



ON THE INTRODUCTION OF A SURVEILLANCE CALCULUS IN GERMANY

Policy Paper

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1 The State of Surveillance

The legal bases for governmental surveillance of individuals and groups are constantly being extended, amended and augmented. This observation applies for the surveillance of infrastructures as well as social relations and developments. The increase of technological capabilities for surveillance entails permanent demands for using these instruments for the purposes of crime prevention, crime prosecution and intelligence-led reconnaissance.

For decades, legislators on the level of the German states (Länder), the federal government and the EU have passed new surveillance laws while old legislation has barely been rescinded. This has raised, increasingly and for some time now, the question on the level of surveillance that democratic states under the rule of law can tolerate. Instead of continually demanding ever more extensive powers, it is imperative to consider those surveillance measures that already exist, with a focus on how to retract them.

This policy paper presents a pragmatic approach for introducing a "surveillance calculus" in Germany. In this, it pursues a twofold aim. On the one hand, we consider it a pressing matter that the legislator should have a comprehensive overview of the existing surveillance laws and their respective interferences with fundamental and constitutional rights. Here we start from the observation of the Federal Constitutional Court that the current level of surveillance is already problematic as it stands and requires an intervention by the legislator. On the other hand, a transparent overview of the status quo is a suitable instrument for structuring and contributing to the public debate about a socially acceptable level of surveillance. Beyond demarkating red lines that may not be crossed, this also concerns the question how surveillance can be reduced limited and abolished, in the future.

We will first outline the discussion on surveillance law, focussing on the list of requirements for a surveillance calculus specified by the German Constitutional Court (chapter 2). We present several current approaches for putting these requirements into practice and discuss their respective advantages and drawbacks (chapter 3). Based on this discussion, we argue that a pragmatic approach is required to ensure a swift practical implementation of a surveillance calculus (chapter 4). We then present a proposal for a gradual introduction of a surveillance calculus, including suggestions for a concrete process and institutionalization (chapter 5). We conclude by outlining the anticipated effects of implementing the proposed surveillance calculus in practice (chapter 6).

2 Transparency and Discussion of Surveillance Legislation

In its 2010 verdict on bulk data retention, the German Constitutional Court has indicated that there is a limit to the increase of surveillance in society. However, it did so in rather vague terms: "The introduction of communication meta data retention must not be used as template for the preemptive, indiscriminate creation of further data retention, but compels the legislator to the utmost restraint when considering new retention obligations or authorizations, in view of the totality of already existing data collections. It is an integral part of the constitutional identity of the Federal Republic of Germany that the exercise of constitutional freedoms of citizens must not be captured and registered in its entirety."¹

It would be neither possible nor expedient to define an absolute upper limit for surveillance, as the demands of freedom and security have to be balanced continuously. However, this balancing does not only concern the proportionality of a single measure in isolation, but also has to account for the overall level of surveillance and the limitations of fundamental rights already in existence. In

¹ BVerfGE 125, 260 (324).

legalistic terms, this can be achieved by way of a two-fold proportionality test: On the one hand, the proportionality of the specific surveillance measure has to be assessed. On the other hand, the proportionality of the overall burden on constitutional rights has to be assessed in view of the entirety of surveillance measures already in existence. A single surveillance measure may be considered proportionate when assessed individually, while, in conjunction with all other surveillance measures available, it may result in undue limitations of the exercise of constitutional rights of the citizens and thereby, ultimately, be disproportionate. In this case, the legislator must not combine the new, concrete surveillance measure with those already in existence. Instead, it has to replace existing ones with new ones. For example, if the legislator decides to rely on bulk data retention for telecommunication traffic, it must not simultaneously collect data about road and air traffic as well as energy consumption. In this context, the Federal Constitutional Court has accounted for the possibility that the legislator may replace a surveillance measure of limited efficiency with a more efficient one in such a way that the overall level of surveillance remains constant or even decreases notwithstanding the introduction of a new monitoring capability.²

Finding the right balance between surveillance and the protection of constitutional freedoms demands acknowledging that fundamental rights and public interests are at stake on both sides of the equation. The protection of life, health and property, the penal authority of the state, the prevention of crime and the affirmation of the legal order require proportionate responses to detect threats to these values and for sanctioning violations. However, these responses must not violate human dignity and limitations of personality rights and self-determination, the right to free speech and of political activities have to be kept at a minimal level. An optimal balance between fundamental rights and public interests must ensure that no rights are violated. This applies to individual surveillance measures and to the overall system of governmental surveillance in equal terms.

