PROJECT 39A, NATIONAL LAW UNIVERSITY, DELHI

RESEARCH BRIEF

AN ANALYSIS OF THE CRIMINAL PROCEDURE (IDENTIFICATION) BILL, 2022

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EXECUTIVE SUMMARY

Structure of the Report

This Report is divided into three parts. *First*, we delineate the scheme of the Criminal Procedure (Identification) Bill, 2022 and its interaction with other laws that currently govern the field. *Second*, we assess the constitutionality of the Bill against Articles 14, 20(3) and 21 of the Constitution. *Third*, we assess issues arising from the Bill, speaking to questions of science, regulation, and the administrative aspects of implementing such a Bill.

Scheme of the Bill and Its Interaction with Other Laws Covering the Field

The Criminal Procedure (Identification) Bill, 2022 seeks to collect what it terms as 'measurements' from certain classes of persons and allows for its processing, storage, preservation, dissemination, and destruction, with the stated aim of identification and investigation in criminal matters and of prevention of crimes. In pursuing its aim, the Bill repeals the Identification of Prisoners Act,1920, but continues to interact with provisions of the Code of Criminal Procedure, 1973 which still occupy the field. The Bill will also interact with the DNA Technology (Use and Application) Regulation Bill, 2019, if both are passed as Acts. In this section, we broadly answer the following questions about both the proposed Bill as well as the current framework in the field: *first*, what measurements can be collected?; *second*, from whom can measurements be taken, and what may be done with them?; and *third*, what procedural safeguards are provided or left undefined?

Constitutional Law Perspectives

In this report, we argue that the present Bill violates the right to equality under Article 14, the right against self-incrimination under Article 20(3) and the right to privacy under Article 21.

Article 14

Excessive Delegation of Legislative Powers: The Bill falls foul of Article 14 as it excessively delegates legislative powers by giving the Central and State Governments wide-ranging rule-making powers, without providing adequate guidance for the exercise of the same.

Grant of Excessive Discretion: The Bill grants excessive and overbroad discretion to police and prison officers as well as Magistrates to compel persons to allow the taking of their measurements. Such excessive and uncontrolled discretion is arbitrary, and also raises the concern of discriminatory execrise of these powers.

Manifest Arbitrariness: Several provisions of the Bill do not disclose an adequate determining principle. *First*, the overbreadth of the definition of 'measurements' raises concerns about whether the indiscriminate collection of all types of 'measurements' can

actually achieve the purpose of more efficient investigation and crime prevention. *Second*, the failure to disclose a basis for the taking of measurements under the Bill contributes to its arbitrariness. *Third*, the absence of a mechanism for destruction of measurements and records of persons who have not been convicted or arrested or detained or ordered to furnish security for good behaviour or maintaining peace is arbitrary. *Finally*, Cl. 6, which makes it an offence to refuse or resist the taking of measurements, without the Bill providing clear guidance on who is obliged under the law to allow his/her measurements to be taken, is arbitrary.

Unreasonable Classification: The *proviso* to Cl. 3 classifies arrested persons on the basis of the gender/age of the victims of their suspected offence, and on the basis of the severity of punishment provided for the suspected offence. Only those arrested for offences punishable by 7 years or more, or those arrested for offences against a woman or a child may be compelled to give their biological samples; whereas, all arrested persons may be compelled to give measurements other than biological samples. This classification bears no rational nexus to the aim of making investigations more efficient, whether in a given case or more generally, in future cases.

In addition, it is important to note that Cl. 4 of the Bill also mentions *crime prevention* as one of its purposes, "in the interest" of which the NCRB shall collect, store, process, preserve, share and disseminate the records of measurements. While this report deals only with the constitutional and policy issues raised by the current scheme of the Bill, readers may want to note that in its implementation, the Bill also raises concerns regarding existing biases in data leading to discriminatory police practices and further stigmatisation of vulnerable communities.

Article 20(3)

Cl.2(1)(b) of the Bill defines measurements to include "*...behavioural attributes* including signatures, handwriting...". The term 'behavioural attributes' has not been further defined in the Bill, and is also not a term of art in forensic science. This leads to concerns of its possible interpretation in a way that might include measurements of a testimonial nature, allowing them to be compulsorily procured, in contravention of the ruling in *Selvi v. State of Karnataka.*

Article 21

The Bill amounts to an infringement of the informational privacy of persons it covers; and, to be constitutional, it must satisfy the fourfold requirement of the doctrine of proportionality laid down in *Justice KS Puttaswamy v Union of India (I).* While the Bill has the legitimate aim of improving investigation, detection and prevention of crimes, it fails to satisfy the other three prongs of proportionality.

Suitability: There is no demonstrated rational nexus between the increased likelihood of future or past offending and the class of persons included in Cl. 3 (convicts of *all* offences, detainees, arrestees, those ordered to give security for maintaining peace and good behaviour). Further, Cl. 3 and 5 do not require that the measurements be taken from persons in circumstances which would show that such taking will aid in a specific investigative matter.

Thus, given the lack of rational nexus between the provisions of the Bill and the legitimate aim espoused by it, the provisions of the Bill are not suitable for its legitimate aims.

Necessity: The Bill's coverage of persons who may be compelled to give measurements is overbroad, as it covers persons without regard to the nature and severity of the offence and without regard to whether they are even persons of interest in an investigation. The Bill provides no timeframe for deletion of records of measurements for convicted persons, detainees, as well as those compelled under Cl. 5 (including juvenile offenders). Further, the Bill does not provide at all for destruction of samples taken from any persons under the Bill, including for those who were arrested and subsequently acquitted. The Bill contains no procedural safeguards to minimise the infringement on the right to privacy, including specifying the purposes for which data may be used or shared, or the circumstances under which the Magistrate may decline the deletion of a person's data. Together, these factors make the extent of infringement on privacy caused by the Bill unnecessary for the purposes of achieving the State's legitimate aim.

Balancing: The Bill provides for no purpose limitation, i.e., no indication of the purposes for which measurements and the records collected and stored can be used. Additionally, Cls. 3 and 4 allow for blanket collection, storage, processing, use and sharing of measurements taken from convicts (possibly even ex-convicts), persons who have furnished security under Section 117 of the CrPC, been arrested for any offence, or detained under preventive detention laws. No gradation is made on the basis of severity of offence, its nature, whether the determination of guilt has taken place.

Issues of Science and Regulation

Scientific validity and databasing

There exists no scientific evidence to support the foundational validity of certain types of measurements covered within the Bill. India currently also lacks adequate scientific standards for examinations of such measurements for the purpose of investigations. These two issues are further exacerbated by the fact that current legal standards for examining expert evidence do not allow for rigorous scrutiny of scientific evidence. Therefore, the collection and databasing of such a wide range of measurements is an unnecessary measure which may not make investigations more effective and instead make them problematic.

Collection of measurements

Capacity building and training of individuals responsible for collection of measurements will be a huge administrative undertaking. The workload of forensic laboratories will also increase multiple folds due to the excessive collection of measurements. Currently the Bill provides no guidance to the Center or the State governments on the framing of rules for the purpose of collection of measurements. As the Bill does not qualify the need for standardisation or quality management, it allows for arbitrary collection methods to be used

across the country. In the absence of data protection, such extensive collection of measurements without any guidance on information sharing within the Bill, raises concerns about third party access and breach of confidentiality.

Collection and storage of "biological samples and their analysis"

As "analysis" is not defined in the Bill, and this expands the scope of information to be collected, to include an individual's phenotype (physical characteristics), their genetic propensity for certain diseases and their ancestry. The information therefore collected and stored may even go beyond the individual from whom the measurement is collected. Storage of the biological samples themselves will be a massive infrastructural challenge. Given that these samples may be stored in perpetuity, it raises further concerns regarding the misuse of this information.

Storage of "records of measurements"

Creation of extensive database(s) which include different types of measurements does not guarantee better criminal investigations. The Bill is drafted on the flawed assumption that such databases will aid criminal investigations. As criminal investigations are undertaken with respect to the context of a particular case, it is impossible to quantify the different evidence types that may be of probative value in a particular case. Therefore, creation of such database(s) with no safeguards regarding information sharing will be a costly exercise which will be an infringement of the right to privacy.

Comparison of present Bill with the DNA Technology (Use and Application) Regulation Bill, 2019

The DNA Bill, currently pending discussion in the Parliament, raises several constitutional and procedural concerns. Yet, given the overlapping scope of the DNA Bill with the present Bill, with reference to collection and storage of "biological samples and their analysis", it is important to analyse the framework that exists within both. Even with multiple gaps within the DNA Bill, it still provides multiple safeguards regarding the collection, storage, use and disposal of samples. Such safeguards are clearly missing with the present Bill. Considering that the Bill envisions creation of multiple databases and provides sweeping powers to investigative authorities, the lack of such safeguards is especially concerning.

Lack of regulation of databases

The Bill presently provides no framework or guidance with reference to quality management of databases. Considering that the Bill envisages the use of the databases for the purpose of investigations, it is imperative that some clarity on the quality of "measurements collected" and "storage of records of measurements" be provided. Given that there is no guidance regarding the manner in which records are to be shared, the lack of standardization with respect to procedures for forensic examination and investigation and the sweeping powers being bestowed upon investigative authorities, such lack of regulation is deeply concerning.

SCHEME OF THE CRIMINAL PROCEDURE (IDENTIFICATION) BILL, 2022

What does the Bill seek to do?

The Criminal Procedure (Identification) Bill, 2022 seeks to collect what it terms as 'measurements' from certain classes of persons and further also allow for its processing, storage, preservation, dissemination, and destruction, with the stated aim of identification and investigation in criminal matters and of prevention of crimes.[1]

What can be collected under the Bill?

Cl. 2(1)(b) of the Bill defines 'measurements' that may be taken from persons as *including* "finger-impressions, palm-print impressions, foot-print impressions, photographs, iris and retina scan, physical, biological samples and their analysis, behavioural attributes including signatures, handwriting or any other examination referred to in section 53 or section 53A of the Code of Criminal Procedure, 1973."[2]

The examinations contemplated under Section 53 of the Code of Criminal Procedure, 1973 ('CrPC') include that of "blood, blood stains, semen, swabs in case of sexual offences, sputum and sweat, hair samples and finger nail clippings by the use of modern and scientific techniques including DNA profiling...". Section 53A of CrPC further provides for the recording of additional particulars, namely, age of the arrestee and marks of injury on his person.

Who may be compelled to provide measurements, and who can compel it?

Cl. 3 allows a police or prison officer, if required, to compel the following classes of persons to give all their 'measurements':

a. Any person who has been convicted of any offence under a law that is in force;

b. Any person who has been ordered to give security for maintaining peace or good behaviour following the procedure prescribed under Section 117 of the CrPC. Such security may be ordered for reasons covered under Sections 107-110 of CrPC. *First*, it may be upon information that the person is likely to breach the peace or disturb the public tranquillity of an area; or *second*, upon information that the person

1 See Statement of Objects and Reasons, Criminal Procedure (Identification) Bill, 2022; see Cl. 4, Criminal Procedure (Identification) Bill, 2022.

2 Cl. 2(1)(b), Criminal Procedure (Identification) Bill, 2022.

disseminates seditious and certain other publications; *third*, upon information that the person is concealing his presence in the area in order to commit a cognizable offence; or *fourth*, upon information that the person is a habitual offender;

c. Any person who has been detained under any preventive detention law;

d. All persons who are arrested for an offence. Such persons can be compelled to provide all measurements except biological samples. However, all persons who have been arrested for an offence against a child or a woman, or for an offence punishable with imprisonment of 7 years or more, can be compelled to provide biological samples as well. Therefore, all those arrested for offences that do not involve women or children, and are punishable with imprisonment of less than 7 years, cannot be compelled to provide biological samples, but can be compelled to provide all other measurements.

Cl.5 of the Bill further expands the scope of persons from whom the giving of measurements may be compelled. Cl.5 provides that the Magistrate may direct "any person" to give measurements, upon being satisfied that it is "expedient" to do so for the purposes of an investigation or proceeding under the CrPC or any other law.

How may the authorities compel a person to give measurements?

Cl. 3 allows a police officer or a prison officer to take measurements from the classes of persons listed above in a manner that shall be prescribed by the Central or State Governments.

In the event of a person who is required to give measurements under the Bill refusing to do so, Cl. 6(1) makes it lawful for a police or prison officer to compel the giving of measurements in a manner that may be prescribed by Rules. Further, Section 6(2) makes such refusal a punishable offence under Section 186 of the Indian Penal Code, 1860.

What can be done with the collected measurements?

The Bill contemplates two distinct terms. One, 'measurements', as defined above, include the biological samples and other personal information taken under Cls. 3 and 5 of the Bill. Two, 'records of measurements' used in Cl. 4 would indicate the records and documentation of the measurements compiled subsequent to the taking of the measurement itself.

Cl. 4(3) of the Bill provides for notification of agencies for the collection, preservation and sharing of the measurements themselves at the State-level.

Cl. 4(1) further provides for the records of such measurements, as opposed to the measurements themselves, to be collected, stored, preserved, processed with crime and criminal records; and shared and disseminated with law enforcement agencies.

Cl. 4(2) provides for such records of measurements to be stored digitally or electronically for 75 years, without any further stipulation of the duration within which they may be deleted. The

proviso to Cl. 4(2) is the only provision in the Bill that envisages a process for deletion of certain records of measurements from the database. This provision is applicable only for the records of measurements of persons with no convictions at any point of time and who were released without trial, or acquitted, or discharged of the offence alleged against them, and is triggered only once all the legal remedies against such release/discharge/acquittal have been exhausted. Even in such cases, notably, the deletion of records of measurements is made subject to the Magistrate's direction to the contrary, without providing any further guidance for the exercise of such discretion.

How are the collected measurements and the records thereof to be stored/shared?

Cl. 4(1) identifies the National Crime Records Bureau ('NCRB') as the nodal agency at the central level for collecting, storing, preserving, destroying, processing, and disseminating 'records of measurements'. It requires the NCRB to conduct these tasks in the interests of "prevention, detection, investigation and prosecution" of offences.

Cl. 4(1) allows the manner of storage and dissemination of records of measurements, and the circumstances under which such dissemination can be allowed, to be prescribed by Rules under the Bill. Cl. 4(2) provides that such records of measurements are to be stored digitally or electronically.

Cl. 4(3) allows State Governments to notify agencies for the collection, storage and sharing of the measurements themselves, that is, the samples collected as opposed to the records or analyses of such samples.

What are the crucial aspects that the Bill's scheme leaves undefined?

