaty Organization (NATO) and, beyond that, to the security of Europe. This is clearly stated in the French White Papers on Defence and National Security, as well as presidential speeches over time. The same idea of nuclear weapons as security providers can be found in the UK and NATO's statements about the purpose of their nuclear weapons.<sup>14</sup> As for NATO, this is clearly stated in Article 18 of the 2010 NATO Strategic Concept and was reiterated at the Warsaw Summit on 8–9 July 2016.<sup>15</sup>

### The limitations of the study

There are limitations to the validity of the findings of this study, which call for broader surveys over a longer period of time.

First, the findings represent a group of people interested in expressing their views and technologically savvy since the poll was done electronically. This distortion was deliberate and based on the assumption that the next generation of EU citizens is expected to be more technologically savvy than the previous one. The respondents were reached through a network of over

30 000 mobile applications and website publishers, so the sample frame was defined as Internet or mobile Internet users. To guarantee broad access to different demographic groups spread evenly across geographical regions, a highly diverse set of widely and heavily used application and mobile website categories was targeted—from news to entertainment, sports and games. To ensure a high degree of data quality, a 'trust score' was created, using a suite of technologies for tracking and measuring response data in real time.

This score tracks user behaviour and profiles users across a range of metrics, such as time to complete steps in a survey, consistency of answers, unusual response patterns and other elements, including passive data observations, which may impact data quality. The trust score is not a static metric, but rather employs a learning algorithm that increases the predictive capacities of the overall system, over time, not just of individual users. This quality assurance measure is a constant feature of the system so that each interaction of a user with the system, in any form, iteratively refines the data quality. These measures complement more traditional approaches to avoid inconsistencies, random responses and other response patterns.

Second, the wording of the questions, the set of available answers and the order in which the questions were asked may have introduced bias—respondents did have to answer the questions in a given order. However, because of this irreducible bias, once the reflexive and compensatory work has been done, 'the most valid and reliable use of survey data is for comparing different populations, within and between countries and over time'.<sup>16</sup> Thus, the results above are strongly comparative across country, gender and age group, with a view to deciding whether it is reasonable to interpret what is being observed as generational change, with a post-cold war generation that is supposed to have different values and attitudes.<sup>17</sup>

Third, another limitation is related to the treatment of the gender variable. However, this paper does not exploit the findings on gender in depth because the available filters were too binary and the survey forced respondents to identify themselves as male or female. In spite of these methodological precautions, consistency over time is always an issue. This could be addressed by polling again, in particular after the wave

<sup>13</sup> Wenger, A., *Living with Peril: Eisenhower, Kennedy and Nuclear Weapons* (Rowman and Littlefield: New York, 1997), p. 201.

<sup>14</sup> Ritchie and Pelopidas (note 10).

<sup>15</sup> See NATO, 'Warsaw Summit Communiqué', Warsaw Summit, 8–9 July 2016, <[http://www.nato.int/cps/en/natohq/official\\_texts\\_133169.htm?selectedLocale=en](http://www.nato.int/cps/en/natohq/official_texts_133169.htm?selectedLocale=en)>, bullet 52.

<sup>16</sup> Russett (note 8), footnote 3, p. 202.

<sup>17</sup> Steele, B. and Acuff, J., 'Introduction', eds B. Steele and J. Acuff, *Theory and Application of the 'Generation' in International Relations and Politics* (Palgrave: Basingstoke, 2012), p. 18.

of terrorist attacks on Europe, and by further analysis of the existing results, which will be presented in a follow-on paper.

Fourth, this study does not measure derealization, which is a first step in the fading awareness of nuclear danger and harm. Derealization can be defined as an attitude of knowledge about nuclear danger but limited belief in that knowledge and, as a result, impossibility to act on it. Scholarship has shown that the effects caused by nuclear weapons can be put at a distance, as if they were a pure abstraction. Even when they are made audible and visible, the adequate embodiment of those effects is missing and knowing them is not necessarily believing, let alone acting on what is known. Similarly, practices of virtualization and institutional and linguistic neutralization of nuclear harm have been exposed.<sup>18</sup> Therefore, this paper only measures the existence, or not, of the ultimate form of fading awareness, which is absence of *knowledge* about the *possibility* of nuclear disaster. It does not deny the possibility, existence and problem of derealization and normalization of nuclear harm, which are not measured in this survey.

### III. OUTCOMES FROM THE PUBLIC OPINION POLL

#### Public knowledge of nuclear vulnerability

States can no longer protect their populations against a nuclear attack. Since the coupling of thermonuclear weapons with intercontinental ballistic missiles launched from submarines in the 1960s, it is no longer possible to intercept the delivery vehicle of a nuclear attack in spite of all the expenses on missile defences.<sup>19</sup>

As a result, European populations have been vulnerable to an accidental or deliberate nuclear strike coming from any nuclear-armed state targeting them. With the exception of Switzerland, which has developed a large-scale civil defence programme expected to be able to host its entire population, the

<sup>18</sup> Masco, J., 'Nuclear technoesthetics: sensory politics from Trinity to the virtual bomb in Los Alamos', *The American Ethnologist*, vol. 31, no. 3 (2004); Gusterson, H., *Nuclear Rites: A Weapons Laboratory at the End of the Cold War* (University of California Press: Berkeley, 1996), in particular chap. 3; Cohn, C., 'Sex, death and the rational world of defense intellectuals', *Signs*, vol. 12, no. 4 (1987); and Zwigenberg, R., *Hiroshima: The Origin of Global Memory Culture* (Cambridge University Press: Cambridge, 2014).