For this balancing exercise to be successful, sufficient awareness of the existing level of governmental surveillance at any given time is of paramount importance. The weighting of the societally acceptable level of surveillance required for legitimate political and legal aims while respecting the protection of fundamental rights requires a sufficient degree of transparency on this matter. A prerequisite for achieving this level of transparency is a "surveillance calculus", which can facilitate a broader public discourse on governmental surveillance measures. This calculus aims at a comprehensive overview of existing surveillance laws and practices, as well as the interferences with fundamental rights entailed by them, thereby guiding decisionmaking with regard to new surveillance legislation. Prior to introducing new surveillance legislation, it should be checked, based on this account, whether fundamental rights would be unduly affected by the introduction of the planned regulation with regard to the entirety of existing surveillance legislation.

There is already a broad discussion about the concept of a surveillance calculus in Germany. On 22 February 2021, the German Federal Parliament held an expert hearing on the topic of "Protecting Freedom and Security -- Towards a Surveillance Calculus, rather than Additional Restrictions of Civil Rights". The hearing revolved around the practical feasibility of producing such a calculus. As early as 2020, the German Liberal Party (FDP) had called for developing a methodology for a surveillance calculus.³ This was followed up by the parliamentary inquiry in 2021 on corresponding methodical foundations and initiatives.⁴ The previous Federal Government then stated that it considered the prospects of operationalising a surveillance calculus beyond the "present dogmatism and methodology for proportionality tests" doubtful.⁵ The introduction of a surveillance calculus was also part

² Roßnagel, Alexander, "Die „Überwachungs-Gesamtrechnung“ – Das BVerfG und die Vorratsdatenspeicherung", *Neue Juristische Wochenschrift (NJW)*, No. 18, 2010, S. 1238-1242.

³ BT-Drs. 19/23695

⁴ BT-Drs. 19/32124

⁵ BT-Drs. 19/32456, S. 3

of the election programs of the FDP and Alliance 90/The Greens (Greens) for the 2021 federal election. The Greens called for a surveillance calculus as "a survey of the current legal framework on threats to public interests and its efficiency with regard to achieving its intended objectives".⁶ In the 2021 parliament hearing, a "concept for a periodical surveillance barometer" was presented to the German Federal Government.⁷ An alternative suggestion concerned the compilation of an "inventory of constitutional freedoms".⁸

The concept of a surveillance calculus was intensively discussed in Austria as well.⁹ We are not aware of similar discussions beyond German-speaking countries. However, at the international level Privacy and Surveillance Impact Assessments provide a sophisticated methodology for assessing individual surveillance measures.¹⁰

In the meantime, the discussion on the surveillance calculus surpassed its original context of the constitutional legal discourse. It does no longer solely concern the legitimacy of information gathered by way of surveillance in legal proceedings, but aims at the political discussion within the legislative bodies as well as the general public.

3 Previous approaches for a Surveillance Calculus

The recent scientific and political debate has produced, adapted and deliberated a variety of approaches on how to conceptualize and implement a surveillance calculus in order to arrive at results that are meaningful in practice.

In the course of developing a *periodic surveillance barometer* for Germany, it has been suggested¹¹, to not just capture the title, but also the effects of each surveillance law. To this end, the relevant legal bases legitimizing indiscriminate mass surveillance will be listed in conjunction with the corresponding data repositories (including those of private businesses). In a next step, the weight of surveillance measures is supposed to be quantified by empirically evaluating the frequency of access to these repositories. In order to qualitatively estimate of the gravity of such interference, the access by authorities is supposed to be assessed in a third step using criteria derived from constitutional law (e.g. the affected sphere of private life, the type, duration, extent and depth of the access). In combining quantitative and qualitative aspects, the gravity of interference should then be represented in an index value and visualized in form of a barometer. This proposal raises the question whether a combination of the frequency of interferences and the qualitative criteria chosen can provide a useful assessment of the real world impacts of surveillance measures. It is also unclear whether and how different surveillance aspects (such as secrecy, range of the impact, the gravity of individual interferences, thresholds for interference, safeguards for fundamental rights etc.) can be offset against each other and represented in index values. In any case, pseudo-mathematical models must not obfuscate the fact that the evaluation required are of an essentially legal nature. Not least since the project has not yet published final results, the discussion about quantifying and assessing surveillance measures this way is still in its infancy. Given the absence of robust findings, more research on these suggestions is required.