There are certain terms that the Bill leaves undefined and unclarified that affect the entire scheme of the Bill as a whole. These larger issues have been summarised below.

First, the Bill does not provide an exact definition of 'measurements'. The definition provided in Cl. 2(1)(b) is an inclusive one, and is open to an expansive interpretation. Further, terms used therein like 'biological samples' and the 'analysis' of biological samples remain undefined. This is a significant deviation from the existing law under the CrPC dealing with examination of the body for evidence [Sections 53], which specifically defines the samples on which such examinations can be conducted. Under this Bill, it is unclear which kinds of measurements constitute 'biological samples'. Similarly, the scope of the term 'analysis' is left undefined and could cover a wide range of processing of biological material, including analysis that does not have any forensic value for the purposes of investigations. A similar problem of ambiguity is also apparent in the use of the term 'behavioural attributes' within the scope of measurements.

Second, the Bill uses two distinct terms in Cl. 3 and Cl. 4 - 'measurements' themselves, and the 'records of measurements'. Cl. 4(1) and (2) cover 'records of measurements', while Cl. 4(3) covers only 'measurements'. Each is stored, preserved and shared by a different nodal agency. However, the Bill does not define what would be considered within the scope of

'records of measurement' and this leaves ambiguous the infrastructure that would be required for the digital and electronic form of storage of records.

Third, Cl. 4 of the Bill evidently seeks to create some form of database(s) managed by the National Crime Records Bureau containing the records of measurements collected. However, it does not use the term database, and does not seek to define any further infrastructural, management and operational aspects of the database.

Fourth, Cl. 4(1) of the Bill provides that the NCRB may share and disseminate records of measurement with law enforcement agencies. Cl. 4(3) provides for storage and sharing of 'measurements' (not records) at the State-level. However, no further stipulation on the purpose of such dissemination has been provided. Specifically, it is unclear whether the NCRB or other agencies may only share measurements or records thereof for *use* itself as evidence or to *access* other evidence, for instance, through the use of a person's biometric information stored on the database, to access his/her devices that carry personal information.

CURRENT FRAMEWORK FOR COLLECTION OF FORENSIC EVIDENCE

Currently, various types of biological and physical samples under the scheme of Code of Criminal Procedure, 1973 ('CrPC') and the Identification of Prisoners Act, 1920 (the '1920 Act') can be collected. These laws balance two considerations while permitting coercive measures to collect non-communicative evidence, namely, the protection of individual's right to privacy and the need for obtaining necessary evidence for the investigation. The 1920 Act authorises taking of "measurements" but has a narrower scope than the Bill. It is restricted to taking such materials for the purpose of investigation under the Code of Criminal Procedure, 1898 and provides certain procedural safeguards to protect against abuse of process.[3]

The DNA Technology (Use and Application) Regulation Bill, 2019 (the 'DNA Bill')[4] was introduced in the Lok Sabha in February 2019 and was referred to the Parliamentary Standing Committee on Science and Technology by the Rajya Sabha in October 2019. Pursuant to this, the report of the Parliamentary Standing Committee was tabled before the Parliament in February 2021.[5] The DNA Bill raises several constitutional and procedural concerns and several changes have been recommended by the Standing Committee. While this bill is yet to be enacted, it is relevant for this discussion as it operates in a similar sphere as and should be considered to assess the provisions of the Criminal Procedure (Identification) Bill, 2022.

What materials can be collected under the current legal framework?

<u>Code of Criminal Procedure, 1973</u>

Sections 53, 53A, and 54 of CrPC authorize the examination of blood, blood stains, semen, swabs in case of sexual offences, sputum and sweat, hair samples and finger nail clippings, by using modern and scientific techniques including DNA profiling and other tests that the registered medical practitioner thinks are necessary in a particular case. Courts have interpreted these provisions broadly. Section 311A additionally permits the collection of specimen signatures and handwriting samples.

3 Law Commission of India, 87th Report on Identification of Prisoners Act, 1920 (1980).

4 DNA Technology (Use and Application) Regulation Bill, 2019, <https://prsindia.org/billtrack/the-dna-technology-use-and-application-regulation-bill-2019>, last accessed 31/03/2022 11:33 IST.

5 Standing Committee on Science, Technology, Environment, Forests and Climate Change, Rajya Sabha, Report on The DNA Technology (Use and Application) Regulation Bill, 2019, 2021, Three Hundred Fortieth Report, 03/02/2021, <https://prsindia.org/billtrack/the-dna-technology-use-and-application-regulation-bill-2019>, (last accessed 31/03/2022 11:54 IST).

Identification of Prisoners Act, 1920

The 1920 Act interprets 'measurements' narrowly, understanding it to include finger impressions and foot-print impressions. It also allows the taking of photographs for the categories of persons covered under the 1920 Act.

The DNA Technology (Use and Application) Regulation Bill, 2019

The source and manner of collection of samples for DNA testing has been specified by the DNA Bill. Sources include bodily substances, scene of crime, clothing or other objects. "Intimate bodily substance" including samples of blood, semen, tissue, fluid, urine or pubic hair or swab from a person's orifice or skin or tissue may be taken from or of a person, living or dead. Another form of evidence is the "non-intimate bodily substances", which includes handprint, fingerprint, footprint, sample of hair other than pubic hair, sample of nail or under a nail, swab from a person's mouth, saliva or skin impression.

From whom can the evidence be collected? Who can collect the evidence and for what purpose?

Code of Criminal Procedure, 1973

Under Sections 53, 53A, 54, and 311A CrPC, samples can only be collected from persons who have already been arrested. Under Sections 53, 53A and 54, only police officers above the rank of a sub-inspector can make a request under these provisions. This material can be used during the investigation and may be part of the evidence against them during trial. A request can only be made if there are reasonable grounds to believe that the examination will afford evidence as to the commission of the crime. The examination must be conducted by a registered medical practitioner under Sections 53 and 53A, and by a government medical officer under Section 54. The examination under Section 54 is done soon after the arrest is made to ensure that the accused was not subject to any physical injury while in custody. Section 311A allows the collection of handwriting samples from any person, including the accused. These samples can only be collected if a Magistrate is satisfied that it is expedient to do so for the purposes of the investigation or proceeding, as the case may be.

Identification of Prisoners Act, 1920

The "measurements", under this Act, are taken for the purpose of collecting evidence and to facilitate the identification and investigation of offences specifically, under the Code of Criminal Procedure, 1898. The ambit of the 1920 Act extends to three classes of people. Of these, the police officer, not below the rank of Sub-Inspector, may take measurements and photographs in the cases of:

1) persons convicted of an offence punishable with rigorous imprisonment for a term up to one year or more;

2) persons ordered to give security for his good behaviour; and

3) non-convicted persons arrested in connection with an offence punishable with rigorous imprisonment for a term up to one year.

The Magistrate is empowered to order any person to allow their measurements and photograph to be taken for the purpose of investigation or proceeding under the CrPC. This person must have been arrested at some point of time in connection with the same.

The DNA Technology (Use and Application) Regulation Bill, 2019

The DNA Bill facilitates identification of certain categories of persons using DNA analysis and through the creation of DNA databanks. These include victims, offenders, suspects, undertrials, missing persons and unknown deceased persons.

Under Cl. 21, samples may be collected from arrested persons as well, subject to their consent as required. If they refuse to do so, an application may be made by the person investigating to the Magistrate, who shall satisfy themself of "reasonable cause" and accordingly order the taking of substances, if they so deem fit.

Cl. 22 of the Bill provides for voluntary submission of bodily substances on behalf of any person who was present at the scene of the crime when it was committed, is being questioned in connection with the investigation of the crime or intends to find the whereabouts of their missing or lost relative through written consent. In cases of minors, where consent from parent or guardian is not available, the person investigating may make an application to the Magistrate, who may order the collection of the samples if they are satisfied there is reasonable cause.

Cl. 23 of the Bill allows collection of bodily substances for DNA testing of a victim or a person reasonably suspected of being a victim who is alive, or a relative of a missing person, with their written consent. It also allows such collection from a minor or a disabled person, with the written consent from their parents or guardians.

The DNA Bill allows collection of intimate bodily substances from persons, living or dead by a medical practitioner. For collection of non-intimate bodily substances, the DNA Bill allows such samples to be taken by technical staff, under the supervision of a medical practitioner or a scientist having experience in molecular biology.

Is consent required for collection of samples? Can the samples be destroyed or removed?

Code of Criminal Procedure, 1973

Consent is not required for the collection of samples. Sections 53, 53A, 54, and 311A do not permit investigating agencies to store the collected samples beyond the period of investigation or include them in a database. As a matter of practice, criminal courts pass orders to destroy the collected samples after the trial is complete and the verdict is given.

Identification of Prisoners Act, 1920

Consent is not required for the collection of samples. The 1920 Act provides for destruction of records of measurements and photographs of persons released without trial, discharged, or acquitted; excluding those previously convicted of an offence punishable with rigorous punishment for a term of one year or more. Under the present framework, there is no provision to maintain a database of measurements.[6]

The DNA Technology (Use and Application) Regulation Bill, 2019

Cl. 21 of the DNA Bill requires consent to be taken from arrested persons, except for those arrested in relation to offences punishable by death or offences more than 7 years. If such consent is refused, then an application can be made by the investigating authorities to the Magistrate, who may order collection, if satisfied that there is "reasonable cause" to believe the bodily substance may prove or disprove involvement in the offence.

Cl. 22 of the Bill allows for voluntary consent to be given in writing for the collection of bodily substances being taken for DNA testing. This provision is applicable to a person who was present at the scene of the crime when it was committed, is being questioned in connection with the investigation of the crime or intends to find the whereabouts of their missing or lost relative. In case such person is a minor, and consent of the parent or guardian cannot be obtained, the person investigating may make an application to the Magistrate, who will pass an order after satisfying themself of "reasonable cause".

The proviso to Cl. 23(2)(b) of the DNA Bill empowers a Magistrate to order collection of bodily samples from victims if he is satisfied that there is reasonable cause, even if the victim does not give their consent. This is contrary to Section 164A(7) of the CrPC, which does not allow the medical examination of or collection of samples from victims in rape cases without their consent.

The DNA profiles collected under the Bill are included in the National and Regional DNA data banks across five indices i.e. crime scene, suspects or undertrials, offenders, missing persons and unknown deceased. Cl. 31 of the Bill provides for removal of information of a suspect after filing of the police report and of an undertrial as per the order of the court. Further, a person, who is not an offender, suspect or undertrial, may send a written request to the National DNA data bank for removal of their information, and in case of minors or disabled persons, a parent or guardian may send such a request.

6 It may be noted that the Central and State Finger Print Bureaus maintain fingerprint databases for comparison and analysis. These databases are governed by separate regulatory mechanisms.

CONSTITUTIONAL LAW PERSPECTIVES

Violations of the Protections Against Arbitrariness, Excessive Delegation and Unguided Discretion Under Article 14

1. The current draft of the Bill presents very serious violations of the right to equality, protected under Article 14 of the Constitution. The constitutional vices characterising the Bill include unreasonable classification, arbitrariness, and excessive delegation. The Bill excessively delegates legislative authority to the executive in a manner that falls foul of the Constitution, grants excessive discretionary powers to functionaries, is manifestly arbitrary and also fails the test of reasonable classification.

I. The Bill presents significant concerns of excessive delegation of powers contrary to Article 14

2. This Bill provides for the taking of measurements by police and prison officers, their collection, preservation, and sharing by state-notified agencies, as well as the collection, storing, destruction, processing and dissemination of the *records* of such measurements by the NCRB in the interest of "prevention, detection, investigation, and prosecution" of offences under the law. At numerous places, the Bill delegates excessive powers to the executive. It does so *first*, by delegating legislative functions to the executive by providing wide-ranging rule-making powers with virtually no guidance; and *second*, by giving functionaries under the Bill (police/prison officers and Magistrates) excessive discretion to decide who they may compel to provide measurements, in what circumstances, and for what purposes.

3. A law may be found to be *ultra vires* the Constitution, on the ground that in delegating powers, it has transgressed the permissible limits.[7] In In re *Delhi Laws Act et*,[8] it was held that the legislature cannot abdicate its legislative functions, and when delegating its powers, it must ensure that the executive does not become a parallel legislature.[9] Choosing and determining the legislative policy behind a legislation as well as formally enacting the same into binding law is an essential legislative function.[10] It is possible for the working out of details to be delegated to the executive, as long as the broad policy is laid down and standards are established, such that the executive can operate within prescribed limits.[11] In *Subramanian Swamy v. Union of India*, it was further observed that in

7 VN Shukla, 'Judicial Control of Delegated Legislation in India' (1959) 1(3) Journal of Indian Law Institute 357, 360.
8 AIR 1951 SC 332
9 AIR 1951 SC 332 [93].
10 AIR 1951 SC 332 [308].
11 AIR 1951 SC 332 [308].

addition to excessive delegation of legislative powers, the conferment of authority to pass administrative orders would be violative of Article 14 of the Constitution, if "such conferment is without any guidance, control or checks."[12]

4. This Bill, not only delegates unguided legislative power to frame Rules under Cls. 4 and 8, thus, abdicating its legislative functions, it also gives excessive and overbroad discretion to the police and the Magistrate under Cls. 3 and 5 to make administrative decisions and pass orders, respectively.

The scheme of delegation of powers under the Bill

a. Delegation in the manner of taking measurements

5. Measurements are to be taken by police or prison officers, of their own accord under Cl. 3, or on the order of a Magistrate under Cl. 5. The manner of taking such measurements is to be prescribed by Rules framed by the Central or State governments. Cls. 3 and 5 provide virtually no guidance on the process and circumstances under which the discretionary powers to compel the taking of measurements are to be exercised by police or prison officers and Magistrates. Specifically, in Cl. 3, measurements are to be taken by police or prison officers 'if required'. Given the lack of legislative guidance as to how this 'requirement' is to be determined, and in the absence of any direction as to what the Rules ought to provide for by way of the manner of taking measurements, the discretion with the said officers is complete and absolute.

b. Delegation of authority to frame rules regarding the collections, storage, preservation, processing and destruction of measurements and records

6. The Bill envisages two levels at which these measurements will be stored, preserved and shared. The State and UTs are to notify agencies to collect, preserve, and share measurements. At the Central level, the Bill provides that the NCRB shall collect, preserve, store, process, destroy, share and disseminate the records of the measurements collected and shared by states and UTs. However, the Bill merely grants these powers of collection, preservation, storage, processing and sharing of the personal information of persons covered by it, without providing any guidance or indicating any principles on the basis of which these powers are to be exercised and regulated. As such, despite the serious implications of the extensive scope of the Bill for the right to privacy of individuals,[13] the duty to provide for any and all procedural safeguards, has been delegated to the Central and State Governments. This constitutes excessive delegation of legislative functions as well as the abdication of the legislature's own functions.