<sup>19</sup> See Slayton, R., 'The fallacy of proven and adaptable defences', Public Interest Report, Summer 2014, <<https://fas.org/pir-pubs/fallacy-proven-adaptable-defenses/>>.

survival of European populations has not been planned for and the survivability in the nuclear shelters in case of a nuclear attack is dubious. This section assesses the respondents' knowledge of this type of nuclear vulnerability, which is distilled into four questions.

*Question 1. Does the possession of nuclear weapons create vulnerability?*

Respondents had to choose one of the following five answers:

(a) Yes, it makes nuclear weapon-possessing states primary targets of a nuclear attack against which there is no defence.

(b) Yes, it does but this vulnerability is necessary for deterrence to work and, because deterrence works, we are not as vulnerable as it might appear.

(c) No, it does not: possessing nuclear weapons protects the country from invasion.

(d) No, it does not: possessing nuclear weapons protects the country from invasion and from a nuclear attack.

(e) No, possessing nuclear weapons protects the country from invasion and from a nuclear attack or an attack with any other weapons of mass destruction (WMD).

The available answers vary in terms of the benefits they expect from nuclear deterrence but the last three show denial of an existing vulnerability associated with the existence of nuclear weapons. In the first approximation, the answers will be used as a measurement of the lack of knowledge of nuclear vulnerability. Across the whole cohort, only 32.21 per cent of respondents said 'No' in one form or another, and the score decreases to 30.16 per cent when the sample is limited to respondents aged 21–30 years. Possession or hosting of nuclear weapons as opposed to a non-nuclear weapon status does not significantly correlate with the answers to this question.

*Question 2. Is the accidental launch of a nuclear weapon possible?*

Respondents had to choose one of the following three answers:

(a) Yes.

(b) No, but it was at some point in the past.

(c) No, but there is a possibility of human miscalculation in a crisis.

**Table 1.** Modalities of the lack of knowledge of the possibility of a nuclear weapon-related disaster

	European Union average (%)	France (%)	United Kingdom (%)	Germany (%)	Italy (%)	Poland (%)	Spain (%)
Lack of knowledge of nuclear vulnerability	32.21 <sup>a</sup>	34.71	38.14	29.15	29.80	23.40	33.13
	35.10 <sup>b</sup>	33.44	42.58	32.14	31.84	27.00	36.41
	30.16 <sup>c</sup>	35.78	34.97	27.19	28.35	20.90	30.71
Lack of knowledge of the possibility of accidental use of nuclear weapons	17.64	19.65	17.18	12.68	24.05	10.26	18.80
	18.09	19.17	18.84	15.08	22.95	9.86	17.78
	17.31	20.05	15.99	11.09	24.83	10.54	19.55
Lack of knowledge of the existence of post-cold war cases of near nuclear use	38.83	40.03	40.44	30.07	33.88	46.93	46.84
	40.11	40.59	41.39	32.88	32.88	50.77	48.07
	37.91	39.57	39.76	28.21	34.59	44.27	45.93
Active denial of the problem of sustainability	20.01	21.63	19.65	17.36	18.23	31.66	14.51
	21.21	21.38	24.00	18.10	17.63	32.03	15.77
	19.16	21.82	16.56	16.87	18.64	31.39	13.59

<sup>a</sup> The first line in each entry is for all respondents.

<sup>b</sup> The second line in each entry is for respondents aged 14–20 years.

<sup>c</sup> The third line in each entry is for respondents aged 21–30 years.

These three answers do not presume a particular understanding of ‘accidental launch’. The study interprets (b) as meaning that this danger no longer exists and expressing a limitation in the respondent’s knowledge of nuclear vulnerability. This was a very rare response: only 17.64 per cent overall, and the score remains stable—at 17.31 per cent—when the sample is limited to respondents aged 21–30 years. In no country does this limit of knowledge exceed Italy’s 24.05 per cent, and 24.83 per cent among Italian respondents aged 21–30 years. The distinction between countries possessing or hosting nuclear weapons and others does not lead to significantly different answers.

*Question 3. How much longer can we live in a world with nuclear weapons without a nuclear explosion happening in a context other than testing?*

Respondents had to choose one of the following five answers:

- (a) Not long—a nuclear incident, accident or war seems likely in the foreseeable future.
- (b) Another 70 years.
- (c) Forever.
- (d) I don’t know.
- (e) I don’t care.