⁶ BT-Drs. 19/26221, S. 2 f.

⁷ Ausschuss für Inneres und Heimat, Ausschussdr. 19(4)732 E; Poscher, Ralf, Michael Kilchling, Katrin Kappler, et al., "Überwachungsbarometer für Deutschland: Ein Modellkonzept", Friedrich-Naumann-Stiftung, Potsdam-Babelsberg, 2022. <http://hdl.handle.net/21.11116/0000-0009-AF0E-4>

⁸ Pohle, Jörg, Freiheitsbestandsanalyse statt Überwachungs-Gesamtrechnung: Ein Alternativvorschlag, *FifF-Kommunikation*, Jg. 36, Nr. 4, 2019, pp. 37-42.

⁹ Tschohl, Christoph, Ewald Scheucher, Dieter Kargl, et al., *Handbuch zur Evaluation der Anti-Terror-Gesetze in Österreich 1.2*, epicenter.works – Plattform Grundrechtspolitik, Wien, 2016.; further developed in: Adensamer, Angelika, Andreas Czák, Alina Hanel, et al., *Handbuch Überwachung*, epicenter.works – Plattform Grundrechtspolitik, Wien, 2020.

¹⁰ See. e.g. Wright, D.; Friedewald, M.; Gellert, R. I. (2015): Developing and Testing a Surveillance Impact Assessment Methodology. In: *International Data Privacy Law*, Vol. 5, No. 1, S. 40-53

¹¹ Poscher et al. (Fn. 7).

Another approach involves shifting the "burden of proof" away from those monitored to the legislator.¹² This would oblige the state to demonstrate, by way of an "*inventory of constitutional freedoms*", the aspects of personal rights and freedoms that remain untouched by surveillance. This would also have to account for the possibility of chilling effects on exercising affected fundamental rights. This "reversal" of the burden of proof could make it easier to criticise surveillance, as it helps to qualify, in the political discourse, claims about the continued existence of spaces of freedom that remain untouched by surveillance measures. While the approach envisages the inclusion of empirical data on the implementation practice of the regulations, it falls short of describing how the method could be operationalized. Merely asking for remaining realms of freedom could also be deemed insufficient for estimating the different effects of surveillance measures on public security and to weigh them against the resulting interference with fundamental rights. Regarding the operationalisation of the surveillance calculus, calls for including chilling effects appear justified and should be considered in the assessment. This also applies for objections that have been raised against assigning the responsibility for the surveillance calculus to governmental entities, since this may easily lead to attempts of strategically minimizing the impact of surveillance measures.

An Austrian project compiling a "*Handbook for Evaluating Anti-Terror Legislation*" (HEAT) pursues a different approach. This compendium encompasses an overview of all Austrian laws granting surveillance powers, analyses the pertinent jurisprudence, determines the technologies that are available to and employed by law enforcement authorities, and outlines a technology impact assessment. It also depicts the legal and societal framework of police surveillance for the prevention and prosecution of crime and the scope of functions assumed by the Austrian national intelligence service.¹³ In order to gauge the surveillance pressures on the population in its totality, this approach shows the relation between all the individual surveillance measures. Due to this ambition and the corresponding method, the surveillance calculus becomes an extensive scientific task which will have to be carried out on a continuous basis. The primary aim of the handbook is to inform the citizens. The aim of compelling the legislator to evaluating surveillance laws, or into retracting them if appropriate, is pursued indirectly, that is, by informing the public discourse. As a consequence, the procedural approach of the handbook is primarily suited for guiding scientific evaluations of surveillance laws and for educating the general public. It is less appropriate for producing a surveillance calculus as required by the German Federal Constitutional Court.