12 *Subramanian Swamy v. CBI* (2014) 8 SCC 682 [48-49]. See also *Ram Krishna Dalmia v Justice S. R. Tendolkar*, AIR 1958 SC 538, [11].

13 *See infra* argument on privacy, paras 38-47.

C. Powers given to police and prison officers and Magistrates

7. Cls. 3 and 5 of the Bill allow police/prison officers and Magistrates to make an assessment of whether the taking of measurements is 'required' or 'expedient', respectively. There is no guidance in the Bill in the form of the legislative policy that undergirds this assessment of 'requirement' or 'expedience'. In comparison to Cl. 3, it is pertinent to note that existing provisions under the CrPC that permit examination of accused for the purpose of collecting evidence, at the request of a police officer, takes place only when the officer is satisfied that there are "reasonable grounds for believing that an examination of his person will afford evidence as to the commission of an offence", having regard to the nature of the offence and the circumstances of its commission.

Excessive Delegation of Legislative Authority

8. Delegation of legislative power is invalid in the absence of specific guidance in the parent statute as to the standards or criteria or principles in terms of which the rule-making powers delegated to subordinate authorities are to be exercised.[14] The present Bill provides no legislative guidance for the Rules that are to be framed by the Central and State Governments under Cls. 4 and 8.

9. Cl. 4 of the Bill states that the collection, storage, preservation, processing, destruction, sharing and dissemination of 'records of measurements' by the NCRB and the collection, preservation, and storage of 'measurements'[15] by the State Governments and UTs, will be governed by Rules to be prescribed by the said governments. Cl. 8 provides that Central and State governments may make Rules, *inter alia*, for prescribing the manner in which police and prison officers can 'take' measurements under Cls. 3 and 6. It also recognises the power of the governments at both levels to make Rules regarding "any other matter" prescribed or in respect of which provisions are to be made. Given that the Bill prescribes no limitations on the powers of taking, collecting, processing, storing, destroying, sharing and disseminating all measurements and their records, or even an indication of the broad contours within which the powers are to be exercised - in addition to a complete lack of safeguards under the Bill[16] - we argue that the Bill is *ultra vires* the Constitution.

a. No guidance as to how, for what purposes and in what circumstances measurements and their records may be used, stored, processed and shared

10. The purposes for which records may be created and stored; the nature of analysis to be conducted on them and who may conduct the same for the preparation of records; the

14 *Hamdard Dawakhana v. Union of India* AIR 1960 SC 554, [33].

15 This phrase includes behavioural samples and analysis thereof. *See* Cl. 2(1)(b) Criminal Procedure (Identification) Bill 2022.

16 *Hamdard Dawakhana v. Union of India* AIR 1960 SC 554 [34-35].

manner of processing the records of measurements; the powers and functions of the NCRB and that of the State-notified agencies; the purposes for which measurements and their records can be shared, disseminated and accessed; the duties of these agencies on receiving access; the period of retention and the grounds for removal, are all important procedural safeguards that ought to be provided for in the parent statute to prevent assumption of arbitrary and uncanalised power through the Rules framed by the executive. Similarly, the Bill also does not indicate how the storage of the measurements and their records will happen. There is no indication of what kind of database will be created and how many, how they will be created, who will create them, who will run the database(s) etc. Thus, the Bill provides no guidance on the *how, the purposes for and the circumstances* in which these records may be used, stored, processed and shared; with whom they may be shared, and the process to be followed for the purpose of such dissemination and after such dissemination. Therefore, the Bill gives wide-ranging legislative powers to the Central and State governments without providing any guidance for the exercise of the same.

b. No guidance on deletion or destruction of measurements and their records

11. As for the deletion and/or destruction of the measurements and the records thereof, the Bill only provides that the records shall be *retained* digitally for 75 years from the date of collection [Cl. 4(2)]. This means that the Rules can provide for retention even after 75 years given that there is no requirement of *destruction/removal* after 75 years. Destruction is mentioned only in the narrow proviso to Cl. 4(2),[17] indicating that the records must be retained at least for 75 years and may also be retained in perpetuity. This is also borne out by the fact that the Bill does not provide for a mechanism by which one can apply for the destruction of records after 75 years have elapsed.

12. Additionally, the Bill allows the Rules framed by State governments to provide for the retention of samples collected in perpetuity. Cl. 4(3) which empowers States and UTs to notify agencies to "collect, preserve and share" measurements (which includes samples as per Cl. 2(1)(b)) does not mention deletion or destruction of measurements collected at the State level. Cl. 4(1)(b) which does mention destruction refers only to records stored with the NCRB and not measurements/samples themselves. It also only specifies destruction of records "at [the] national level". The *proviso* to Cl. 4(2) which mentions destruction of the records of unconvicted arrestees, is limited to records and not the actual measurements/samples. Thus, the Bill allows the Rules to provide for indefinite retention of all records of measurements as well as samples. This unguided rule-making power to determine the period of retention - an important procedural safeguard that legislation governing sensitive personal information ought to provide for[18] - is ultra vires the Constitution.

17 This provision permits destruction of records (not of measurements themselves) only in those cases where, after exhaustion of legal remedies (arguably by both the State and accused), there has been acquittal, discharge or release of the accused and the accused has not been previously convicted of an offence

18 *Aycaguer v. France* [2017] ECHR 587 [38].

Excessive Grant of Discretion to Functionaries

13. A law that restricts fundamental rights must be sufficiently clear and precise in terms of the extent, scope and nature of the interference allowed, along with the presence of sufficient safeguards to prevent abuse of powers by authorities.[19] This entails that the law must not grant excessive executive discretion where such discretion has the effect of restricting rights and freedoms.[20] Grant of discretion, by itself, is not a matter of concern as long as there are guidelines governing the exercise of discretionary powers. However, *"[d]iscretion which is absolute and uncontrolled degenerates into arbitrariness."*[21]

14. Cl. 3 allows prison and police officers to take the measurements of those persons covered under Cl. 3(1), "if so required". Further, Cl. 5 provides that the Magistrate can direct, if he deems "expedient", "any person" to allow his/her measurements to be taken, for the purpose of "any" investigation or proceeding under the CrPC or "any other law" in force. There is no indication of any legislative policy in the Bill that governs the determination by police and prison officers or the Magistrate of whether there is a requirement for taking measurements or the same is expedient. It is therefore our argument that the purposes for and the circumstances in which this determination of 'requirement' or 'expediency' may be made, is not indicated in the Bill at all.

a. Excessive discretion granted to police and prison officers under Cl. 3.

15. Section 53 of the CrPC, which provides for the examination of accused by a medical practitioner at the request of a police officer, requires the police officer to at least be satisfied that there are "reasonable grounds for believing that an examination of his person will afford evidence as to the commission of an offence", having regard to the nature of the offence and the circumstances of its commission. This Bill does not require even this threshold level of satisfaction before police officers can take measurements of the persons covered under Cl. 3. Thus, the determination of when officers are 'required' to take 'measurements' under Cl. 3 is a discretionary power that is uncanalised and unguided, so as to amount to a *carte blanche* to discriminate. This is particularly concerning given that unlike the 1920 Act where measurements only included finger impressions, foot-print impressions and photographs,[22] the present Bill's scope extends to "finger-impressions, palm-print impressions, foot-print impressions, photographs, iris and retina scan, physical, biological samples and their analysis, behavioural attributes including signatures, handwriting or any other examination referred to in section 53 or section 53A of the Code of Criminal Procedure, 1973". All or any of these may be processed, stored in databases, and shared for unspecified and varied purposes through the exercise of unguided discretion by a police or prison officer.

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19 *Shreya Singhal v. Union of India* (2015) 5 SCC 1 [17, 18, 26]; *K. S. Puttaswamy & Anr. v. Union of India & Anr.*, (2019) 1 SCC 1 [319,1288].

20 European Court of Human Rights, Guide on Article 8 of the European Convention on Human Rights: Right to Respect for Private and Family Life, Home and Correspondence, 9-10, 93, August 31, 2018, available at https:(//www.echr.coe.int/Documents/Guide_Art_8_ENG.pdf (Last visited on February 8, 2019).

21 *State of Punjab v. Khan Chand*, AIR 1974 SC 543 [8].

22 *See* Section 2(a), Identification of Prisoners Act 1920.

16. Additionally, it must be noted that unlike the 1920 Act which provides that the police officers includes those "not below the rank of Sub-Inspector",[23] the present Bill brings the requirement down to the rank of "Head Constable" [Cl. 2(1)(c)]. Prison officers, of the rank of Head Warden and above, have also been newly introduced in the present Bill, with the 1920 Act not envisaging any powers under the Act to be exercised by them.

b. Excessive discretion granted to Magistrates under Cl. 5

17. As for the discretion granted to the Magistrate under Cl. 5, it may be argued that the same was available even under the 1920 Act. However, two aspects distinguish the discretionary power of the Magistrate under the 1920 Act and the present Bill. *First*, the ambit of 'measurements' has been considerably widened under the present Bill. *Second*, the provision in the 1920 Act, corresponding to Cl. 5 of the present Bill, specifically limited its application to persons who are or were at some time "arrested in connection with such investigation or proceeding" and thus, were persons of interest in a given criminal case. This indicates that 'expedience' under the 1920 Act related to the facilitation of the investigation or proceeding in which an order under Section 5 of the Act could be passed. Cl. 5 of the present Bill, on the other hand, allows the Magistrate to order the taking of measurements of "any person" for the purpose of not just investigations and proceedings under the CrPC but "any other law…in force", thereby significantly broadening the ambit of the provision. The inclusion of proceedings under "any other law" makes it unclear if the assessment of expedience is linked to the proceeding in which the order is passed, or is future-looking, i.e., for the purpose of aiding future investigations by collecting measurements of "any persons". Thus, the broad policy of the Bill - to "make the investigation of crime more efficient and expeditious"[24] through the taking (Cls. 3 and 5) and databasing (Cl. 4) of measurements - rather than providing guidelines for the exercise of discretion by the Magistrate, increases the scope of the discretionary powers already present under the 1920 Act.

II. The provisions of the Bill are manifestly arbitrary

18. In *Shayara Bano v. Union of India*,[25] the test of manifest arbitrariness was established as a separate ground for invalidating parliamentary legislation under Article 14. In that case, Justice Nariman observed that a legislation is manifestly arbitrary if the same is "done by the legislature capriciously, irrationally and/or without adequate determining principle….[the law is] excessive and disproportionate."[26] This test, as a means of invalidating legislation, has also been acknowledged by the majority opinion in the Aadhar 5-J judgement.[27] It is our argument that at several instances, the Bill does not disclose any rationale or determining principle, and thus, is manifestly arbitrary.

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23 Section 2(b), Identification of Prisoners Act 1920.

24 Statement of Objects and Reasons, Criminal (Procedure) Identification Bill, 2022.

25 *Shayara Bano v. Union of India*, (2017) 9 SCC 1.

26 *Shayara Bano v. Union of India*, (2017) 9 SCC 1. [101].

27 *Puttaswamy (II) v Union of India* (2019) 1 SCC 1 [106].

The taking, collection and storage of all types of measurements is without determining principle

19. The definition of measurements is overbroad making the collection and storing of the same in databases manifestly arbitrary. The present Bill seeks to achieve two objectives. *First*, it seeks to take measurements and use the same as evidence in current investigations and proceedings; and *second*, it seeks to collect and store the same in databases, so as to generally aid future investigations, as well as other crime prevention and detection efforts.

20. With respect to the first, it needs to be recognised that the expansion of the definition of measurements in the present Bill, to include several types of personal information - all of which have varying degrees of reliability and usefulness when it comes to criminal investigations - is manifestly arbitrary. Given that there is no consistent evidentiary framework in Indian law for the examination of such expert evidence,[28] there is no assurance that the collection of such wide-ranging types of measurements will bring about any improvement in the efficiency and effectiveness of investigations. Thus, the rationale for taking and storing such wide-ranging types of measurements is unclear.

21. With respect to the second objective, it must be noted again that not all the types of evidence/information regarding individuals, covered under the definition of measurements, are equally reliable and useful for the purposes of unique identification of persons involved in crimes. Thus, it is unclear why, in the absence of any real value addition to the goals of accurate investigation and efficient prosecution, a database of such measurements is sought to be created. Nothing in the law prohibits the use of such measurements as investigative tools in individual cases. It is the creation of databases that is unexplained. The absence of an express purpose of search and comparison using such databases adds to this lack of clarity on the purpose and the aims of the Bill, thereby rendering the Bill irrational and manifestly arbitrary.

a. The Bill does not disclose a basis for determining from whom measurements can be taken under the Bill

22. The language of the Bill clearly reflects that it does not envisage that all convicts, all persons who have furnished security under Section 117 of CrPC, all persons who have been arrested and all persons who have been detained under preventive detention laws will be required to provide measurements under Cl. 3. The conclusion that only some persons belonging to these categories will be compelled to provide their measurements flows from the fact that police/prison officers have to determine that the same is "required" before taking any measurements under Cl. 3. In providing no guidance in the form of principles or criteria or even the broad policy on the basis of which this 'requirement' is to be assessed, how the requirement differs for convicts in prisons or persons arrested in connection with ongoing to proceedings, or even who (whether police or prison officer or any other authority) actually needs to make this assessment,

28 *See infra* argument on the framework for examination of expert evidence, paras 77-82.

the Bill is manifestly arbitrary. It does not disclose the determining principle behind the taking of measurements of some members of the mentioned categories and not others.

b. There is no mechanism for persons who have been compelled to provide measurements under Cl. 5 to have the same destroyed

23. The effect of Cl. 5, which allows the Magistrate to order the taking of measurements of "any person" irrespective of whether they have been arrested or are persons of interest in any criminal proceedings, is that such persons do not have the opportunity of having their records and measurements removed. This is because the *proviso* to Cl. 4(2) - the only provision that deals with destruction of records in the entire Bill - covers only arrested persons who have been acquitted, discharged or released without trial. Thus, persons who are not involved in criminal proceedings in fact are subject to a greater degree of infringement of their right to privacy,[29] than unconvicted suspects who were at some point arrested for an offence. This is manifestly arbitrary as it does not disclose a determining principle for such differentiation.

c. Cl. 6 provides no clear guidance on what constitutes an offence

24. Cl. 6 is an arbitrary and excessive invasion of the right to privacy. It makes it lawful for a police or prison officer to compel the giving of measurements in the event of facing resistance from a person to do so, in a manner that may be prescribed by the Rules. Further, Cl. 6(2) makes such resistance or refusal a punishable offence under Section 186 of the Indian Penal Code, 1860.