While (d) maintains a potential openness to the possibility of a nuclear weapon-related disaster, (c) and (e) display an active absence of awareness and concern for the possibility of a nuclear weapon-related disaster. Here it is assumed that if the respondent believed a nuclear weapon catastrophe was a possibility, he/she would care. Finally, (b) is the equivalent of ‘not in my lifetime’ for respondents older than 14.<sup>20</sup> On the other side of the spectrum, (a) is an active awareness of the danger turned into nuclear fear. So the study treats (b), (c) and (e) as forms of active denial of the problem of sustainability of a nuclear-armed world. This active absence of awareness remains constantly under 25 per cent for the respondents across country, age and gender, with an average of 20.01 per cent of respondents across all the EU countries remaining relatively stable across age groups.

<sup>20</sup> In 2001, when the youngest respondents were born, life expectancy at birth for women born in the EU was 81 years, compared to 74 years for men, see <[http://ec.europa.eu/eurostat/statistics-explained/index.php/Mortality\\_and\\_life\\_expectancy\\_statistics](http://ec.europa.eu/eurostat/statistics-explained/index.php/Mortality_and_life_expectancy_statistics)>.

*Question 4. How aware are you of post-cold war cases of near nuclear use?*

Respondents had to choose one of the following four answers:

- (a) I am aware of no cases—that was a cold war problem.
- (b) I can think of one case.
- (c) I think there was more than one case.
- (d) I think there were nuclear weapon incidents but none that could have caused a nuclear weapon to explode.

Given that the seriousness of the 1995 Black Brant incident is still being debated, (a) is taken as revealing an explicitly limited knowledge of the danger.<sup>21</sup> This limitation of knowledge is the strongest among the four questions but still does not affect the majority of respondents—38.83 per cent of them saw it as a cold war problem. Focusing on respondents aged 21–30 years, the number remains stable at 37.91 per cent. In Poland, Spain, France and the UK, more than 40 per cent of respondents treated cases of near nuclear use as a cold war problem. In that respect, the distinction between possession and hosting of nuclear weapons as opposed to a non-nuclear weapon status does not significantly affect the results.

Comparing respondents aged 21–30 years with those aged 14–20 years gives an approximation of the forgetting effect assumed in the literature within the post-cold war generation. On average, the respondents aged 14–20 years display a slightly higher rate of lack of knowledge than those aged 21–30 years, which might suggest a slight effect of loss of knowledge (see table 1). However, there are three important caveats.

First, this trend is limited in scope: around 2 per cent in every question, except for the one on knowledge of nuclear vulnerability.

Second, such loss of knowledge is not visible across the board. The younger respondents are more knowledgeable: in France, about nuclear vulnerability and the possibility of accidental use of nuclear weapons; in Spain, about the possibility of accidental

use of nuclear weapons; and in Italy, about cases of near nuclear use. Both groups of respondents are fairly equal: in Poland, when it comes to knowledge of the possibility of accidental use of nuclear weapons; and in France, regarding the problem of sustainability of a nuclear-armed world.

Third, some countries display a higher discrepancy between the two groups of respondents than others. The UK and Germany stand out with the younger cohort of respondents displaying less knowledge of nuclear danger across all four questions and with a really high discrepancy regarding nuclear vulnerability, the possibility of accidental use of nuclear weapons in the case of Germany and denial of the problem of sustainability of a nuclear-armed world in the case of the UK. If the knowledge of the older respondents about nuclear danger was raised after they turned 21, the apparent loss of knowledge of the younger respondents might just mean that they have not yet been educated about nuclear danger and that the same was true for the older group at that age.

This would explain the UK's anomaly. The level of debate on nuclear weapons in the UK over the last five years was unusual and might have created an increase in knowledge among citizens who focused on it, most likely those who were at voting age in the 2015 general election. However, it should be noted that the poll took place before Jeremy Corbyn, with an explicitly anti-nuclear stance, became the head of the Labour Party, but that the Liberal Democrats modifying their stance on Trident and the Scottish National Party expressing an opposition to nuclear weapons opened a space for UK citizens to reconsider these issues. Whether or not younger people will also be made more aware as they grow older cannot be determined based on these results.

Overall, according to the results of the poll, the post-cold war generation of EU citizens does not display a worrisome lack of knowledge of nuclear danger in any of the four aspects measured. The most striking lack of knowledge across countries has to do with the recent cases of near nuclear use, with a 38.8 per cent average and a score higher than 30 per cent across all countries; the slight rise in this lack of knowledge among younger respondents is neither steep nor uniform across the board. The possession or hosting of nuclear weapons rarely seems to play a visibly determining role in the results.

<sup>21</sup> On Black Brant, see Pelopidas, B., 'Overconfidence and learning from nuclear false alarm: lessons on the Blank Brant XII event from an oral history workshop after twenty years', Unpublished manuscript, Available on request. On cases of near nuclear use, see Lewis, P. et al., 'Too close for comfort: cases of near nuclear use and options for policy', Chatham House, London, 2014.



### Public attitudes to current nuclear policies and continued exposure to nuclear vulnerability

Having documented the imperfections in knowledge of nuclear vulnerability above, this section focuses on the other three expressions of support for current nuclear weapon policies: (a) an acceptance of the above-mentioned vulnerability; (b) an expression of satisfaction with the decisions the government is taking; and (c) a sense that nuclear weapon possession makes people feel safe, as the weapons are justified by a security rationale. However, as will be shown in the new data below, none of those components is visible in a large fraction of the respondents.

