CHAPTER 7

Portugal

Abstract The Portuguese DNA database was established in 2008 and is one of the smallest DNA databases in the EU. Portugal has one of the most restrictive regulatory frameworks in the EU in relation to the criteria for the entry and deletion of DNA profiles. The country started connecting with the Prüm system's genetic data exchange in 2015. In terms of bordering practices, Portugal serves as an example of *latent rebordering dynamics*. This is because the requirements of the EU regulations regarding Prüm have been fully implemented in Portugal in terms of technological and operational infrastructures, yet Portugal simultaneously severely restricts access to biometric data. This situation derives from particularities of Portugal's national policy regulations on data protection and its judicial traditions as well as regulations on ethical oversight.

Keywords Portugal • DNA database • Data exchange • Rebordering • Prüm

INTRODUCTION

Portugal established its forensic DNA database in 2008 by Law 5/2008 of 12 February. The Portuguese database has one of the most restrictive regulatory frameworks in Europe with regard to the criteria for the entry and deletion of DNA profiles (Santos, Machado, & Silva, 2013). According to the European Network of Forensic Science Institutes (ENFSI), in June

2016, the database had 5339 profiles from individuals, which represented just 0.05 per cent of the resident population in Portugal.¹ More recent data shows that, on 31 December 2019, the database contained 10,270 profiles from individuals convicted of a crime, which represents 0.1 per cent of the population (of 10,257,934²).³ This situates Portugal as one of the European countries with the smallest DNA databases and comparable to Poland.

In 2015, Portugal started connecting with the Prüm system's DNA data exchange. Portugal's integration into Prüm was characterized by the full enforcement of the requirements of the European Union (EU) regulations and speedy implementation. One indicator for integration is that, since 2015, Portugal has established connections with 19 countries (Council of the European Union, 2020). However, Portugal has severely restricted the number of data categories available for exchange: it only exchanges data pertaining to convicted individuals and crime scene samples (Brito et al., 2019; Council of the European Union, 2020), making it one of the countries that exchange the least data categories among all operational countries, together with Greece (Council of the European Union, 2020). The Portuguese bioborders regime is thus addressed as an example of *latent rebordering dynamics*.

Portugal's historical and cultural specificities also make the country a particularly interesting case through which to address the dynamics of bioborders. Portuguese history is heavily marked by a long period of political dictatorship in the twentieth century (1926–1974), characterized by political and police repression and censorship (Durão, 2008; Pimentel, 2007; Ribeiro, 1995), which left an indelible mark on society and particularly on Portugal's legal and criminal justice culture. For example, the police forces were perceived in the collective imagination as strongly linked to the authoritarianism of the dictatorship period (Durão, 2008). According to Machado and Prainsack (2012), this cultural mark of dictatorship and lack of trust in Portugal's police forces had a profound impact on the development of the national DNA database in Portugal: for

¹ As the ENFSI report is to our knowledge the latest statistic which provides comparable information across countries, we refer to it to situate Portugal in comparison to the other country cases in this study. Data available at <http://enfsi.eu/wp-content/uploads/2017/01/ENFSI-Survey-on-DNA-Databases-in-Europe-June-2016.pdf> (last access on 23 June 2020).

² Data available here: <https://www.pordata.pt/Portugal> (last access on 23 June 2020).

³ Data available here: <https://www.cfbdadosadn.pt/pt/bdpadn/sobreabd/Paginas/ConteudoFicheiros.aspx> (last access on 23 June 2020).

example, it explains why the custody of the DNA database is in the hands of the National Institute of Legal Medicine and Forensic Sciences and not in the hands of the police (see also Frois & Machado, 2016; Machado & Frois, 2014).

After the democratic revolution of 1974, the Portuguese state began to focus on investing on modernization and progress. According to Frois and Machado, '[i]n Portugal, the ideal of modernity and the fight against backwardness is so deeply rooted that it has been assimilated into a kind of official rhetoric, to the point where we could almost say it has become a national trait, readily identified by the Portuguese as a defining feature of the national character' (Frois & Machado, 2016, p. 396). Within this trajectory, forensic DNA technology has emerged as a symbol of the modernization and progress that has increasingly become introduced in most areas of state activity, including criminal investigation, as a way to emulate the models of other European countries (Machado & Frois, 2014).