25. In *Shreya Singhal v. Union of India*,[30] Section 66A was struck down for its overbreadth and vagueness, with the court affirmatively citing case law from the Supreme Court of the United States where it had been held that "if no reasonable standards are laid down to define guilt in a section which creates an offence, and where no clear guidance is given to either law abiding citizens or to authorities and courts, a section which creates an offence and which is vague must be struck down as being arbitrary and unreasonable."[31] It was observed that since Section 66A did not provide any "manageable standard by which to book a person for an offence" it arbitrarily, excessively and disproportionately restricted the freedom of speech. Cl. 6 is also a penal provision, in that it makes it an offence under Section 186 of the Indian Penal Code (obstructing public servant in discharge of public functions), to resist or refuse the taking of measurements under the Act. As argued above, Cl 3 makes the taking of measurements under the Bill completely dependent upon the subjective discretion of police and prison officers and magistrates. Cl. 6 therefore, fails to provide clear guidance to individuals as to when a refusal to allow the collection of measurements constitutes an offence. This therefore entails an arbitrary invasion of privacy.

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29 Cl. 4(2), Criminal Procedure (Identification) Bill, 2022.

30 *Shreya Singhal v. Union of India* (2015) 5 SCC 1.

31 *Shreya Singhal v. Union of India* (2015) 5 SCC 1 [5, 101].

III. The *proviso* to Cl. 3 of the Bill constitutes an unreasonable classification violative of the right to equality under Article 14

26. Cl. 3 of the Bill creates a class of persons who may be compelled to give their 'biological samples' to a police or prison officer in a manner prescribed by the Rules. This class of persons includes, *inter alia*, any person who has, at any point of time, been arrested for an offence against a woman or a child or for any offence the punishment for which is 7 years or more. Other arrested persons - those whose alleged victims were neither women nor children, and those whose alleged offence is punishable by less than 7 years of imprisonment – may only be compelled to provide measurements *other than biological samples.*

27. It is a well-established rule that for a legislative classification to pass the constitutional test of Article 14, such classification must be reasonable. A classification is reasonable if it meets two requirements. *First*, the classification must be founded on intelligible differentia distinguishing one class from another; and *second*, the differentia must have a rational nexus to the object sought to be achieved by the Act.[32] It is our case that the *proviso* to Cl. 3 of the Bill makes a classification with no rational nexus to the aim of the Bill, and is therefore in violation of Article 14.

28. The stated aim of the Bill is to "gather sufficient legally admissible evidence and establish the crime of the accused person", and to "make the investigation of crime more efficient and expeditious."[33] The Bill itself provides for both collection of measurements of certain categories of persons, as well as the databasing of the collected measurements. It may, therefore, be construed that the aim of Cl. 3 of the Bill is to collect measurements of a certain class of persons towards aiding investigations, both present and future.

29. The proviso classifies arrested persons on the basis of the gender/age of the victims of their suspected offence, and on the basis of the severity of punishment provided for the suspected offence. Having made such a classification, the proviso allows those arrested for offences punishable by 7 years or more, or those arrested for offences against a woman or a child to be compelled to give their biological samples; whereas, all other arrested persons may only be compelled to give measurements other than biological samples.

30. There is no rational nexus between the classification based on gender/age of the victim for the requirement of biological samples, and the purposes of investigation. First, it is our case that the gender or the age of the victim has no rational nexus to the usefulness of biological samples from the arrested person for the investigation in any particular matter. Second, the age/gender of the victim also has no rational nexus to whether the collection of such biological samples from an arrested person will aid police's investigative machinery generally.

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32 *Shri Ram Krishna Dalmia v. Justice S. R. Tendolkar* AIR 1958 SC 538; *Special Courts Bill, 1978,* In re, (1979) 1 SCC 380.

33 *See* Statement of Objects and Reasons, Criminal (Procedure) Identification Bill, 2022.

No rational nexus with the aim of efficient investigation in a given case

31. To illustrate this, a comparison may be made to Section 53A, CrPC which also identifies a class of persons for examination of specific biological samples - those arrested for the offence of rape, *only* in cases where it may reasonably be believed that examining the arrested person may afford evidence of the offence.[34] The aim of Section 53A may be construed to aid the investigation of a particular crime. The classification in Section 53A, CrPC hinges on two bases - *one*, the offence being of a nature where *generally* biological material is of particular importance in investigation; *two*, the circumstances in that case *specifically* warrant a reasonable belief that examination of biological samples from the arrested person will afford evidence of the offence. The basis of the classification, thus, has some rational nexus with the purpose of aiding investigations in such criminal matters.

32. In contrast, there is no general evidence to show that investigations relating to crimes where victims are women or children, as opposed to all other crimes, *generally* benefit from the examination of biological samples - *regardless* of the nature of the crime itself. Further, the lack of an additional requirement of reasonable belief that examination of biological samples in a particular case will afford evidence of the offence, further weakens the rational nexus between the *proviso* and the aim of aiding the specific investigation. Similarly, it is the nature of offence and the circumstances of the specific crime, and not the *severity* of its punishment, that has any rational nexus with whether biological samples will aid in its investigation.

No rational nexus with the aim of efficiency in future or past investigations

33. If the aim of Cl. 3 is instead construed to be aiding the general investigative machinery of the police, the *proviso* would still suffer from being an unreasonable classification, for lack of rational nexus between the classification and the aim. To be clear, such aim is apparent upon a reading of Cl. 3 (taking of measurement) with Cl. 4 (databasing of measurements). Together, these provisions intend to create a database of 'measurements' profiling the class of persons identified in Cl. 3 for the purposes of aiding investigations of *future* crimes. The aim, thus, is premised on a prediction of future criminality of the identified class of persons.

34. Again, the rational nexus between the gender/age of the victim of an offence and the likelihood that the person arrested for that offence will commit future crimes is unclear. Similarly, it is unclear if there is a rational nexus between the likelihood of committing future crimes and the severity of the prescribed punishment for an offence.

34 Section 53A Code of Criminal Procedure 1973.

Violation of the Right Against Self-Incrimination Under Article 20(3)

35. Cl. 2 of the Bill defines 'measurements' to include "finger-impressions, palm-print impressions, foot-print impressions, photographs, iris and retina scan, physical, biological samples and their analysis, *behavioural attributes* including signatures, handwriting or any other examination referred to in section 53 or section 53A of the Code of Criminal Procedure, 1973." [emphasis ours]

36. It is notable that 'behavioural attributes' is not a term of art in forensic science, and leads to concerns about its overbroad, vague scope. Specifically, it is open to interpretation to include measurements of a testimonial nature. For example, 'behavioural attributes' as measurements may be coercively taken from a person by making use of a compelled psychiatric evaluation. Such evaluation, when it leads to any incriminating admission, would constitute a 'testimonial compulsion'. An expansive interpretation of 'behavioural attributes' could even potentially be understood to include narco-analysis, polygraph tests, or brain mapping, which were prohibited expressly by the Supreme Court's ruling in *Selvi v. State of Karnataka*.[35]

37. This implication is further strengthened by the fact that the provision is phrased as an inclusive definition. The Supreme Court has, across a line of cases, held that inclusive definitions are understood as intended to *enlarge* and *add* to the ordinary meaning of words, especially in cases where the extended statutory meaning may not fall within the ordinary or natural meaning.[36] Thus, 'behavioural attributes' may be constructed as including both what its ordinary meaning would imply, *as well as* handwriting, signatures and other measurements mentioned in Sections 53, 53A of CrPC.

35 *Selvi v. State of Karnataka* (2010) 7 SCC 263.

36 *Ramanlal Bhailal Patel & Ors. v. State of Gujarat* (2008) 5 SCC 449 [23]; *State of Maharashtra & Ors. v. Reliance Industries Limited & Ors.*, (2017) 10 SCC 713 [21]; *Regional Director, ESIC v. High Land Coffee Works of P.F.X. Saldanha & Sons & Ors.* (1991) 3 SCC 617 [3, 7].

Violation of the Right to Privacy Under Article 21

I. The Bill's provisions restrict the fundamental right to privacy under Article 21

38. A 9-judge bench of the Supreme Court in its decision in *Puttaswamy-I* conclusively established the right to privacy as a fundamental right is protected under Article 21 of the Indian Constitution. The 5-judge bench in *Puttaswamy-II*, while ruling on the constitutionality of the Aadhaar framework, further reiterated the inclusion of informational privacy (including biometric and other personal data) within the right to privacy under Article 21.[37] Retention of data which constitutes private information, amounts to an interference with the right to privacy.

39. The measurements, as defined under Cl. 2(1)(b), constitute private or personal information. Justice Chandrachud's plurality opinion in *Puttaswamy-I* affirmatively cited[38] *S and Marper v. United Kingdom*,[39] where the ECtHR had held that "*fingerprints, DNA profiles and cellular samples, constitute personal data...as they relate to identified or identifiable individuals...[T]he DNA profiles' capacity to provide a means of identifying genetic relationships between individuals ... is in itself sufficient to conclude that their retention interferes with the right to the private life of the individuals concerned ... The possibility the DNA profiles create for inferences to be drawn as to ethnic origin makes their retention all the more sensitive and susceptible of affecting the right to private life...fingerprints objectively contain unique information about the individual concerned allowing his or her identification...[and are] thus capable of affecting his or her private life and retention of this information without the consent of the individual concerned cannot be regarded as neutral or insignificant ...*".[40] Most of the measurements covered under Bill, specifically, finger-impressions, palm-print impressions, foot-print impressions, iris and retina scan, physical and biological samples and their analysis, are personal information, in that they are related to the identification of individuals. In addition, systematically recording photographs[41] and voice samples[42] on databases, for the purpose of identification of persons, by way of data-processing, has also been recognised by the ECtHR as an interference with privacy. Thus, the right to privacy is squarely implicated due to the extensive collection and use of similar personal information as envisaged under the Bill.

II. The restrictions on the right to privacy are not proportionate and are thus unconstitutional

40. An infringement of the right to privacy is constitutional only if it satisfies the four-fold test of proportionality laid down in *Puttaswamy-I* and *Puttaswamy-II*. It must be noted that in

37 *KS Puttaswamy v. Union of India* (2019) 1 SCC 1.

38 *KS Puttaswamy v. Union of India* (2017) 10 SCC 1 [17, 29, 221].

39 *S and Marper v. United Kingdom* 2008 ECHR 1581.

40 *S and Marper v. United Kingdom* 2008 ECHR 1581 [84].

41 *Friedl v. Austria* 15225/89 52-53.

42 *P.G. and J.H. v. The United Kingdom* No. 44787/98 2.

Puttaswamy-I, the Supreme Court endorsed 8 key Data Protection Principles from the EU GDPR regime which may be considered as informing the proportionality assessment of a particular measure infringing on informational privacy.[43] These are: informed consent, collection limitation, purpose specification, use limitation, access and correction, accountability, and data security.

41. The test of proportionality was first introduced in Indian constitutional jurisprudence through the 5-judge bench decision in *Modern Dental College*,[44] wherein J. Sikri endorsed the proportionality doctrine proposed in *R v. Oakes*.[45] However, J. Sikri himself refined his formulation of proportionality further in the 5-judge bench decision in *Puttaswamy-II*, after considering the various critiques of the Canadian and German approaches as well as the ruling in *Modern Dental College*.[46] Therefore, we construe the ruling in *Puttaswamy-II* as a clarification of the ruling in *Modern Dental College*. The test laid down was as follows:

1) Legitimate aim, ensuring that the goal is 'of sufficient importance to warrant overriding a constitutionally protected right or freedom.'

2) Suitable means, implying thereby a rational connection between means and ends.

3) Necessity of means to be judged as follows:

- *First*, identify a range of possible alternatives to the measure employed by the State;
- *Next*, examine the effectiveness of each of these measures in realising the purpose in a 'real and substantial manner;'
- *Next*, examine the impact of each measure on the right at stake;
- *Finally*, determine whether there exists a preferable alternative that realises the aim in a real and substantial manner but is less intrusive on the right as compared to the State's measure.

4) Proportionality stricto sensu, which should avoid the concerns with 'ad-hoc balancing' by judges by using 'brightline rules', which implies conducting the 'act of balancing' on the basis of some established rule or by creating a sound rule.

While the Bill has a legitimate aim of improving investigation, detection and prevention of crimes, it fails to satisfy the other three prongs of proportionality, as argued below:

43 *KS Puttaswamy v. Union of India* (2017) 10 SCC 1 [65].

44 *Modern Dental College Research Centre v. State of Madhya Pradesh* (2016) 7 SCC 353.

45 *R v Oakes* [1986] 1 S.C.R. 103 [68].

46 *KS Puttaswamy v. Union of India* (2019) 1 SCC 1 [157-158].

The Bill is not a suitable means for achieving the legitimate aim of crime prevention, detection and investigation

42. The Bill allows for compelling a large class of persons identified under Cl. 3 and Cl. 5 to provide their measurements.

43. Under Cl. 3, convicts, arrestees, detainees, as well as those ordered to give security for breach of peace and good behaviour can be compelled to give measurements, "*if required*". There is no further attempt in the Bill to define the circumstances under which the police or prison officers may compel the giving of such measurements. The Bill does not provide that the giving of measurements, in a particular instance, must have any connection to aiding the investigation in the particular matter. Thus, Cl. 3 has no rational nexus with the stated aim of aiding investigations in specific matters.

44. Under Cl. 5 of the Bill, the Magistrate may compel "any person" to give measurements, if it is found to be "expedient" for the purpose of an investigation or proceeding under the CrPC or any other law. It does not provide for any further requirements that the taking of such measurement must specifically aid in investigation of a crime. Thus, again, there is no rational nexus at all between this power and the legitimate aim of aiding in specific investigations of crime.

45. Further, under Cl. 4, the Bill databases and profiles certain classes of persons identified in Cls. 3 and 5 to aid in future or past 'cold' investigations using a vast forensic data bank that the potential suspect's known measurements may be matched against. Inherent to the suitability of this Bill to the task of aiding future or past investigations is the assumption that those compelled to give measurements for this data bank (i.e. those covered by Cl. 3 and Cl. 5) are likelier than the general population to commit an offence in the future/to have committed an offence in the past, or the assumption that their measurements are likelier than the general population's to provide leads for crime detection or investigation. There is no basis for such an assumption.