We are not aware of specific discussions on a surveillance calculus in the published international scientific literature. Existing loosely related proposals focus on the assessment and analysis of concrete surveillance measures. The debates on Privacy Impact Assessments (PIAs) and technology impact assessment first initiated a discourse around Surveillance Impact Assessments (SIAs). Here, a risk assessment process is used to identify and estimate the probability of impacts caused by surveillance measures, their potential individual and societal consequences are pointed out, and mitigation measures are determined for reducing the identified risks. The organization in charge of processing the data is deemed the entity responsible for carrying out the SIA by also involving other contributing or affected entities.¹⁴ PIAs as well as SIAs have been criticised for having an unsuitably narrow perspective on surveillance measures. This has led to a number of suggestions for selectively estimating impact aspects of data processing, such as Ethical Impact Assessments¹⁵, Human Rights

¹² Pohle (Fn. 8).

¹³ Adensamer, Angelika, Andreas Czák, Alina Hanel u.a. *Handbuch Überwachung*, epicenter.works – Plattform Grundrechtspolitik, Wien, 2020.

¹⁴ Wright, et al. (Fn. 10).

¹⁵ Wright, D.; Friedewald, M. (2013): Integrating privacy and ethical impact assessment. In: *Science and Public Policy*, Vol. 40, No. 6, pp. 755-766.

Impact Assessments¹⁶, Algorithmic Impact Assessments¹⁷ and Facial Recognition Impact Assessments.¹⁸ This literature is useful as it summarizes the ever more specific procedural approaches (what should be implemented when and by whom?) and criteria for the operationalization of the risk assessment (how can we investigate which constitutional rights and societal values are affected and in what way?). However, these proposals are solely geared at examining single surveillance measures, which limits their applicability for a surveillance calculus which, in turn, aims to encompass surveillance measures in a comprehensive manner. Whether and to what extent the positive aspects highlighted for these approaches can be integrated into a surveillance calculus remains an open question and is subject to further research.

4 A pragmatic Approach for a Surveillance Calculus

The difficulties and inconsistencies of existing approaches listed in the previous sections call for a multitude of conceptual deliberations and discussions before a surveillance calculus can claim to cover all relevant requirements. It may well turn out that not all contradictions can be resolved and that not all requirements can be included.

These deliberations might not be finalized in time to support the submission of a proposal for a surveillance calculus during the current legislative period in Germany, which runs from 2021 to 2025. In this case, the aim must be to develop an intermediate, pragmatic approach that can instantaneously be put into practice. It should not be considered as a solution for all the problems and demands listed above, but rather as a feasible first move towards the practical implementation of a surveillance calculus scheme. In order to add value for the ongoing political discussion, the proposal would address some of the most important aspects right from the outset and lend itself to being extended incrementally. At later stages, the implementation could be revisited to determine possible improvements and successively introduce them.

The introduction of a surveillance calculus must demonstrate, to the legislator, the urgent need for action with regard of the totality of surveillance measures. It must not lend itself to any kind of white washing, i.e. it must not be co-opted for the justification of the existing level of surveillance by uncritically accepting the status quo.

In order to achieve the aim of structuring the public debate, a surveillance calculus must indicate, in a transparent way, the parts that require a value judgment. These evaluations should not be shrouded by a thicket of seemingly objective figures. On the contrary, it should enable a public discussion on the validity and weight of the arguments brought forward for introducing surveillance measures.

Our proposal is aimed primarily at the federal legislator and thus directed at federal legislation. The German Länder, which also pass and amend surveillance legislation on a continuous basis, could, however, also adopt the proposal for their respective legislation and thereby widen the scope of the surveillance calculus.

As a starting point, a list of federal legislation enabling governmental surveillance should be compiled and updated continuously. This list should be annotated with descriptions of the legal bases, their interdependencies and relations with other surveillance legislation, as well as their scope of application (for more details see section 5.2).

¹⁶ Mantelero, Alessandro, AI and Big Data: A blueprint for a human rights, social and ethical impact assessment, *Computer Law and Security Review*, Vol. 34, No. 4, 2018, pp. 754-772.

¹⁷ Reisman, Dillon, Jason Schultz, Kate Crawford, et al., *Algorithmic Impact Assessment: A Practical Framework for Public Agency Accountability*, New York University, AI Now Institute, 2018.

¹⁸ Castelluccia, Claude and Daniel Le Métayer, Position Paper: Analyzing the Impacts of Facial Recognition, in Antunes, Luís, et al. (eds.), *Privacy Technologies and Policy. 8th Annual Privacy Forum, APF 2020. Lisbon, Portugal, October 22–23, 2020. Proceedings*, Springer International, Cham, 2020.