#### *Acceptance of nuclear vulnerability*

As explained above, there are reasons to accept nuclear vulnerabilities. Drawing on the greatest political and social concerns in 2015, the assumption was made that for citizens of European countries living in democratic and liberal market economies with freedom of religion, the most opposed form of political organization would be to be governed by the Islamic State (IS). In other words, the contemporary equivalent of ‘better dead [in a nuclear war] than red’ that the poll intended to test was ‘better dead [in a nuclear war] than under IS’. In doing so, the goal was to see whether there was an equivalent of the cold war political acceptance of nuclear vulnerability in the name of the avoidance of a political outcome deemed worse. Of course, the comparison is imperfect given that the Soviet Union was perceived as both a territorial threat (via invasion) and an existential threat (via a nuclear strike), while the IS-sponsored nuclear terrorism threat is much less likely (since IS does not possess nuclear weapons) and is not the only threat.

Nonetheless, the issue (and the specific question below) became more relevant when French Chief of Defense Staff, General Pierre de Villiers, explained on French national television that IS was in the process of becoming a state and that this development had to be monitored and correlated to nuclear weapons. In other words, he was paving the way for a justification of French nuclear deterrence against a future IS state.<sup>22</sup> The question to respondents was: ‘Would it be worse

to live under IS than to die in an accidental nuclear explosion?’

When asked to choose between ‘Yes’, ‘No’ and ‘I don’t have an opinion on this issue’, only 29.09 per cent of the respondents said ‘Yes’. In other words, less than 30 per cent of the respondents saw this as a political condition worse than death in an accidental nuclear war. If the sample is narrowed to respondents aged 21–30 years, the scores remain approximately the same: 29.87 per cent said ‘Yes’. In the UK, the percentage of respondents who said ‘Yes’ is substantively higher: 41.87 per cent for respondents aged 21–30 years. The surprise came from the French respondents: no more than 14.59 per cent of the French respondents said ‘Yes’. If the sample is restricted to those aged 21–30 years, the score rises only slightly to 16.40 per cent.

This goes against the idea that the population of a nuclear-armed state is willingly putting its life in the hands of the president to make credible his retaliatory threat and accept that such a choice makes their country a target of other nuclear weapon states and, as such, a possible victim of accidental nuclear use. If this commitment were strong, many more respondents would have said ‘Yes’, portraying IS as much worse than a patriotic acceptance to exposure in the name of nuclear deterrence. The point remains valid even if IS does not acquire nuclear weapons. Interestingly, 73.39 per cent of the respondents who self-identified as French said ‘I don’t have an opinion on this issue’ (and this drops to 71.95 per cent for respondents aged 21–30 years).

The distinction between nuclear weapon possessor or host and other types of state is not significant for the answers to this question. France and Spain have a much lower rate of ‘Yes’ and ‘No’ answers and a much higher rate of people expressing their absence of opinion on the matter.

#### *Engagement in the debate on nuclear weapons*

The absence of active support for a policy that relies on the acceptance of nuclear vulnerability as a condition for security is confirmed in the answers to the following question: ‘What three things hold you back most from engaging more in the debate over the future of nuclear weapons?’

One of the available answers was ‘I am generally content with the decisions made in my name’. Only 23.45 per cent of the respondents included it as one of their three answers. There is not much variation around this average among the countries in the study;

<sup>22</sup> Gabet, S., ‘la France, Le Président, et la Bombe’ [France, the President and the Bomb], Broadcast on France 5, 22 Mar. 2016, Cited in Tertrais, B. and Guisnel, J., *Le Président et la Bombe* (Paris: Odile Jacob: Paris, 2016), pp. 215–16.

for example, the score was 21.13 per cent in France, 27.78 per cent in the UK, and a high of 29.28 per cent in Italy. Responses from the non-nuclear weapon states Poland and Spain are slightly below the average with 20.34 per cent and 16.80 per cent respectively.

It seems that these unexpectedly low numbers correlate more broadly with the level of popular support for a government at a point in time among young voters and are not specific to the nuclear issue. They remain meaningful in a context like France, in which the credibility of nuclear deterrence is expected to be based in part on the credibility of the leader, which in turn is determined by the support of the nation for that leader. In that particular setting, the two possible interpretations of these results mean the same thing. The results can either be interpreted as signs of very limited support for current nuclear weapon policies or as signs of very limited support for a particular government at a moment in time. Given the French articulation of the connection between the president, the support of the national community and the credibility of the deterrent threat, these two interpretations are equally significant of a problematic lack of support for existing policies.

There is another way of assessing the consistency of this lack of support for current nuclear weapon policies. In the UK and France, active support of current nuclear weapon policies would consist of assessing nuclear vulnerability in the following way. To the question ‘Does the possession of nuclear weapons create vulnerability?’, the respondent would answer ‘Yes, it does’—which shows knowledge of the lack of protection against a nuclear attack whatever its origin—‘but this vulnerability is necessary for deterrence to work and, because deterrence works, we are not as vulnerable as it might appear’. This is one of the available answers. In France, only 34.72 per cent of the respondents gave that answer and 25.51 per cent in the UK. These scores are equally low if the sample is limited to respondents aged 21–30 years (32.25 per cent in France; 25.61 per cent in the UK).