46. There is no demonstrated rational nexus between the increased likelihood of future or past offending and the class of persons included in Cl. 3 (convicts of *all* offences, detainees, arrestees, those ordered to give security for maintaining peace and good behaviour). The rates of recidivism among ex-convicts compared to the rate of offending in the general population have not been studied in India. Similarly, there has been no demonstration of the notion that persons arrested or detained are likelier than others to have committed crimes in the past. Similarly, once the investigation against an arrestee is complete, and the arrestee is acquitted/discharged/released without trial, the Bill still provides for indefinite retention of their 'measurements' taken under Cl. 3. There is, again, no rational nexus between prior arrests for a crime one was acquitted of and the risk of future offending.

47. Thus, given the lack of rational nexus between the provisions of the Bill and the legitimate aim espoused by it, the provisions of the Bill are not a suitable means to achieve its legitimate aims.

The extent of infringement of the right to privacy is not necessary for attaining the legitimate aim of crime prevention, detection and investigation

48. An assessment of the necessity of the specific framework of collection and storage of measurements envisaged in the Bill may be made along the lines of the following metrics:

a. The Bill's coverage is overbroad

49. The Bill allows an overbroad class of persons to be compelled to provide measurements. It covers persons convicted of all offences and possibly even ex-convicts, regardless of the severity or nature of offence convicted of, as well as persons detained under any preventive detention law, and all arrestees (though a further sub-class of arrestees are exempted from production of biological samples specifically). No classification is made on the basis of the nature of the offence, in assessing whether it is of such a nature that the investigation is likely to be aided by the use of measurements. Thus, the Bill's coverage is overbroad for the purposes of the legitimate aim it seeks to achieve. In addition, Cl. 5 of the Bill allows the Magistrate to order the taking of measurements of "any person" for the purpose of not just investigations or proceedings under the CrPC but also "any other law…in force". Cl.5 does not appear to require that there be a suspicion that the person whose measurements are collected has committed an offence. An extensive database does not in and of itself translate into better crime prevention, investigation and prosecution.[47] Therefore, the extensive coverage of the Bill is not necessary for the purpose of satisfying either of the two legitimate aims of linking a particular suspect to a particular crime, or for identification of future offenders.

b. The Bill fails to limit the duration for storage of the measurements as well as record of measurements

50. In *Gaughran v. UK*,[48] ECtHR dealt with a scheme providing for indefinite retention of DNA information and other personal information of persons convicted of certain minor offences. The Court dismissed the argument that the increased collection of data results in increased prevention of crime,[49] and struck down the scheme for not having a provision for removal of the data on the ex-convict's application, in consideration of factors like age of the person concerned, nature of offence, length of time elapsed, and the current personality of the ex-convict.[50] In *S. and Marper v. UK*, the ECtHR struck down a similar scheme that indefinitely retained personal information of suspected and unconvicted persons, and observed with particular concern, the retention of such information for juvenile offenders.[51] Significantly, in *Aycaguer v. France*,[52] it was held by the ECtHR that a deletion procedure should be a practical remedy available not only to

47 *Gaughran v. United Kingdom* 45245/15.

48 *Gaughran v. United Kingdom* 45245/15.

49 *Gaughran v. United Kingdom* 45245/15 [89].

50 *Gaughran v. United Kingdom* 45245/15 [94].

51 *S and Marper v. United Kingdom* 2008 ECHR 1581 [54, 124].

52 *Aycaguer v. France* [2017] ECHR 587.

suspects, but also convicted persons.[53] Further, it was also observed that the data storage period should be proportionate to the nature and gravity of the offence.[54] A scheme of indefinite retention or retention in perpetuity was uniformly held to be excessive with respect to the legitimate aim of crime investigation and detection.

51. This Bill provides no procedure to apply for removal or deletion, except in the context of the acquittal, discharge or release of persons without any criminal antecedents (provision to Cl. 4(2)). Even for the aforesaid class of persons such procedure has been provided for, the Bill does not envisage a clear procedure for the collection of information on court outcomes by the NCRB which is tasked with the responsibility of destruction of records of measurements. Thus, it is unclear how such a provision will be implemented. The Bill also seems to require indefinite retention of not just records of measurements in digital format, but also measurements themselves. Cl. 4(2) provides that records would be retained for 75 years, which effectively translates into indefinite retention. In *Aycaguer v. France*,[55] a period of 40 years was interpreted as "indefinite storage, or *at least* as a norm rather than a maximum."[56] Further, while the NCRB, as per Cls. 4(1) and (2), shall store records of measurements, which necessarily may not include the samples themselves; Cl. 4(3) provides that State notified agencies will collect, preserve and share the measurements themselves. Given the definition of measurements includes biological samples, and none of the provisions of the Bill require destruction thereof, it may be assumed that the samples can also be retained indefinitely.

52. Thus, the Bill provides no timeframe for deletion of records of measurements for convicted persons, detainees, as well as those compelled under Cl. 5 (including juvenile offenders). Further, the Bill does not provide at all for destruction of samples taken from any persons under the Bill, including from those who were arrested and subsequently acquitted. There is no provision for deletion of samples as well as records based on current personality of the person, likelihood of future criminality, severity of the offence, nature of the offence, time elapsed since the offence, *etc.* Therefore, the indefinite retention of such data and measurements is not necessary towards the legitimate aim of aiding future investigations.

c. The Bill contains no procedural safeguards to minimise the infringement of privacy

53. The Bill leaves out several critical procedural safeguards or leaves them to the discretion of executive rule-making bodies. There is no specification of the purpose for which the records may be used, shared and disseminated under Cl. 4(1), and determination of such policy is left to the prerogative of the rule-making body. The procedure for removal of one's record of measurements from the database is only triggered after the acquittal/ release/discharge of an accused person and the exhaustion of all legal remedies

53 *Aycaguer v. France* [2017] ECHR 587 [44-45].
54 *Aycaguer v. France* [2017] ECHR 587 [44].
55 *Aycaguer v. France* [2017] ECHR 587 [42].
56 *Aycaguer v. France* [2017] ECHR 587 [42].

against such outcomes, and is even in that case subject to the Magistrate's unguided discretion under Cl. 4(2). There is no guidance on the manner of collection of measurements, on the period for which records of such measurements as well as the measurements themselves may be stored, or on the manner in which a person resisting the taking of their measurements may be compelled to provide them.

The Bill has a disproportionate impact on the right to privacy

54. The Bill provides for no purpose limitation, i.e., no indication of the purposes for which measurements and the records collected and stored can be used. Additionally, Cls. 3 and 4 allow for blanket collection, storage, processing, use and sharing of measurements taken from convicts (possibly even ex-convicts), persons who have furnished security under Section 117 of the CrPC, been arrested for any offence, or detained under preventive detention laws.

a. No purpose limitation

55. The Bill allows for the storing of all measurements and records collected [Cl. 4], but does not clarify the purposes for which they may be used. The absence of expressly laid purposes which could limit the power of authorities to use, maintain, and process the information/measurements collected, opens up scope for significant invasion of individuals' privacy, given the private and sensitive nature of measurements collected and stored.

56 The intrusion of privacy is particularly serious in the present Bill when we consider another aspect. The inclusion of biometric information, such as fingerprints, iris and retina scans (which are otherwise not useful in investigating a given crime-scene), the extension of Magistrates' powers under Cl. 5 to even persons who are not suspects in criminal proceedings, and the lack of a mention of the specific uses to which measurements and their database records will be put to, raise the question of whether the 'measurements' in Cl. 2(1)(b) are to be *used as evidence* (to run searches on databases and to compare data for identification of criminals in specific cases) or *used for obtaining evidence*. The latter would include the use of biometric information by law enforcement agencies to access digital as well as physical spaces belonging to suspects or other persons, which are protected using biometric technology, in order to gather more evidence in present and future investigations. Examples of these could be cellular devices, laptops, as well as lockers protected by biometric passwords. The capacity of the Bill to allow for this degree of intrusion into the private life of individuals, including those who are not even suspects in criminal proceedings, makes the violation of the right to privacy particularly severe.

b. Failure to differentiate between persons based on guilt, degree of criminality, and the nature of the offence

57. In *Aycaguer v. France*, the ECtHR found that the compelled inclusion of one's biological sample in the national computerised DNA database was a violation of the right to

respect for private life under Article 8 of the ECHR. The violation of Article 8 was found on account of the absence of a provision to differentiate the period of storage depending on the nature and gravity of the offences committed,[57] the long duration of storage specified and the fact that the data could not be deleted.[58] It was observed that the regulations therefore failed to strike a fair balance between the competing public and private interests.[59]

58. As such, personal information of the nature collected under the Bill must be relevant and the collection and storage should not be excessive in relation to the purposes for which the information is stored, and the information must not be preserved in a form which permits identification of the data subjects for longer than is required for the purpose for which the data is stored.[60]

59. The lack of differentiation between convicts, persons arrested or detained, and persons furnishing security under Section 117 of CrPC, as well as the lack of differentiation based on seriousness of offence and the investigative needs in the case that a person is involved in, makes the Bill disproportionate in its impact. This differentiation and/or gradation between the persons covered by the Bill and the offences they have or may have committed should have informed both: 1) what measurements can be collected from them; and 2) their period of retention.[61]

60. With respect to the first, it must be noted that *all* persons in Cl. 3(1) can have *all* their measurements collected and stored in databases, except biological samples. Thus, even within convicts, the Bill disproportionately infringes the privacy of convicts as it collects all measurements from them, and not only those measurements, as may be proportionate to the crimes that they have been convicted for. Not all measurements can reasonably be collected from all convicts, and a gradation based on the seriousness of the offence must be employed.

61. Similarly, for persons who are arrested but not yet convicted, not all measurements can be collected and stored, independent of the investigative purpose served by the measurements in the specific criminal proceeding involving them, and the nature of the crimes they have allegedly committed. Even if a rational nexus between severity of the offence and the risk of future offending is assumed, it is notable that all measurements, excluding non-biological samples can be collected and retained vis-a-vis persons implicated in a minor non-violent offence, such as a traffic violation. This is not proportionate to the risk, if any, posed by the said offender or to the aims of the investigative process and consequently, the need for future investigation and identification. Given the nature of the present offence alleged, it is also not

57 *Aycaguer v. France* [2017] ECHR 587 [43].

58 *Aycaguer v. France* [2017] ECHR 587 [44-45].

59 *Aycaguer v. France* [2017] ECHR 587 [45].

60 *Aycaguer v. France* [2017] ECHR 587 [38]; *S and Marper v. United Kingdom* 2008 ECHR 1581 [103].

61 The Bill also does not seem to admit any differentiation based on the age of the offender. This is at odds with the scheme of the Juvenile Justice (Care and Protection of Children) Act, 2015 and its commitment to the protection of the right to confidentiality and privacy of children in conflict with the law.

commensurate with any actual requirement of such measurements in the investigative process for the present crime.

62. The retention of sensitive personal information for at least 75 years and possibly even in perpetuity, in the absence of any procedural safeguards (specifically that of limitations on the use and dissemination of data in terms of a specific purpose, and provisions for removal of records or destruction of samples at request) constitutes a disproportionate restriction of individuals' right to privacy. The blanket and indiscriminate nature of the powers to collect and retain measurements, again without differentiating between convicts and suspects, fails to strike a fair balance between individual rights and the aims of crime prevention, detection, investigation and prosecution.

63. **In conclusion**, the present Bill violates the right to equality under Article 14, the right against self-incrimination under Article 20(3) and the right to privacy under Article 21.

ISSUES OF SCIENCE AND REGULATION

64. The primary purpose of the Bill is to aid investigations through the collection and databasing of measurements and their records. In this section, we discuss whether this Bill will increase the efficiency and accuracy of investigations. The Bill assumes that the data collected and stored will aid in future criminal investigations. It is our argument that *first*, the current scientific and legal standards stand contrary to this assumption. In fact, much of the data being collected would not be scientifically valid. *Second*, the Bill does not consider the impact of an unregulated database on criminal investigations in the backdrop of a flawed criminal justice system. India lacks robust standards for forensic examination and legal appreciation of such evidence. Therefore, criminal investigations will not benefit from an extensive database like this.

65. It is also important to consider the financial and administrative costs of establishing and maintaining such an extensive database and the effectiveness of such an exercise. A database like this is unnecessary as it will only rob the public of their right to privacy, while being a drain on public resources. The following sections discuss the issues that emerge from the analysis of the Bill in the context of criminal investigations and forensic examinations.

Scientific Validity and Databasing

66. As per Cl. 2(1)(b) of the Bill, 'measurements' shall include finger-impressions, palm-print impressions, biological samples and their analysis along with an individuals' signatures and handwriting amongst various other measurements. As per the Statement of Objects and Reasons under the Bill, the purpose of collecting and databasing the measurements is that the "*unique identification of a person involved in any crime...will assist the investigating agencies in solving the criminal case*." While many of the measurements mentioned in the Bill are a part of criminal investigations already, this Bill seeks to expand their use by providing wider powers of collection as well as storage of these measurements, enabling their use to investigate either unsolved cases or future offences. Considering the wide scope of the Bill, it is imperative to consider the scientific and legal validity of forensic methods involved in collecting and analysing these measurements.

67. As discussed in the sections below, there is no scientific evidence to support the foundational validity[62] and reliability of forensic comparison methods relating to certain

62 A method is considered to be foundationally valid, when empirical studies can establish that the method provides accurate results irrespective of who uses it (reproducibility) or how many times it is used (repeatability).

types of 'measurements' covered within the Bill. Further, contrary to the Statement of Objects and Reasons of the Bill, there is no scientific literature to support the claim that all measurements[63] mentioned in Cl. 2(1)(b) of the Bill are unique to an individual. Additionally, the Bill envisages the use of these measurements for purposes of criminal investigation, while ignoring the lack of established scientific standards for forensic examination and clear legal standards for examination of expert evidence in India. Therefore, these issues raise concerns regarding the use of such measurements as evidence in investigations and criminal proceedings. Consequently, there is a mismatch between the stated aim of the Bill to gather legally admissible evidence and the scheme of the Bill.