The political project of modernization of criminal investigation through technology—including by establishing a national DNA database (Machado & Silva, 2010)—is nevertheless influenced by Portugal's cultural particularities, which are marked by scarce economic resources, low criminality rates and low levels of public confidence in the state, the police and the criminal justice system (Transparency International, 2019). We, therefore, consider Portugal's development of its DNA database and involvement in transnational DNA data exchange to be embedded in a particular project of nationhood that is linked to the aspiration to modernize through technology. This project is, nevertheless, challenged by cultural ambiguities: on one side, the judiciary powers want to 'modernize' the criminal justice system by resorting to forensic DNA technologies; on the other, judges and public prosecutors are orientated to implementing a highly protective regime that aims to safeguard the rights of citizens from potential abuses by the police forces (Amelung & Machado, 2019; Machado & Silva, 2010).

NATIONAL DNA DATABASE DEVELOPMENT

Portugal established its national forensic DNA database in 2008 with the aim of assisting both civil identification and criminal investigation. The initial proposal put forward by the Portuguese government included the establishment of a universal database of Portugal's entire population (Machado & Silva, 2010, p. 218). However, several factors led to the abandonment of this initiative. According to the study conducted by

Helena Machado and Susana Silva, three main factors conditioned the creation of a universal DNA database in Portugal: (i) the practice was not in line with the decisions and practices of most European countries, which restrict national DNA databases to populations with some type of involvement with the criminal justice system; (ii) the incidence of serious crime in Portugal is relatively low when compared to other countries; (iii) in a country with limited economic resources, the establishment of a national DNA database would require a massive economic investment (Machado & Silva, 2010, p. 218). Moreover, despite the initial desire to establish an expansive DNA database, the *legislative framework* of the Portuguese forensic DNA database turned out to be one of the most restrictive in Europe in terms of data inclusion and information preservation (Machado & Silva, 2010; Santos et al., 2013). The regulations and legislative frameworks determining the collection, use and retention of particular DNA data in Portugal can be understood as derived from a particularly protective regime in terms of personal data and genetic privacy (Amelung & Machado, 2019; Machado & Silva, 2010).

The legislative framework in Portugal is also characterized by its inquisitorial orientation, in which judges play a prominent and active role in the examination process and the imposing of rules of evidence and court procedures. This orientation is reflected in the Portuguese DNA database: the inclusion of profiles in the DNA database requires a judge's order. Several criminal justice stakeholders see this dependence on judges as an obstacle to criminal investigation and the expansion and enhanced efficacy of the DNA database (Machado, 2016): first, because some judges do not order the insertion of profiles into the database (Frois & Machado, 2016) and, second, because the legislation has established circumscribed criteria concerning the paths of communication between the entity that manages the database—National Institute of Legal Medicine and Forensic Sciences (*Instituto Nacional de Medicina Legal e Ciências Forenses* [INMLCF])—the judges and the police forces. More particularly, judges have the power to decide if and how information should be transmitted to the police. According to the police, this has created several challenges in criminal investigation and compromises the efficacy of the DNA database (Costa, 2014; Machado & Costa, 2013; Santos, Costa, & Machado, 2012).

In 2013 and 2017, the law was altered in an attempt to overcome the challenges posed by the 2008 legislation on the Portuguese forensic DNA database and with the aim of expanding database usage and size (Laws 40/2013 and 90/2017). There were three significant changes. First,

changes to the law introduced the possibility of creating samples from official suspects (*arguidos*⁴) and inserting them into the national DNA database files. Second, amendments also allowed the Laboratory of Judiciary Police to insert profiles obtained from samples collected from crime scenes; previously, only the INMLCF could insert such samples. Third, the 2017 law also simplified the procedure for inserting profiles into the database. Previously, two judgements were required from a judge: the first to request sample collection for DNA profiling and the second to request insertion into the database. Nowadays, the judge's requests for sample collection and insertion of DNA profiles are made simultaneously. This easing of the inclusion criteria might, at least partially, explain why the Portuguese DNA database, one of the smallest in the EU, has grown disproportionately quickly over the last few years: between 2010 and 2016, 8139 profiles had been inserted into the database; between 2017 and 2018, the number grew to 11,774 profiles.