#### *Nuclear weapons and personal safety*

In seeking to go one step further and trying to explain the absence of support beyond a general trend towards the decline of *pro patria mori* (sacrifice for one’s country) over the years, it is necessary to relate this to the primary mission of the nuclear weapons stationed in Europe: to guarantee the security of the countries on

the continent. To get a sense of this, respondents were asked the following question.

#### *Do nuclear weapons make you feel safe?*

Respondents had to choose one of the following four answers:

(a) Yes, absolutely.

(b) Yes, they make me feel safe from attacks by other countries, but I acknowledge that they also have risks attached.

(c) No.

(d) Yes and no: the ones that are located in my country and allied countries are a source of safety; the others are a concern.

61.54 per cent of respondents simply answered ‘No’, and this increases to 65.48 per cent if the sample is limited to respondents aged 21–30 years.

The rationale of current nuclear weapon policies on the European continent, nuclear deterrence in France and the UK, US-extended nuclear deterrence and non-proliferation, would be compatible with two of the four answers: (b) and (d). As suggested in the previous section, (b) would express support for the existing policies combined with knowledge of nuclear vulnerability and (d) is typical of a non-proliferation project.<sup>23</sup> ‘Yes’ would be a pro-proliferation attitude and ‘No’ suggests radical opposition to any policies involving nuclear weapons.

However, more than 50 per cent of respondents expressed that nuclear weapons did not make them feel safe in every single country in the study with a representative sample of respondents, except for non-nuclear armed Poland (42.53 per cent). Even in France and the UK, 51.16 and 54.37 per cent respectively of respondents shared this feeling. The exceptions were Polish respondents, and respondents aged 14–20 years in the UK and France (53.81 per cent in France and 53.41 per cent in the UK), who said that nuclear weapons did make them feel safe (as opposed to their older counterparts). Notably, the share of respondents expressing that nuclear weapons do not make them feel safe reached 73.71 per cent in Germany.

When limiting the sample to respondents aged 21–30 years, the ‘No’ rate increases in every country with a representative sample, remains above 50 per cent in all of them except for Poland, and Spain displays

<sup>23</sup> Gusterson, H., ‘Nuclear weapons and the other in the Western cultural imagination’, *Cultural Anthropology*, vol. 14, no. 1 (1999).

the highest rate. (In France, it increases by 4 per cent to 55.28 per cent; in the UK, by 5.5 per cent to 59.92 per cent.)

It should also be noted that this component of support for current nuclear weapon policies tends to score higher than the other two—acceptance of the above-mentioned vulnerability, and expression of satisfaction with the existing policy. This finding needs to be analysed in connection to the limitations of the knowledge of nuclear dangers, in particular when it comes to accidents, as demonstrated in the previous section. Moreover, it is noticeable that a significantly larger share of the respondents aged 14–20 expressed that nuclear weapons make them feel safe than those aged 21–30.

Overall, the constituency that actively and consistently supports current nuclear weapon policies in this representative sample of Europeans aged 14–30 years is very limited. Even when assuming complete knowledge of nuclear vulnerability, which is a generous assumption as suggested in the previous section, only a very small portion of the respondents expressed an acceptability of the vulnerability they are put under, an active satisfaction with the policy conducted in their name and a sense of safety derived from their state's or its protector's nuclear weapons (see table 2).

If consistency across those three modalities of support is assumed, meaning that the respondents expressing support in one modality are also expressing support in the other two, the lowest share of expression of support of the three should be treated as the highest possible share of support across all three modalities. Therefore, at best, 23.45 per cent of respondents fully support current nuclear weapon policies while being fully knowledgeable of the vulnerability they create—consistency checks will be applied and the results will be presented in a follow-on paper.

The fragility of that support also appears with support being higher among respondents aged 14–20 years (for the last two criteria in table 2, out of four across all countries), who are slightly less knowledgeable of nuclear danger. In the two European nuclear weapon states, support across all four aspects is also very limited, much more so in France than in the UK. In France, support across the board is not higher than 14.59 per cent and 16.40 per cent if focusing only on the group aged 21–30 years. (Answers to the first question are deemed irrelevant because respondents might feel that living under IS would not be worse

than dying in an accidental nuclear war but there might be another outcome which would be worse than such a death. They might also have no opinion on that particular dichotomy and still support current policy in the name of the avoidance of invasion for instance.) In the UK, support across the board would be 27.78 per cent and 27.10 per cent if focusing only on the group aged 21–30 years.

### **Does the public no longer care about nuclear weapons?**

A common assumption about the attitude of the next generation of EU citizens towards nuclear weapons is that they no longer care enough. This is why, according to pro-disarmament circles, there are no longer protests worldwide as there were in the 1980s. To assess this assumption, two questions were designed.

*Question 1. What three things hold you back most from engaging more in the debate over the future of nuclear weapons?*

Respondents could choose three of the following six answers:

- (a) I can't affect the outcome.
- (b) I'm too busy on things that more directly affect my life.
- (c) I don't know what the answers are.
- (d) My country does not have the influence.
- (e) I am generally content with decisions made in my name.
- (f) I am worried about the impact on my reputation/job/standing with the government.
- (g) I don't care.