I. Scientific and legal validity of certain measurements covered under the Bill

Signature and handwriting samples

68. Currently, there is no scientific basis to attribute uniqueness to an individual's writing samples.[64] Handwriting is a complex human task and is therefore prone to variation. Studies have shown that an individual's handwriting can change based on multiple factors.[65] Comparison of writing samples between exemplar and question samples, is often fraught with errors. A study has shown that handwriting examiners have reported erroneously in 6.5% of their comparisons.[66]

69. The Supreme Court has also noted that the science of handwriting analysis is not an exact science, on multiple occasions.[67] The imperfect nature of this science heightens the risk of incorrect opinions by experts.[68] In any case, courts have held that handwriting analysis is opinion evidence that cannot replace substantive or direct evidence.[69] As handwriting analysis is fallible, prudence requires that it cannot be admitted unless corroborated by other evidence on record.[70] Courts have recognised that it is hazardous to base a conviction solely on the opinion of such an expert.[71] In *Magan Bihari Lal v State*

63 Including finger-impressions, palm-print impressions, foot-print impressions, iris and retina scans, signatures, and handwriting.
64 Committee on Identifying the Needs of the Forensic Sciences Community, National Research Council, 'Strengthening Forensic Science in the United States: A Path Forward' (2009) accessed at <https://www.ojp.gov/pdffiles1/nij/grants/228091.pdf> accessed 29th March 2022.
65 Shruti Gupta and others, 'Effect of natural variations with respect of time interval in handwritings of individuals' (2017) 45 Nowa Kodyfikacja Prawa Karnego 81.
66 Moshe Kam and others, 'Writer identification by professional document examiners' (1997) 42(5) Journal of Forensic Sciences 778-786.
67 *Sarkar's Law on Evidence* (2020 Vol. 1) 1351.
68 *Basheera Begam v. Mohd. Ibrahim* 2020 11 SCC 174 [184]; *Murarilal v. State of Madhya Pradesh* 1980 1 SCC 704 [4] (In Murarilal, the Court eventually admitted the expert opinion on handwriting).
69 *Sashi Kumar v. Subodh Kumar* AIR 1964 SC 529.
70 *Padum Kumar v. State of Uttar Pradesh* (2020) 3 SCC 35 (J. Banumathi); *State of Maharashtra v. Sukhdev Singh* 1992 3 SCC 700.
71 *Magan Bihari Lal v. State of Punjab* 1977 2 SCC 210; *Fakhruddin v. State of Madhya Pradesh* AIR 1967 SC 1326.

of Punjab, the Supreme Court noted that expert opinion must be received with great caution - perhaps none so with more caution than the opinion of a handwriting expert.[72] It follows that the opinion of handwriting experts is not binding on a judge.

70. In the US, courts have rejected the contention that forensic document examination, or handwriting analysis, is a science.[73] Appellate and trial courts in the US generally take three broad approaches to handwriting analysis.[74] They avoid engaging with handwriting analysis,[75] reject the analysis altogether,[76] or prevent handwriting experts from giving any conclusions as to authorship,[77] limiting their role to identifying similarities and dissimilarities between handwriting samples.[78]

Footprint impressions

71. Footprint impressions would refer to the collection and analysis of bare footprint impressions. The research into methods of analysis for such impressions are at a nascent stage, with limited research into its forensic applications. The Supreme Court has held that the identification by footprint impression is an imperfect science,[79] going so far as to call it a 'rudimentary science'.[80] In the absence of any other evidence, courts refuse to convict on the basis of matching footprints (shoe-moulds) found near the dead bodies of the deceased. Such a circumstance has been held to be too "far-fetched" to establish an offence.[81] Footprints of an accused found on the spot are considered insufficient to connect the accused with a crime.[82]

Fingerprint impressions

72. There are two assumptions based on which latent fingerprint[83] examination is done: 1) fingerprints are unique for every individual; and 2) fingerprints do not change as time

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72 1977 2 SCC 210 [7].
73 *United States v. Starzecpyzel* 93 Cr 553 (LLM), 880 Fed.Sup. 1027 (S Dist NY 1995); *United States v. Jones* 107 F.3d 1147, 1159-61 (6th Cir. 1997).
74 Jennifer Mnookin, 'Scripting Expertise: The History of Handwriting Identification Evidence and the Judicial Construction of Reliability, Symposium: New Perspectives on Evidence' (2001) 87(8) Virginia Law Review 1723-1845.
75 *United States v. Paul* 175 F.3d 906 (11th Cir. 1999).
76 *United States v. Rutherford*, 104 F.Supp. 2d 1190, 1193-943; *United States v. Van Wyk*, 83 F.Supp. 2d 515, 522, 524.
77 *United States v. Fujii* No. 00-CR-17, 2000 US Dist. LEXIS 20829 (ND III Sep. 25, 2000); *United States v. Saelee* Order No. A01-0084-CR (Aug. 24, 2001).
78 Jennifer Mnookin, 'Scripting Expertise: The History of Handwriting Identification Evidence and the Judicial Construction of Reliability, Symposium: New Perspectives on Evidence' (2001) 87(8) Virginia Law Review 1723-1845.
79 *Mohd. Aman v. State of Rajasthan* AIR 1997 SC 2960 [9]; *Bhulakiram Koiri v. State* 1968 SCC Online Cal 111 (Calcutta High Court) [17]; *Mormal v. State of Rajasthan* 2005 Crl LJ 2877 (Rajasthan High Court).
80 *Pritam Singh and Anr. v. State of Punjab* AIR 1956 SC 415 [26].
81 *State of Haryana v. Ved Prakash* 2008 13 SCC 268 [12].
82 *Bhulakiram Koiri v. State* 1968 SCC Online Cal 111 (Calcutta High Court) [16].
83 Latent fingerprint impressions refers to the fingerprint impressions that are not visible to the naked eye and need to be developed before carrying out a comparison with the known sample.

passes or are not affected by external factors. Current scientific studies show that fingerprints are highly variable among individuals but the rarity of certain features or set of features is yet to be determined.[84] There is research that shows that the same finger can produce different fingerprints under different circumstances.[85] In case of latent fingerprint examination, false positive error rates of over 15% have been reported.[86] A report by the Federal Bureau of Investigations ('FBI') observed errors in 1 in 306 cases,[87] whereas another study based out of the Miami-Dade Police Department Forensic Services Bureau, observed error in 1 in 24 cases.[88] In *Justice S.K. Puttaswamy and Anr. v. Union of India*, UIDAI submitted information to the Supreme Court that the authentication failure rate of fingerprints in India was 6%, or over 3.69 crore failed IDs.[89] Reports have observed failed fingerprint authentications resulting in individuals losing out on benefits.[90] In spite of these scientific challenges, fingerprint examination can aid investigations and provide crucial evidence. However, for fingerprint evidence to be considered reliable it is crucial that best practices be followed. Even then, courts mostly rely on fingerprint examination only for the purpose of exclusion. In India, it is pertinent to note there are no standards guiding the examination of fingerprints.

Palm print impressions

73. Scientific studies have shown that examiners may not come to a consensus when comparing palm impressions and the analysis is also prone to errors, with a rate of false negatives at 9.5%.[91]

Iris and retina scans

74. As per information submitted to the Supreme Court by UIDAI in *Justice S.K. Puttaswamy and Anr. v. Union of India*, authentication failure rates for iris scans at the national level was 8.54%. In other words, this would mean authentication failure of over 9 lakh unique IDs.[92] There also currently exists no government database anywhere in the world that uses retina scans.

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84 William Thompson and others, *Forensic Science Assessments: A Quality and Gap Analysis* (AAAS 2015) 5.

85 William Thompson and others, *Forensic Science Assessments: A Quality and Gap Analysis* (AAAS 2015) 6.

86 Jonathan J. Koehler and Shiquan Liu, 'Fingerprint Error Rate on Close Non-Matches' (2020) Journal of Forensic Sciences 1.

87 Bradford Ulery and others, 'Accuracy and reliability of forensic latent fingerprint decisions.' (2011) 108(19) Applied Biological Sciences 7733.

88 Igor Pacheco and others, 'Miami-Dade research study for the reliability of the ACE-V process: Accuracy & precision in latent fingerprint examinations' (2014) accessed at <www.ncjrs.gov/pdffiles1/nij/grants/248534.pdf>.

89 *Justice SK Puttaswamy (Retd.) and Anr. v. Union of India and Ors.* (2017) 10 SCC 1.

90 Reetika Khera, 'Impact of Aadhaar on Welfare Programmes,' (2017) 52(50) Economic and Political Weekly 61; Swetha Totapally and others, State of Aadhaar Report 2019: A People's Perspective (Dalberg 2019) accessed at <https://stateofaadhaar.in/assets/download/SoA_2019_Report_web.pdf?utm_source=download_report&utm_medium=button_dr_2019>.

91 Heidi Eldridge and others, 'Testing the accuracy and reliability of palmar friction ridge comparisons – A black box study' (2021) 318 Forensic Science International.

92 *Justice SK Puttaswamy (Retd.) and Anr. v. Union of India and Ors.* (2017) 10 SCC 1.

Forensic DNA Profiling

75. The 'analysis' of biological samples under the Cl. 2(1)(b) may be broader than forensic DNA profiling, serological examination for identification of body fluids, or species and grouping analysis. With respect to forensic DNA profiling, while it has a stronger scientific basis and is better established as a scientific method, it remains fallible and prone to errors. In 2016, '*Forensic science in criminal courts: Ensuring scientific validity of feature-comparison methods*' (PCAST, 2016)[93] a report by the President's Council of Advisors on Science and Technology, carried out a foundational study of six feature comparison methods and concluded that only forensic DNA analysis from single source samples is foundationally valid.[94] Even with respect to analysis of complex DNA mixtures, PCAST found that the methods of analysis were not valid and reliable.[95] A recent study on the foundational validity of DNA mixture interpretation, has concluded that currently there exists no public data to assess the reliability of this method.[96] This is especially pertinent considering that often evidence collected from crime scenes will generate mixed DNA profiles. Currently in India, guidelines on interpretation of DNA profiles are not at par with international scientific standards and are not uniformly implemented across the country.

II. Cognitive bias in pattern matching methods

76. Pattern matching methods are based on comparing known samples to unknown samples. This is often based on the subjective interpretation of the characteristics an expert identifies to be similar and dissimilar.[97] There are multiple scientific studies that show that forensic experts are affected by cognitive bias impacting the results of their

93 The United States President's Council of Advisors on Science and Technology (PCAST) is an advisory group, which was re-chartered by President Barack Obama in 2010 to advise him on issues involving science and technology. In 2015, PCAST was mandated to identify the necessary steps to ensure the scientific validity of forensic evidence within the legal system. PCAST conducted an extensive review of scientific literature on seven forensic disciplines i.e. DNA profiling (single source samples and mixtures), bitemark, fingerprint, firearms, footwear and hair analysis, and consulted with a wide range of forensic experts, lawyers, prosecutors, judges, law enforcement, and researchers. The PCAST 2016 report outlines the scientific criteria for establishing the validity and reliability for forensic disciplines. It evaluates the scientific validity of the forensic disciplines based on these standards and offers recommendations for further assessment of these techniques.

94 *Report to the President: Forensic Science in Criminal Courts: Ensuring Scientific Validity of Feature-Comparison Methods* (PCAST 2016).

95 *Report to the President: Forensic Science in Criminal Courts: Ensuring Scientific Validity of Feature-Comparison Methods* (PCAST 2016) 75.

96 John Butler and others, DNA Mixture Interpretation: A NIST Scientific Foundation Review (NISTIR Internal Report 8351 2021) <https://nvlpubs.nist.gov/nistpubs/ir/2021/NIST.IR.8351-draft.pdf> accessed on 30th March 2022.

97 *Report to the President: Forensic Science in Criminal Courts: Ensuring Scientific Validity of Feature-Comparison Methods* (PCAST 2016).

analysis.[98] Studies have also shown how workplace related stress impacts an expert's decision making process.[99] Given the subjectivity in the examination process, the lack of set guidelines and practices for forensic examination across India, and the tremendous pressure and workload already being handled by forensic science laboratories, the possibility of cognitive bias cannot be denied.

III. Limitations of standards for examination of expert evidence

77. There are significant differences between the scope of judicial scrutiny of forensic evidence under Section 45 of Indian Evidence Act ('IEA') and that prescribed in other jurisdictions. Indian jurisprudence lacks a clear separation between admissibility and reliability of evidence, as compared to analysis by courts in other jurisdictions such as the US. In India, courts rarely consider any challenges to forensic evidence beyond perfunctory chain of custody arguments. Courts do not scrutinise the very thing that makes forensic evidence reliable in law - the science underlying this analysis. Neither the relevant statute (Section 45 of IEA) nor judicial interpretations thereof provide guidance on how to examine the scientific validity of forensic evidence. Instead, limitations on the scope of review of expert opinion under Section 45 preclude a fair assessment of the admissibility and probative value of forensic evidence.

78. Under Section 45 of IEA, courts must arrive at their conclusions based on their own findings, which are in turn, informed by expert opinions.[100] The expert's role is to furnish scientific criteria necessary to test the accuracy of the expert's conclusions. *Ramesh Chandra Agrawal v. Regency Hospital Limited and Ors*. prescribes three requirements for the admissibility of expert evidence

    1. The expert must be within a recognised field of expertise,

    2. The evidence must be based on reliable principles, and

    3. The expert must be qualified in their discipline.[101]

79. An expert's opinion is a relevant fact but it is the court's role to appreciate the evidence.[102] Despite this, appellate courts in India are reluctant to examine the scientific validity of forensic evidence and rarely question the competence of an expert witness. Courts appreciate forensic evidence based mainly on chain of custody concerns and the internal logic of the prosecution's case.

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98 Itiel Dror, 'Cognitive and Human Factors in Expert Decision Making: Six Fallacies and the Eight Sources of Bias' (2020) 92 Analytical Chemistry 7998–8004; Itiel Dror, 'A hierarchy of expert performance' (2016) 5 Journal of Applied Research in Memory and Cognition 121-127.

99 Mohammed Almazroue and others, 'Organizational and Human Factors Affecting Forensic Decision-Making: Workplace Stress and Feedback' (2020) 65 Journal of Forensic Sciences 1.

100 *State v. Pali Ram* 1979 2 CSC 158 [31].

101 *Ramesh Chandra Agrawal v. Regency Hospital Limited and Ors.* 2009 9 SCC 709 [16].

102 *Baso Prasad v. State of Bihar* 2006 13 SCC 65 [37].

80. In contrast, Rule 702 of the Federal Rules of Evidence[103] in the US, when read together with the US Supreme Court's decision in *Daubert v. Merrell Dow Pharmaceuticals Inc.*,[104] offers a sophisticated framework for verifying the scientific validity of forensic techniques before they are used to prosecute the accused. Such a framework is missing in India.