At a later stage, empirical data should be collected on the surveillance practices corresponding to the respective legal bases and their impact on the exercise of fundamental rights for society as a whole, for specific groups, and for individual citizens.

In the first instance, surveillance by commercial entities and private individuals using surveillance data for their business models or for safeguarding their power status (e.g., by creating user profiles from data gathered from different sources tracking an individual's use of digital services) must remain out of scope. However, federal legislation allowing government authorities to access commercial or private data collections or to require the collection of user data are included in the surveillance calculus.

5 Proposal for Introducing a Surveillance Calculus

The following proposal comprises of considerations on how to enable the swift introduction of a surveillance calculus within the time frame of the current legislative period (2021-2025) that already yields benefits in the early stages of its implementation.

5.1 Objectives

The surveillance calculus aims at making the process and instruments of governmental surveillance more transparent and provide a survey of existing interferences with fundamental rights. This survey should indicate the surveillance measures that are in place to maintain and improve the security at the public and individual level and the respective powers of interventions available for this purpose. Our initiative aims at structuring the political debate about governmental surveillance measures. We strive to support parliamentary and societal control in the area of public security and to foster a perspective that includes the retraction of existing surveillance measures and the reversibility of their effects as a serious legislative option.

In addition, the compiled information is geared at supporting the work of institutions tasked with maintaining public security, of civil rights groups, the reporting of the media, as well as institutions acting in a scientific or advisory capacity.

The preparation of a basis for discussion in the legislative and public context should be paramount. In contrast, balancing the extent and level of surveillance and security should be carried out by the addressees and included in their political argumentations and agendas. The orientation towards preparing a basis for discussion for a multitude of stakeholders is of special significance with regard to the qualitative ambition of the surveillance calculus, which should not be over-emphasized during its early stages.

5.2 Instruments

Since it is desirable to swiftly introduce a surveillance calculus method, an incremental, pragmatic approach is required. It would set out from compiling a survey of all federal legislation authorizing surveillance measures carried out by government authorities. For each law, this survey should include specifics of the legal bases legitimizing surveillance.

In order to enable a qualitative assessment of restricting effects on fundamental rights, the practical applicability of the following limitations for surveillance measures should be evaluated successively and implemented. These criteria should complement the initial simple list of surveillance legislation as far and as soon as this is possible:

- Systematization of individual legal bases: to identify the curtailing effects on fundamental rights and promote security in the first place, it would be desirable to systematize the individual legal

bases for surveillances measures. This could be achieved, for instance, by distinguishing the collection of basic data, communication meta data, location profiles, audio-visual surveillance of behaviour and verbal communication, matching with pre-existing data or the disclosure of surveillance data and insights derived from it.

- Novelty of the legal basis: the political and practical significance of the legal basis depends, in parts, on whether a novel surveillance technology is introduced, possibly by superseding instruments already introduced, or whether existing technology is upgraded, adapted, or adjusted (e.g. by transitioning from analogue to digital communication).
- Interplay between legal bases, their limitations and exemption clauses: surveillance legislation is introduced in specific historic situations. There is a complex interplay between the systems of the various provisions, which complement and limit each other. Frequently, the full legal and societal implications of surveillance legislation can only be recognized once the interrelations between the legal bases both within the same surveillance law and between different laws by way of references, common terms, common scope, separate limitation clauses and temporal sequences have been captured and delineated.
- Scope of legal bases: A delineation of the personal and geographical extent of a surveillance measure is an important criterion for assessing surveillance measures. Is a particular surveillance measure only authorized for individuals on a case-by-case-basis? Is it authorized in situations involving multiple individuals? Does it authorize the collection of data on whole groups and networks of individuals, or about entire geographical regions? Or does it authorize surveillance of the behaviour of loosely defined groups of individuals?
- Objectives of surveillance: The assessment of a legal basis for surveillance also hinges on the prerequisites (threshold of intervention) required to trigger them, in particular, whether it requires a specific situational context. It can be a deciding factor whether a surveillance measure can only be triggered in clearly defined, narrowly specified circumstances and in cases where particularly serious offenses are investigated or on occasions that are very broadly defined with measures that apply indiscriminately. This implies that the varying requirements for the prevention or prosecution of crimes have to be taken into account.
- Duration of surveillance: It is of significance whether a surveillance measure is triggered for a limited period or without temporal limitations. This applies for the collection as well as for the storage of data; deletion periods are also relevant.
- Use of specific surveillance technology: The gravity of the interference can differ widely, depending on the technologies that are employed. Abstract information on the common practical means of surveillance that are in use or envisaged, with reference to each surveillance law and the corresponding legal basis, would be helpful.
- Information on the legislative process: The provision of the context of the legislative process, would further the political discussion, e.g., who introduced the draft regulation. It would also be of interest at what state of the legislative process the draft regulation was submitted and what options for a proper political and public debate were enabled or blocked thereby (e.g. by the competent ministry submitting amendments during the last session of the committee for internal affairs prior to the third reading of the draft in parliament). Another bit of information that could be easily provided concerns the duration of the legislative process and the period available for the members of parliament to study and discuss the drafts. This type of information could enhance a comprehensive surveillance calculus method.