*Question 2. What global issues do you think will affect your life most in the coming half century that might motivate you to take action?*

Respondents could choose three of the following six answers:

- (a) The spread of nuclear weapons and nuclear weapon use.
- (b) Global terrorism.
- (c) Threat of attack or invasion by another state.
- (d) Climate change and ecological destruction/breakdown.
- (e) Exhaustion of key resources.
- (f) Global poverty and inequalities.
- (g) Financial breakdown.

**Table 2.** Modalities of support for current nuclear weapon policies

	European Union average (%)	France (%)	United Kingdom (%)	Germany (%)	Italy (%)	Poland (%)	Spain (%)
Acceptability of nuclear vulnerability (Islamic State is worse than accidental nuclear death)	29.09 <sup>a</sup> 27.97 <sup>b</sup> 29.87 <sup>c</sup>	14.59 12.41 16.40	41.75 41.58 41.87	35.66 34.52 36.41	32.70 34.66 31.32	33.02 30.59 34.69	17.78 16.35 18.84
Content with the decisions taken in one's name	23.45 25.65 21.89	21.13 23.07 19.51	27.78 28.72 27.10	19.53 21.44 18.27	29.28 30.09 28.70	20.34 25.13 17.03	16.80 19.02 15.16
Feel safe	38.46 44.03 34.52	48.84 53.81 44.71	45.63 53.41 40.07	26.29 28.40 24.89	30.63 34.77 27.70	57.47 62.46 54.03	25.56 31.20 21.40

*Note:* The results for 'Feel safe' aggregate all the expressions of feeling of safety, including the potentially pro-proliferation variant answer 'Yes' without qualifiers which, while expressing safety, is not compatible with the current policies of European nations.

<sup>a</sup> The first line in each entry is for all respondents.

<sup>b</sup> The second line in each entry is for respondents aged 14–20 years.

<sup>c</sup> The third line in each entry is for respondents aged 21–30 years.

The answers to the second question suggest that this generation is not on the verge of mobilization regarding nuclear weapon issues and does not expect to actively engage in it. Of course, a few leaders would be sufficient to make a difference but only 27.67 per cent of respondents included the spread of nuclear weapons and nuclear weapon use in their three answers.

This is the lowest score among all issues across the whole cohort of respondents and it remains the lowest score if the scope is narrowed to respondents aged 21–30 years (26.33 per cent). It is also the lowest score for both genders (25.79 per cent for self-identified female and 29.47 per cent for self-identified males). It is the lowest score in all countries except for Germany (29.47 per cent), where the threat of attack or invasion scored even lower (27.48 per cent). On that issue, the distinction between nuclear weapon state, non-nuclear weapon state and hosting state does not make a difference. France and Spain have the lowest scores, 22.72 per cent and 22.86 per cent respectively, and Poland and the UK have the highest scores, 29.77 per cent and 29.28 per cent respectively.

However, the absence of or limited mobilization does not result from an active and acknowledged absence of

care for the issue. 34.23 per cent of respondents chose 'I don't care' as one of their three answers. This partly addresses an objection to the validity of the results, which consists of claiming that those who chose to take part in the poll about nuclear weapons care more than the average population. They had other incentives to answer the questions.

There is almost no gender difference in the score (33.86 per cent for self-identified females and 34.59 per cent for self-identified males) and the score only drops slightly when focusing on respondents aged 21–30 years (32.44 per cent). In that case too, the distinction between nuclear weapon states and non-nuclear weapon states does not make a significant difference, with non-nuclear Poland and Spain displaying scores five points higher than the average and almost nine points lower (39.62 per cent and 25.94 per cent respectively), with nuclear-armed UK somewhere in between (30.35 per cent). France stands out with a score of 51.03 per cent, which remains stable when only considering respondents aged 21–30 years (50.68 per cent).

The limits of this common assumption that popular attitudes to nuclear weapons are careless, except

in the French context in which the active effort towards demobilization on the issue seems to have been successful, are visible in the answers to another question. When asked ‘How much longer can we live in a world with nuclear weapons without a nuclear explosion happening in a context other than testing?’, respondents had the possibility to answer ‘I don’t care’. Only 6.83 per cent of respondents chose to do so and the highest score across the countries was Poland, with 12.95 per cent (France scored higher than average but not as high, with 8.94 per cent).

Instead of carelessness, a feeling of powerlessness to influence the outcome is widespread across the whole cohort. More than 70 per cent of respondents (72.38 per cent) expressed a feeling that they could not affect the outcome as a reason why they do not participate in the debate about the future of nuclear weapons. This remains true for respondents aged 21–30 years (73.8 per cent). This is also true for every single country in the study for which the cohort questioned was large enough to be representative, meaning France, the UK, Germany, Italy, Poland and Spain: in all of those countries, more than 71 per cent of respondents expressed the same feeling of powerlessness.

The most important finding remains that whichever way the data is narrowed, by country, age or gender, there is always more than 70 per cent of respondents expressing a feeling of powerlessness in affecting nuclear weapon policy choices in every country for which there was a representative sample.