81. In a legal system based on precedent, courts can be understood as sites for validating the reliability of forensic evidence.[105] As new investigative techniques yield new kinds of evidence, decisions of courts become the driving force for generating belief in their reliability. Indian courts are not primed for this responsibility. What emerges from the jurisprudence outlined above is a reluctance to engage with the question of whether forensic techniques are foundationally reliable and valid. Thus, despite the demonstrated inaccuracy of certain forensic techniques, Indian courts continue to rely on them to decide criminal cases, and there is no scope for re-opening these decisions at a later stage on the basis that the forensic evidence was inaccurate. Without considering the scientific validity of the forensic methods related to the measurements described in the Bill, the proposed Bill fails to consider how these measurements can be used in a scientifically valid and reliable way to ascertain the perpetrator and solve crimes. It does not equip courts with any tools to determine the probative value of forensic techniques, even when some of these techniques make dubious claims of accuracy.

82. The need for collection and databasing of such measurements, will invariably lead to an influx of such measurements being used during investigation. Without any investigative guidelines, in the absence of standards for forensic examination and a failing system of quality management within the forensic science infrastructure, this may amount to providing either misleading results or no results, which may affect the interests of the victims and the accused alike. Both types of results are a cause for concern and need to be considered before public resources are spent on creating and maintaining such a massive database.

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103 Rule 702 of the Federal Rules of Evidence prescribes four qualifications for whether a witness is an expert witness:

1. If their scientific, technical, or other specialised knowledge will help understand the evidence or determine a fact in issue;
2. If their testimony is based on sufficient facts or data;
3. If their testimony is the product of reliable principles and methods; and
4. If the witness has reliably applied principles and methods to the facts of the case

104 The US Supreme Court's decision in Daubert v. Merrell Dow Pharmaceuticals Inc. prescribes five pre-conditions to the admissibility of expert evidence:

1. Whether the scientific technique can be tested;
2. Whether the scientific technique has been subject to peer review and publication;
3. What is the known/potential error rate of the scientific technique;
4. Whether there exist standards to control the operation of the scientific technique;
5. Whether the technique has attracted widespread acceptance in the relevant community.

105 Jennifer Mnookin, 'Scripting Expertise: The History of Handwriting Identification Evidence and the Judicial Construction of Reliability, Symposium: New Perspectives on Evidence' (2001) 87(8) Virginia Law Review 1723, 1741.

Collection of Measurements

This section discusses the regulatory and scientific issues relating to the collection of measurements.

I. Training for collection of measurements

83. Cl. 3 of the Bill qualifies police officers (not below the rank of a Head Constable) and prison officers (not below the rank of a Head Warder) to take measurements. However, these officials would not have any training, skills or qualifications in collecting the wide range of measurements under Cl. 2(1)(b) of the Bill. It is important to note that the current investigative framework under CrPC allows only Investigative officers (IOs), usually of the rank of sub-inspector or inspector to take evidence.[106] The 1920 Act also provided for a police officer not below the rank of a sub-inspector for taking of measurements. By expanding the scope of officials who can take measurements, the Bill requires expansion of the training programs for collection of such evidence.

84. Currently, even the training programs for IOs are inadequate and infrequent, with poor crime scene management and evidence collection practices. Therefore, the implementation of newer training programmes with a wider scope will be a concern. On the other hand, prison officers are not even trained in this regard. In the absence of any guidance on training, questions related to who will conduct the training and how it will be conducted, remain unanswered.

II. Increased workload for forensic laboratories

85. The government laboratories are currently severely understaffed and backlogged. Often samples that add no probative value to the investigation are sent to laboratories, thereby increasing the workload of the scientists. The Bill will also cause the investigative authorities to submit samples collected as measurements for examination in all cases, irrespective of their probative value or relevance to ongoing investigations. The Bill, therefore, fails to account for lack of capacity and infrastructure within the government forensic science laboratories.

III. Issues pertaining to data protection

86. Cl. 4(3) raises concerns about who will be responsible for collection of measurements and the breach of confidentiality that may be possible, especially in the absence of a framework on information sharing in the Bill. In the absence of a data protection law, the possibility of unregulated third parties having access to biological samples for the purposes of analysis or the records of measurements for the purpose of analysis as part of investigations, also raises serious concerns about privacy of individuals.

106 Section 53, Code of Criminal Procedure 1973.

IV. Issues with quality management

87. The Bill fails to provide any guidelines or safeguards to evaluate the quality of data that would be stored onto the database. Considering that there is no clarity on who the agency defined under Cl. 4(3) will be and the lack of any guiding principles for framing of Rules pertaining to collecting, storing, and preserving measurements under Cls. 4(1) and 8, collection of measurements can then become an arbitrary exercise. There are no safeguards currently in place to ensure that minimum standards for collection are adhered to. This is especially problematic, when the collected measurements will be stored in databases and shared for the purposes of identification and investigation.

V. Issues regarding privatisation of criminal investigations

88. Cl. 4(3) empowers State governments and UTs to notify an appropriate agency to collect, preserve, and share sensitive personal information of citizens. In the absence of any restrictions on the scope of the notification under Cl. 4(3), it cannot be ruled out that the task of collecting, preserving, and sharing measurements may be assigned to a private agency. This would amount to delegation of the sovereign function to conduct criminal investigations and collect evidence for the same, which in turn has implications for the State's obligation to administer justice. Such unguided delegation of a sovereign function to a private and unregulated agency is legally impermissible.

Collection and Storage of "Biological Samples and Their Analysis"

89. In the absence of a clause regarding destruction of 'measurements', given that the term includes samples,[107] inference can be drawn that biological samples and their analysis can be collected and preserved in perpetuity by the State Government and UTs. With reference to biological samples and their analysis, this raises greater concerns regarding the types of analysis that can be carried out and the manner in which these samples will be stored. By not defining the term 'analysis', the Bill widens the scope of information that is analysed and included in the database(s). This would have repercussions on an individual's right to privacy and raise concerns regarding data sharing.

90. Storage of biological samples is another concern as they are susceptible to environmental factors and can impact quality of examination if not stored properly. The Bill also fails to provide any indication as to the duration for which samples can be stored. This introduces the possibility of sensitive data being stored in perpetuity. In the absence of any guidance on data sharing and safeguards against misuse, such an indefinite retention period becomes particularly concerning.

I. Issues with vagueness of the term "analysis"

91. By failing to qualify what "analysis" of biological samples means, the Bill provides the government with a wide range of possibilities. This would include DNA profiling within its scope. Human DNA also contains codes (information) on an individual's phenotype, medical conditions and their ancestry.[108] Forensic DNA profiling used as part of criminal investigations limits the analysis of DNA to non-coding regions of the DNA.[109] These regions do not provide any information regarding the phenotype or medical conditions of an individual. However, given the wide scope of analysis of biological samples, the lack of clarity can lead to DNA data unrelated to criminal investigations being stored in the database. An individual's biological samples can be analysed in an arbitrary manner and stored in perpetuity. Private information about individuals' medical history can also be stored within this database. On the other hand, genealogical analysis of biological samples will lead to information about an individual's family being collected and included in the database.[110] This is especially concerning with reference to Cl. 5 of the Bill, where measurements can be collected from any "person" for the purpose of an investigation. This could imply that individuals could be obligated to provide their biological samples to carry out genealogical analysis or for familial searching (search database for relatives of the suspect) even if they are distantly related to a suspect.

107 Section 2(1)(b), Criminal Procedure (Identification) Bill, 2022.

108 John Butler, *Fundamentals of Forensic DNA Typing* (Academic Press 2009) 25.

109 John Butler, *Fundamentals of Forensic DNA Typing* (Academic Press 2009).

110 Solana Lund, 'Ethical Implications of Forensic Genealogy in Criminal Cases' (2020) 13 The Journal of Business, Entrepreneurship and the Law 185.

II. Issues regarding the collection and preservation of biological samples

92. Biological samples are susceptible to contamination and degradation. Given the nature of these samples, there need to be strict guidelines in place for collection and preservation of samples. The Bill currently provides no clarification on the duration for which "measurements" are to be stored, therefore implying biological samples will be stored in perpetuity. The storage of such samples will need to be separately considered as the infrastructure required for storage of biological samples is different to other types of measurements. Currently, in India, the police store biological samples collected as part of criminal investigations, in their evidence rooms (malkhana), which often lack adequate infrastructure. These evidence rooms often are not maintained at the accurate ambient conditions to correctly preserve biological samples. If not stored properly, biological samples will degrade over time which will impact the quality of examination that will be conducted based on these samples. The costs of setting up and maintaining such storage facilities is a hidden expense while estimating the costs for establishing a database.

III. Issues with the duration of storage of samples

93. As there is no clarity on when, and if, "measurements" are to be destroyed, the Bill provides the Government unrestricted and indefinite access to sensitive information of an individual and their family. The biological samples can remain in storage indefinitely, therefore providing the Government an opportunity to conduct different types of analysis of biological samples multiple times.

Storage of "Records of Measurements"

94. Creation of extensive database(s) which include different types of measurement does not guarantee better criminal investigations. Criminal investigations should not be devoid of context and therefore it is important to consider the repercussions of such voluminous database(s) and if it is truly necessary for a criminal trial process. The Bill is drafted on the flawed premise that records of measurements stored in the databases will aid criminal investigations. It is impossible to quantify the different evidence types that may be of probative value in a particular case. Therefore, creation of such database(s) with no safeguards regarding information sharing will result in infringement on the right to privacy and not strengthen criminal investigations.

I. Issues with excessive collection and storage

95. Evidence in criminal investigations should be collected and analysed based on their probative value for that case. Based on the context of a particular offence, it is possible that measurement under the Bill may not be useful for its investigation. Further, the use of measurement for investigation does not require such an extensive database. A database as imagined by this Bill, will include measurements such as foot print impressions,[111] handwriting samples,[112] iris scans,[113] fingerprint impressions, DNA profiles, etc[114] for the purpose of investigation. The underlying assumption is that such data may be helpful in the identification of the accused. However, this assumption is flawed as one cannot predetermine the types of evidence that may be relevant in a particular criminal investigation. With the current lack of standards that exist within the country in terms of forensic examination and its use in the criminal justice system, an extensive database like this cannot assure better criminal investigations. In fact, as highlighted in the sections above, it may introduce unreliable evidence into criminal trials.

111 Some forms of footwear/shoe print databases exist across different jurisdictions like the UK, Netherlands and the USA, but there exists no database for (bare) footprint impression. It is imperative to understand that the definition of measurements refers to collection of footprint impressions, which is unheard of. Finding footprint impressions at crime scenes is highly unlikely, therefore creating a database for the purpose of investigation is definitely an excess.

112 There exists no such database for handwriting samples anywhere in the world.

113 In the US, iris images are stored in the Next Generation Identification (NGI) Iris Service. All iris images enrolled in the repository are linked to a tenprint fingerprint record. The NGI Iris Service has an automated iris search that is used for identification validation at some correctional facilities. The scope of this database is limited when compared to the Bill and functions purely to identify prisoners and not for investigation. See 'Next Generation Identification' (FBI) <https://www.fbi.gov/services/cjis/fingerprints-and-other-biometrics/ngi> accessed 30th March 2022.

114 Countries where databases on DNA and fingerprints exist have limited the scope of these databases. There exist strict guidelines on whose data enters the database and the retention times of these databases. Investigative safeguards and quality control measures are also in place to prevent arbitrary use of these databases for the purpose of investigation. The Bill currently fails to provide any such guidance and instead provides sweeping powers to the Magistrate and the investigative authorities on the use of the database.

II. Issues with cost of creation and maintenance of database

96. As per the Government's own estimation, setting up of the DNA databank would cost 20 crore rupees,[115] which is actually woefully limited in comparison to the budgets for similar databases in other jurisdictions.[116] Creation of databases that extend beyond DNA would require greater funding. The Bill distinguishes between 'records of measurements' and 'measurements' [Cl. 4(1)-(2) compared with Cl. 4(3)]. Cls. 4(1) and (2), which deal with records, imply that a broad range of measurements will be collected, digitised and retained in a database as records, for perpetuity, for the purpose of investigation. The process of collecting the measurements therefore will be separate from the process of digitisation as per the requirements of the database itself. Infrastructural and training requirements for both will be different, which will add to the budget for the database. One should also account for the costs for building capacity within the states and UTs for creating and maintaining such databases, as there is no clarity in the bill as to agencies responsible for collection, preservation and sharing of measurements. This is before one can even consider the cost of *maintenance* of a massive database like this.[117] Currently, the level of expertise and the rigour with which collection, analysis and legal scrutiny of different types of pattern matching evidence takes place in India is inadequate. Therefore, collection and retention of such massive amounts of data is an exercise in excess,[118] without any clear purpose or demonstrable benefits.

115 Financial Memorandum, The DNA Technology (Use and Application) Regulation Bill, 2019.

116 "In 2010, putting someone's DNA profile on the United Kingdom's National DNA databank was estimated to cost £30 to £40" 'DNA databases and human rights' (GeneWatch UK 2011) <http://www.genewatch.org/uploads/f03c6d66a9b354535738483c1c3d49e4/infopack_fin.pdf> accessed 29th March 2022.

117 "Storing one person's DNA sample cost about £1 a year" 'DNA databases and human rights' (GeneWatch UK 2011) <http://www.genewatch.org/uploads/f03c6d66a9b354535738483c1c3d49e4/infopack_fin.pdf> accessed 29th March 2022.

118 Inserting and storing DNA data even from 10 individuals for a minimum period of 75 years (as required by the Bill) would cost the government approximately 760 million pounds or over Rs. 7500 crores, this is discounting the other hidden costs like training and infrastructure. (*Note-This has been calculated based on the estimates for the creation and maintenance of the National DNA databank in the United Kingdom.*)

Comparison of Present Bill With the DNA Technology (Use and Application) Regulation Bill, 2019

97. Currently in India, the DNA Technology (Use and Application) Regulation Bill, 2019 ('DNA Bill') is also being considered by the Parliament. One of the aims as defined under this Bill, includes the creation of DNA databanks for investigative purposes. The DNA Bill was referred to the Parliamentary Standing Committee which submitted its reports in February 2021. As explained in sections above, 'measurements' as per the 2022 Bill would include biological samples and their analysis, therefore extending the scope to the creation of a DNA database. Thus, with respect to DNA profiles, this Bill would overlap in scope with the DNA Bill. This section only seeks to compare the framework under the DNA Bill with the present Bill, without taking a position on the merits of the DNA Bill.

98. Although the DNA Bill also raises several constitutional and procedural concerns, in comparison to the present Bill, it provides multiple safeguards with regard to accreditation of laboratories, creation of a DNA Regulatory Board staffed with scientific members, and guidelines for storing, sharing and deletion of data from DNA databanks. Such safeguards are simply missing from the present Bill, which envisions a more extensive database and entrusts greater powers to investigative authorities.