A qualitative assessment of the federal legislation authorizing surveillance measures would be incomplete if it did not also reflect the legal guarantees and regulations that safeguard the protection

of fundamental rights. For this reason, a number of measures are listed below that are required by the Federal Constitutional Court in particular to protect against an abuse of surveillance powers.

- Substantive limitation of the scope of surveillance, e.g. by excluding the collection of data that concerns core areas of private life, rules on the protection of professional secrecy, the limitation of legitimate purposes or the prohibition of using surveillance intelligence in legal proceedings.
- Procedural safeguards such as requiring court orders, periodical auditing by data protection authorities or another supervisory body.
- Reviews of effectiveness and impact of surveillance legislation, e.g. by way of (data protection) impact assessments by the legislator and periodic evaluation of individual legislation.
- Project-specific auditing, e.g. by way of data protection impact assessments of data processing operations - preferably with a legal obligation to publish the essential parts that are not under obligations of secrecy.
- Technical and organizational measures such as control and limitation of access, authentication, multi-tenancy architectures, dual control principle, logging of activities, mandatory intervals for data erasure or periodic reviews, data protection by design and by default, auditability of all functions, system adaptations in regular intervals.
- Transparency for those affected by surveillance legislation (by corresponding transparency obligations) and for the public (by reporting obligations).

The list of measures above does not only serve to assess existing surveillance laws, but is also useful when demanding complementary measures for protecting fundamental rights. Within the framework of a surveillance calculus method, measures to protect of fundamental rights should equally be subjected to a periodic evaluation. Perhaps some of these measures are not effective in practice, e.g. due insufficient implementation in organisational processes, or because they turn out to be inefficient in their interplay with other measures for protecting the fundamental rights of those affected, in which case they would have to be extended or replaced.

For individual surveillance laws, it should be investigated whether a simple, three-way classification scheme can be employed to tackle the issue of weighing the gravity of the surveillance measures by reference to a set of clearly defined criteria. This weighing process must not replace the political and legal evaluation of individual surveillance laws and measures, a task that ought to remain in the realm of the addressees. The sole purpose of this classification is to distinguish laws with high significance for guaranteeing public security and fundamental rights from those that have a smaller impact, thereby directing the attention towards the most relevant elements of legislation. This should help prioritize those laws that require particular attention. This will be the case when new surveillance laws enable a high level of surveillance, and to determine which laws in particular need to be included in the surveillance calculus when considering the overall level of surveillance (for a particular area, particular fundamental rights) that has already been reached.

In order to achieve this rough classification, the criteria for evaluating the effects of the various legal bases contained in a surveillance law as well as the safeguards contained in the legislation should be considered. However, such a qualitative classification would only be of use if it facilitates, rather than aggravates, the political debate about new surveillance legislation. This requires an unambiguous description of the categories and a relatively straightforward process of assigning a law to one of the categories. In this, the rationale for the classification should be transparent and intuitively comprehensible. Provided that these requirements can be met, this simple classification may serve as a preliminary guide for the political discussion.