#### IV. CONCLUSIONS

European nuclear weapon policymakers and commentators commonly assume that European public opinion is increasingly forgetful and indifferent about nuclear weapon-related issues (as the spectre of the cold war moves back in time), but still tacitly supportive of the policies conducted in its name.

These assumptions are all the more important as several of the democratic polities composing the members of the EU are making decisions to modernize their nuclear arsenals and to continue hosting US weapons. This will commit their future citizens to living in a nuclear-armed continent for most of their lives, without giving them a say in the matter. Given that nuclear weapon modernization plans extend the lifespan of the weapons over at least the next 40 years,

the decisions taken now will impact many EU citizens—including those not yet born or not yet of voting age.

However, the results of the poll of more than 10 000 EU citizens aged 14–30 years, in August 2015, suggest that none of these assumptions is true.

First, the lack of knowledge about nuclear danger is not as rampant as commonly assumed. Among those aged 14–30 years, it only increases very slowly, not uniformly and possibly masks the simple fact that citizens become informed about nuclear weapons in their 20s. Therefore, the greater lack of knowledge among younger citizens simply suggests that they may not have been informed yet. However, it should be reiterated that this study could not fully measure derelization: respondents might know things but not fully relate to them. A lack of knowledge about post-cold war cases of near nuclear use seems the most concerning aspect of this lack of knowledge, with up to 40 per cent of the cohort manifesting it.

Second, even if a reasonable amount of understanding of nuclear danger can be documented, it does not translate into an expression of support for the existing nuclear weapon policies conducted in the name of the people of the EU. Support combining the criteria of feeling of safety, satisfaction with policies taken in one’s name and acceptance of nuclear vulnerability is lower than 30 per cent in every country for which there was a representative sample of respondents, if consistency is assumed. Even if this low level of support reflects the overall level of support for governments at the time of the poll, this is meaningful in countries where active popular support is meant to justify nuclear threats and make them credible.

The next generation of Polish citizens stands out as pro-nuclear weapons and increasingly so—62.46 per cent of the respondents aged 14–20 years expressed that nuclear weapons made them feel safe (8.43 per cent more than those aged 21–30 years) and Poland has the highest rate of active denial of the problem of sustainability of a nuclear-armed world (a stable 31.66 per cent versus the average 20.01 per cent)—but that does not translate into support for existing policies conducted in its name.

Finally, the absence of mobilization of the youngest generation does not reflect tacit support for existing policies or lack of concern about the issue, but rather a strong feeling of powerlessness, of inability to change the outcome (72.38 per cent on average and more than 70 per cent whichever way you narrow the data, by country with a representative sample, age or gender).

### Implications for research and policy

The conclusions above have several implications for further research and future policy.

Regarding research, it would be worth polling a similar sample of the European population again, in order to see whether the observed attitudes are stable over time. A contrasting poll, including people who had received their voting rights by the end of the cold war, would also be a way of more robustly measuring the forgetting effects and the potential for generational change. A forward-looking approach would consist of adding questions about how respondents were sensitized to the issue and how old they were when they first thought about nuclear weapons.

That might unveil the existence of future thresholds beyond which the forgetting effect might accelerate. The passing away of the *Hibakusha* (the surviving victims of the 1945 atomic bombings of Hiroshima and Nagasaki) is only one of those possible thresholds. It might also reveal that the forgetting phenomenon has to do with the orders of magnitude of the nuclear weapon phenomenon (i.e. the number a weapons in a given country, the damage they can cause and their cost) rather than the fundamentals of nuclear vulnerability.

Regarding policy, an educational policy aimed at spreading knowledge of nuclear vulnerability among future EU citizens could be an option. Issues surrounding nuclear weapons could be taught as part of the curriculum in mandatory school. For example, teaching about cases of near nuclear use could address the problem of the slightly lower knowledge of nuclear danger among citizens aged 14–20 years. This would require an active research programme on nuclear history and a connection between the latest scholarship on these issues and high school teaching.

This is all the more important as the countries that have had serious nuclear weapon-related accidents do not display a significantly higher level of knowledge—not even the UK, where discussions about nuclear weapon issues have been significantly more active, stands out in terms of knowledge. Spain, for example, had the historic accident of Palomares. On 17 January 1966, a US B-52 collided with a KC-135 tanker during a refuelling mission near Palomares. The bomber exploded, killing seven crew members, and four hydrogen bombs fell to the earth. The conventional explosive material for two of the bombs exploded after

it hit the ground, spilling radioactive material.<sup>24</sup> In spite of this, Spanish respondents displayed a slightly higher lack of knowledge of the possibility of accidental use of nuclear weapons, 18.80 per cent versus the average 17.64 per cent (see table 1).