99. The DNA Bill requires DNA databanks to be created both at the state and national level to store DNA profiles in five indices i.e. crime scene, offender, suspect, missing persons and unknown deceased. These databanks will function outside the purview of the NCRB as their regulatory framework will be different from the one described in the present Bill. The regional and national DNA databanks as per the DNA Bill would be regulated by a DNA Regulatory Board established by the Central Government. The present Bill does not provide for a specific regulatory body with the requisite knowledge and expertise to oversee the collection, storage and sharing of measurements.

100. Further, under the DNA Bill, the DNA Regulatory Board would provide accreditation to DNA laboratories as well as lay down procedures for collection, storage and dissemination of the data as per the framework under the Bill. However, the present Bill, in Cl. 8, provides a wide range of powers to the Central and State governments to frame Rules with respect to collection, storage and sharing of measurements. The Cl. does not provide any guidelines as to the framing of these Rules and instead provides a possibility of different standards to be adopted across States. Without any uniform regulatory mechanism in place, this could lead to variation in the quality of measurements collected across the country.

101. The DNA Bill also provides guidelines for retention and removal of data from the databanks and provides opportunities for individuals to approach the government for removal of data from the databank. The present Bill fails to provide any such guideline and instead simply enforces a minimum 75 year retention period. Therefore, it can be inferred that an individual's DNA related information will still remain on the NCRB database even when it is removed from the DNA databanks.

102. Cl. 21(1) of the DNA Bill requires that consent be taken of persons arrested for offences (other than the specified offences) before their bodily samples may be collected. In case consent is not given, the investigating officer must approach a Magistrate and apply for obtaining bodily substances from the concerned person. The present Bill invalidates this protection and does away with the requirement to take consent from arrested persons, subject to a narrow *proviso*. Thus, Cl. 3(3) allows the collection of biological samples from persons arrested for offences punishable with imprisonment for more than 7 years and those arrested for offences against women and children, regardless of whether they consent.

103. Cl. 5 of the present Bill significantly expands the scope of the Magistrates' powers to order collection of bodily substances provided in Cl. 21(3) of DNA Bill. Under the DNA Bill, the Magistrate can only order the taking of bodily substances from an arrested person if he is satisfied that there is reasonable cause to believe that the bodily substances may confirm or disprove the person's culpability. Cl. 5 of the present Bill does away with the requirement of reasonable cause, and also permits collection of bodily substances from any person, as opposed to just arrested persons or persons of interest.

Lack of Regulation of Databases

104. The present Bill does not prescribe any requirements for the quality management of the proposed database(s). Specifically, the Bill lacks clarity on the quality of measurements collected and storage of records of measurements as part of the database. The Bill also lacks clarity on how measurements are to be processed with relevant crime and criminal records, as provided for in Cl. 4(1)(c). Most importantly however, no details are provided regarding the manner in which the records can be shared and disseminated with law enforcement agencies. Lack of regulation and oversight over the functioning of the database, further makes the existence of such a database unnecessary

I. Issues with lack of standards for collection of measurements

105. It is necessary to provide a framework to ensure the integrity of measurements collected for the proposed database. An important concern is the fact that States have developed a wide range of standards for collection of evidence within their respective jurisdictions. While the databases themselves may be administered and maintained by the NCRB, decisions regarding the quality of measurements collected for the database must be guided by forensic experts. The NCRB should follow standardised protocols based on scientific best practices to ensure uniformity across measurements. An insurmountable challenge is the broad scope of 'measurements' as defined under Cl. 2(1)(b). Since several types of measurements are sought to be collected, developing standards for each of them, which are universally accepted, will be a difficult task.

II. Issues with NCRB's role

106. NCRB currently oversees the functioning of the Indian version of Automated Fingerprint Identification System ('AFIS') known as FACTS and Crime and Criminal Tracking Network & Systems ('CCTNS'). The Bill provides no safeguards against sharing of information to third parties and could link data to other databases, like FACTS, CCTNS and Aadhar. It is notable that NCRB outsources the day-to-day management of such projects to private contractors.[119] Considering the sweeping powers of investigation and lack of guidance on information sharing, it is highly possible that under the pretence of efficient investigations, multiple databases will be linked. This will greatly infringe upon an individual's right to privacy based on the assumption that an extensive database such as this will aid investigators.

119 Contracts under CCTNS with M/s. Pricewaterhouse Cooper (PwC) as Central Project Management Unit (CPMU) for an amount of Rs.9,89,44,615 on 29/03/2010 and M/s, Wipro Ltd. as Software Development Agency (SDA) for an amount of Rs.22,39,02,247 on 21/06/2010 have been entered into/ with/ signed between Ministry of Home Affairs and the vendors. See RTI Act Disclosures, National Crime Bureau. See <https://ncrb.gov.in/en/rti-act> accessed 30/03/2022.

107. Additionally, the NCRB is ill-equipped to deal with quality management for a database containing records of the proposed measurements, particularly of biological samples and their analysis. Such a database is contingent on the quality of records received and maintained, and thereafter disseminated to law enforcement agencies. The NCRB lacks the expertise necessary to maintain even the minimum standards that may be prescribed to ensure the integrity of the collected records.[120] This becomes critical with respect to Cl. 4(1)(c) of the Bill, which entrusts the NCRB with the processing of the measurements with respect to relevant crime and criminal records. Considering investigation and prosecution interests of the NCRB, there is absolutely no guidance on the use of the database for the purposes of a criminal trial and the probative value it would carry.

108. **In conclusion,** while we agree that improving the effectiveness and efficiency of investigations is an important endeavour, the Bill's assumption that it can be achieved through the collection of a wide range of measurements and the creation of such extensive databases is far-fetched. The entire exercise of collection, preservation and storage of the different types of measurements will create greater administrative burdens and may not deliver on promised returns, making the creation of such database(s) unnecessary while also infringing on the fundamental rights.

120 NCRB employs IPS and/or IAS officers in positions of authority, even with respect to the functioning of databases such as CCTNS and FACTS. As the creation and maintenance of databases for the different measurements will require expertise pertaining to the different types of measurements. See <https://ncrb.gov.in/en/importance-contact-number> accessed 30th March 2022.

ANNEXURE I: CLAUSE-WISE ANALYSIS

Serial No.	Provision		Analysis	Reference
1.	Clause 2(1)(b)	Definition: "Measurements"	<u>Constitutional Law Perspectives</u> • **Expansive definition of measurements** to include several types of personal information with varying degrees of reliability and usefulness in criminal investigations is **manifestly arbitrary and thus, violative of Article 14.** • **Violation of the right against self-incrimination** under Article 20(3) on account of compelling persons to take an evaluation covered by the undefined term "behavioural attributes" included in the definition of "measurements". • On account of being personal information, the breadth of materials that can be taken from persons raises issues pertaining to the **violation of the right to privacy under Article 21**. Lack of clarity on whether the measurements are to be used *as evidence* themselves, or *for evidence* (such as using biometrics to access mobiles etc.), raise further issues of **privacy**. <u>Issues of Science and Regulation</u> • **No scientific basis** to attribute uniqueness to an individual's writing samples. • Identification by footprint impression is an **imperfect science** and this alone, is **insufficient to connect the accused to the crime.** • **No standards** for guiding the examination of fingerprints. • **Same finger can produce different fingerprints** under different circumstances. • **No consensus** exists when comparing palm impressions and **the analysis is also prone to errors** with a high rate of false negatives. • **Authentication failure** rates for iris scans at the national level was 8.54%. • Forensic experts are affected by **cognitive bias** impacting the results of their analysis. • India has **no legal standards** for assessing the admissibility and reliability of scientific evidence. • **Fails to consider** how these measurements can be used in a scientifically valid and reliable way to ascertain the perpetrator and solve crimes.	paragraphs 19 to 21 paragraphs 35 to 37 paragraphs 38, 39, 55, 56 paragraphs 68 to 70 paragraph 71 paragraph 72 paragraph 72 paragraph 73 paragraph 74 paragraph 76 paragraphs 77 to 82 paragraphs 81, 82

Serial No.	Provision		Analysis	Reference
2.	Clause 3	Taking of measurement	<u>Constitutional Law Perspectives</u> ● **Excessive discretionary power** given to police and prison officers to compel taking of measurements, of their own accord, in **violation of Article 14**. ● **No guidance provided** as to the manner of taking measurements and **no basis disclosed** for determination of which measurements are "required" to be taken and from what persons covered under the Bill. ● **Unreasonable classification contrary to Article 14** amongst arrested persons based on gender/ age of the victim as well as the quantum punishment prescribed for their suspected offence, and the objectives of the Bill, in terms of the requirement of biological samples. ● **Disproportionate infringement of the right to privacy due to lack of differentiation/gradation** between convicts, persons arrested or detained, and persons furnishing security under Section 117 of CrPC and the lack of differentiation based on nature of offence and the investigative needs in a given case. <u>Issues of Science and Regulation</u> ● **Lack of training and qualification** among prison and police officials in collecting a wide range of measurements. Training programs in place are **inadequate and infrequent**. ● **Challenging to develop standards** for each kind of measurement sought to be collected.	paragraphs 15, 16 paragraphs 10, 15, 16, 22 paragraphs 26 to 34 paragraphs 57 to 62 paragraphs 83, 84 paragraph 105
3.	Clause 4	Collection, storing, preservation of measurements and storing, sharing, dissemination, destruction and disposal of records	<u>Constitutional Law Perspectives</u> ● **Excessive delegation of legislative functions in violation of Article 14** by providing rule-making powers to Central and State governments, **without indicating even basic procedural safeguards, or providing any guidance** or principles for the regulation of powers delegated to executive under the Bill. - No guidance as to **the purpose** for which records may be created and stored; **nature of analysis** to be conducted on them; **manner of processing** and storage; and **purposes for and circumstances in which they may be shared**. - **No guidance as to deletion or destruction of measurements** and their records, allowing for **indefinite retention** of records and samples.	paragraphs 8 to 12

Serial No.	Provision		Analysis	Reference
3.	Clause 4	Collection, storing, preservation of measurements and storing, sharing, dissemination, destruction and disposal of records	• Creation of database(s) for all the types of measurements listed in the Bill, in the absence of any real value addition to the goals of accurate and efficient investigation, renders the Bill **manifestly arbitrary and violative of Article 14**. • **Scheme of indefinite retention excessive** with respect to the legitimate aim of crime investigation, detection, and prevention, amounting to a **disproportionate restriction of individuals' right to privacy under Article 21. No other procedural safeguards** to minimise the infringement of privacy • **Failure to strike a fair balance between individuals' right to privacy and the aims** of crime prevention, detection, investigation and prosecution on account of the **indiscriminate nature of the powers of collection and retention** of measurements, without differentiating between convicts and suspects or other persons covered under the Bill, or the nature of the offences. <u>Issues of Science and Regulation</u> • **Lack of regulation and oversight** over the functioning of the database, especially considering **NCRB is ill-equipped and lacks the expertise** to maintain the different databases as envisioned by the Bill. • **Lack of guidance** on collection, storage and sharing of records of measurements, which will affect the investigative processes due to **inconsistent standards that States may adopt**. • **Problems arising from storage** of biological samples may impact quality of examination if not stored properly. • **Failure to provide any guidelines or safeguards** to evaluate the quality of data that would be stored onto the database. • **No guidance provided** on the use of the database **for the purposes of a criminal trial** and the **probative value** it would carry. • **Problem of misleading results or no results** in the **absence of standards** for forensic examination and **a failing system of quality management** within the forensic science infrastructure. • **Lack of clarity on the meaning of "analysis"** widens the scope of information that is analysed and included in the database, thus, having repercussions on an individual's right to privacy and raising concerns regarding data sharing. It would also lead to **arbitrary analysis of individual's data.**	paragraphs 19 to 21 paragraphs 50 to 52, 53 paragraphs 57 to 62 paragraphs 104, 107 paragraphs 87, 105, 106 paragraphs 90, 92 paragraph 87 paragraph 107 paragraph 82 paragraph 91

Serial No.	Provision		Analysis	Reference
3.	Clause 4	Collection, storing, preservation of measurements and storing, sharing, dissemination, destruction and disposal of records	• **Possibility of unregulated third parties** having access to biological samples and record of measurements for the purposes of analysis **raises serious concerns about privacy** of individuals. • **Absence of guidance on data sharing** and safeguards against misuse. **Unrestricted and indefinite access** to the government to sensitive information of an individual and their family without clarity on the type of analysis to be conducted leads to privacy concerns, especially considering **lack of clarity on the duration** for which the measurements will be stored. • **Failure to account for lack of capacity and infrastructure** within the government forensic science laboratories. • Exercise of collection, preservation and storage of the different types of measurements will create **greater administrative burdens**, including **considerable cost of creation and maintenance of database**	paragraphs 86, 88 paragraphs 91, 93 paragraph 85 paragraphs 96
4.	Clause 5	Power of Magistrate to direct a person to give measurements	<u>Constitutional Law Perspectives</u> • **Excessive and overbroad discretionary power in violation of Article 14** given to the Magistrate to make administrative decisions and pass orders to compel taking of measurements. • Compelling the taking of measurements from "any person" who may not be arrested or even suspected or involved in a criminal proceeding, is **arbitrary and a disproportionate invasion of privacy.** • **Disproportionate violation of the right to privacy, as the coverage is overbroad in respect of the two legitimate aims** of linking a particular person to a particular crime, or for investigation of crimes in general. <u>Issues of Science and Regulation</u> • **Problem of individuals being obligated** to provide their biological samples to carry out genealogical analysis or for familial searching (search database for relatives of the suspect) even if they are distantly related to a suspect.	paragraph 17 paragraphs 22, 49 paragraphs 49, 42 to 47, 57 to 62 paragraph 91

Serial No.	Provision		Analysis	Reference
5.	Clause 6	Resistance to taking of measurements	Constitutional Law Perspectives ● **No clear guidance** as to when the refusal to provide measurements constitutes an offence, making the provision arbitrary and **contrary to Article 14**.	paragraphs 24, 25
6.	Clause 8	Power to make rules	Constitutional Law Perspectives ● **Excessive delegation of legislative functions** by providing broad rule-making powers to the executive **without providing any guidance, or prescribing any checks or control** is violative of Article 14. Issues of Science and Regulation ● **No clear guidelines** as to the framing of rules could lead to a possibility of different standards to be adopted across States leading to no uniformity in practice.	paragraphs 8 to 12 paragraph 100

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