5.3 Institutionalisation

The surveillance calculus should be carried out for the legislative bodies and be open for the interested public. However, the task of carrying out the process should not be delegated to executive or legislative bodies participating in the process of legislation. In theory, the task could be anchored within the rules of procedures for those public authorities competent to initiate legislation, e.g. by complementing the duty of regulatory impact assessment laid down in § 43 para. 1 nr. 5 und § 44 para. 1 of the common rules of procedure for the federal ministries. This, however, would violate Art. 76 para. 1 GG which grants an unconstrained right of legislative initiative to the legislative bodies and imposes stringent limitations on the juridification of parliamentary legislative procedures. There is also a danger that delegating the surveillance calculus process to the legislative bodies will subject it to the political interests of the political parties in power. After all, the surveillance calculus is intended as an instrument that protects fundamental rights by questioning the inherent political drive towards more expansive surveillance laws.

The institution tasked with drawing up the surveillance calculus has to be resourced adequately in terms of both human and financial resources. The task could be assigned to existing institutions such as the Research Services or the Office for Technology Impact Assessment of the German parliament, if these institutions are further developed in accordance with the criteria stated above. Alternatively, a new federal institution could be created.

Overall, the institutionalization of a surveillance calculus scheme as an objective of an independent organization operating in accordance with scientific standards seems the best option. It should be ensured that the results of the surveillance calculus are reflected in the legislative process. This could be achieved by granting members of the federal parliament a seat on its supervisory body. The supervisory body should also include representatives from academia and civil society. However, supervisory bodies of this type may also threaten the independence of an institution, in particular if it is influenced by partisan considerations. In either case, it would have to be ensured that the institution to be created ultimately provides feedback to the work of the legislature.

In addition to the surveillance calculus, the current government's programme (p. 86 f.) envisages "an independent scientific review of security legislation and its impact on freedom and democracy in the light of technological advancement." Such reviews, prepared by independent research organizations, should occur in regular intervals to support and supplement the work on the surveillance calculus. These reviews, as a long-term process, allow to account for the societal impacts on public security and restrictions on fundamental rights originating from particularly relevant laws or from a combination of multiple laws and to assess them on a continuous basis. It could also allow to investigate empirical aspects which, for the time being, are not covered by the surveillance calculus. For instance, the frequency of deploying specific surveillance powers, the intensity of interferences with fundamental rights and the chilling effects described by the research projects mentioned in chapter 3. These investigations should not be confined to purely quantitative data, but have to assess the consequences for the fundamental rights of the individuals affected. By improving the data basis, these reviews may influence the surveillance calculus and improve its quality.

5.4 Process

Preparing and maintaining the surveillance calculus requires continuous monitoring and evaluation of the relevant surveillance legislation. The primary objective of the initial phase will be to produce an overview of the surveillance laws currently in force that categorizes them according to the pragmatically selected criteria mentioned above. Other aspects, as discussed in the previous section, could be introduced into a surveillance calculus step by step at later stages, to eventually arrive at a comprehensive overview of the current state of surveillance. In parallel and as a follow-up, every new law including authorizations for surveillance measures should be included in the surveillance calculus, integrated into the overall structure and evaluated. This would yield conclusions about existing laws with similar surveillance measures or purposes of surveillance.

6 Benefits and Effects

This proposal is intended as a first step towards the realization of a surveillance calculus method. En route to its practical implementation, this proposal will be refined further and extended with additional aspects that improve it.

Due to its pragmatic stance our approach may have certain drawbacks. However, these are counterbalanced by the merit of making transparent, to those who are concerned, the current scope of the surveillance legislation and the resulting interferences with fundamental rights. This groundwork facilitates questioning whether envisaged surveillance measures actually improve public security and whether the improvement justifies the interferences with fundamental rights that are to be expected. Thereby the surveillance calculus can enrich and structure this discussion by ensuring that the ultimately political balancing is comprehensive and transparent.

By advancing accountability and transparency requirements, we emphasize the responsibility of the legislator in the context of democratic law-making. Making the social costs incurred by loss of freedoms and trust more visible, may ensure that they are duly considered in the legislative process. This could also help to avoid future instances where the legislator passes surveillance laws that violate established case law and, for this reason, end up being repealed by the Federal Constitutional Court.

Beyond possible effects on the legislative bodies, interested groups and organizations from civil society or data protection authorities can utilize the approach presented here to assess surveillance laws in a concise and systematic way. This makes it easier to point out potentially problematic aspects of new surveillance measures in the general political discourse.



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