In other words, history is not enough: an active programme to unearth it and keep it alive is required. The programme should address the possible derealization of nuclear danger and harm that this study could not measure and avoid overconfidence and the retrospective illusions of safety and control. It should expose the trade-offs and bets on the future attached to every possible nuclear weapon policy choice, so that citizens feel re-empowered and so that their concern for nuclear weapon issues does not simply turn into ‘I don’t know what the answers are’ (45.67 per cent of the cohort explained its limited to non-existent participation in the debate on the future of nuclear weapons this way). It would need to go beyond an instrumental view of technology and incorporate the role of luck in the issue of nuclear crises, in order to revive informed democratic engagement.<sup>25</sup>

### ACKNOWLEDGEMENTS

This study was funded by a UK Economic and Social Research Council grant on ‘Learning from the history of nuclear close calls’, a British Academy Newton Advanced Fellowship for a project with Professor Carlo Patti on ‘Global nuclear vulnerability: the effects of the Cuban Missile Crisis on British, French and Brazilian nuclear policies’, and the British American Security Information Council (BASIS). The author is grateful to Malte Gottsche, Alicia Jensen, M. V. Ramana, Ben Reimold, Mark Walker and anonymous reviewers for very useful feedback on early drafts.

<sup>24</sup> Sagan, S., *The Limits of Safety: Organizations, Accidents and Nuclear Weapons* (Princeton University Press: Princeton, 1993), p. 178; and Schlosser, E., *Command and Control* (Allen Lane: New York, 2013), pp. 315–19.

<sup>25</sup> The author’s junior chair of excellence in security studies project on nuclear knowledge and epistemic vulnerability, at Sciences Po (Paris), focuses on this very issue. See Pelopidas, B., ‘The unbearable lightness of luck. Three sources of overconfidence in the manageability of nuclear crises’, *European Journal of International Security*, vol. 2, no. 2 (2017), on the retrospective misunderstanding of luck; and Pelopidas, B., ‘Nuclear weapons scholarship as a case of self-censorship in security studies’, *Journal of Global Security Studies*, vol. 1, no. 4 (2016). The author’s 2016 British Academy Rising Star Engagement Award on ‘Teaching cases of near use of nuclear weapons in high/secondary schools: a first step’ is building the network of teachers to do so and will create and translate teaching material based on the latest research on past nuclear crises.



This document has been produced with the financial assistance of the European Union. The contents are the sole responsibility of the EU Non-Proliferation Consortium and can under no circumstances be regarded as reflecting the position of the European Union.

## A EUROPEAN NETWORK

In July 2010 the Council of the European Union decided to create a network bringing together foreign policy institutions and research centres from across the EU to encourage political and security-related dialogue and the long-term discussion of measures to combat the proliferation of weapons of mass destruction (WMD) and their delivery systems.

## STRUCTURE

The EU Non-Proliferation Consortium is managed jointly by four institutes entrusted with the project, in close cooperation with the representative of the High Representative of the Union for Foreign Affairs and Security Policy. The four institutes are the Fondation pour la recherche stratégique (FRS) in Paris, the Peace Research Institute in Frankfurt (PRIF), the International Institute for Strategic Studies (IISS) in London, and Stockholm International Peace Research Institute (SIPRI). The Consortium began its work in January 2011 and forms the core of a wider network of European non-proliferation think tanks and research centres which will be closely associated with the activities of the Consortium.

## MISSION

The main aim of the network of independent non-proliferation think tanks is to encourage discussion of measures to combat the proliferation of weapons of mass destruction and their delivery systems within civil society, particularly among experts, researchers and academics. The scope of activities shall also cover issues related to conventional weapons. The fruits of the network discussions can be submitted in the form of reports and recommendations to the responsible officials within the European Union.

It is expected that this network will support EU action to counter proliferation. To that end, the network can also establish cooperation with specialized institutions and research centres in third countries, in particular in those with which the EU is conducting specific non-proliferation dialogues.

<http://www.nonproliferation.eu>

# EU NON-PROLIFERATION CONSORTIUM

*The European network of independent non-proliferation think tanks*

FONDATION  
pour la RECHERCHE  
STRATÉGIQUE

## FOUNDATION FOR STRATEGIC RESEARCH

FRS is an independent research centre and the leading French think tank on defence and security issues. Its team of experts in a variety of fields contributes to the strategic debate in France and abroad, and provides unique expertise across the board of defence and security studies.

<http://www.frstrategie.org>

PRIF  HSFK  
Peace Research Institute Frankfurt Hessische Stiftung  
Friedens- und Konfliktforschung

## PEACE RESEARCH INSTITUTE IN FRANKFURT

PRIF is the largest as well as the oldest peace research institute in Germany. PRIF's work is directed towards carrying out research on peace and conflict, with a special emphasis on issues of arms control, non-proliferation and disarmament.

<http://www.hsfk.de>

 IISS

## INTERNATIONAL INSTITUTE FOR STRATEGIC STUDIES

IISS is an independent centre for research, information and debate on the problems of conflict, however caused, that have, or potentially have, an important military content. It aims to provide the best possible analysis on strategic trends and to facilitate contacts.

<http://www.iiss.org/>

 sipri

## STOCKHOLM INTERNATIONAL PEACE RESEARCH INSTITUTE

SIPRI is an independent international institute dedicated to research into conflict, armaments, arms control and disarmament. Established in 1966, SIPRI provides data, analysis and recommendations, based on open sources, to policymakers, researchers, media and the interested public.

<http://www.sipri.org/>