Currently, the Portuguese DNA database includes eight types of files (Brito et al., 2019): (i) profiles obtained from samples for civil identification purposes; (ii) reference profiles for missing people and (iii) their relatives; (iv) profiles obtained from samples collected from crime scenes; (v) profiles from professionals who collect and analyse samples for elimination purposes; (vi) profiles from offenders convicted to a prison sentence of three years or more for committing an intentional crime; (vii) samples of official suspects (*arguidos*) in criminal proceedings for intentional crimes carrying a prison penalty of three years or more; (viii) and profiles from volunteers (see Machado & Silva, 2009, 2016). In the context of the Portuguese legislation, a volunteer is a citizen who agrees to have his/her DNA profile included in the national database on their own initiative—that is, without being approached by an agent of the justice system—and on the basis of free and informed consent. According to Machado and Silva:

A request by a volunteer for their DNA profile to be included in the database may symbolically signify maximization of choice and a sense of

⁴According to Article 57 of the Código de Processo Penal (Code of Criminal Procedure 2007), *arguido* is the status of an individual who is under criminal investigation or who has been formally accused. Article 58 states that a person may be made an *arguido* based on a justifiable suspicion of a crime. *Arguido* status is designed to provide individuals with certain rights, such as knowing the details of charges, together with obligations that may range from a simple statement of identity and residence to detention on remand (Machado & Prainsack, 2012, p. 39).

individual responsibility toward maintaining social order. In addition, the genetic profile of the volunteer is received by the state as a voluntary gift and as the citizen's contribution toward expanding a database designed to fight crime and ensure public peace and security. (Machado & Silva, 2016, p. 329)

The number of volunteers in the national DNA database remains significantly low: by 31 December 2019, there were solely six profiles of volunteers in the database.⁵

With regard to the deletion of information, the legislative framework of the Portuguese forensic DNA database does not allow the indefinite retention of DNA profiles and personal information in the database. All data, including both the DNA sample and the DNA profile, has deadlines by which it must be eliminated and/or destroyed (Wallace, Jackson, Gruber, & Thibedeau, 2014). More particularly, non-identified profiles must be deleted 20 years after they were inserted (N.º 2, Article 26, Law 90/2017). The data of convicted individuals is removed from the database five, seven or ten years after they have served their sentence, according to whether its duration was less than five years, between five and eight years or more than eight years, respectively (N.º 3, Article 26, Law 90/2017).

Regarding the *technical database infrastructure*, the National Institute of Legal Medicine and Forensic Sciences (INMLCF) is responsible for the database and operations that apply to it. The INMLCF is a public institution under the supervision of the Ministry of Justice. It is responsible for cooperating with the courts, the public prosecution service and the police forces, along with other services and entities that intervene in the administration of the justice system. The INMLCF performs forensic examinations and provides specialized technical and laboratory support.

The competent entities for the analysis of biological samples in order to obtain DNA profiles are the Forensic Genetic Laboratories of the INMLCF and the Scientific Police Laboratory of the Judicial Police. These analyses can only be carried out by other laboratories if they are authorized to do so by the Ministry of Justice and the ministry supervising them (Brito et al., 2019). The Portuguese DNA database uses CODIS (Combined DNA Index System), an IT system developed by the FBI.

The scientific standards adopted in the Portuguese forensic DNA database are meant to be solely restricted to the coding region of the DNA and

⁵Data available here: <https://www.cfbdadosadn.pt/pt/bdpadn/sobreabd/Paginas/ConteudoFicheiros.aspx> (last access on 23 June 2020).

to be in line with international standards, which include the ISO 17025 laboratory standards and the scientific standards of European forensic genetics (the selection of genetic markers conforms with the European Standard Set). Regarding the procedural process of defining DNA markers, the law governing the Portuguese DNA database defines that DNA markers must be defined in accordance with international standards and scientific knowledge, but also in consultation with the National Commission of Data Protection, thereby giving precedence to respect for and protection of genetic privacy. The National Commission of Data Protection is an independent administrative entity that works with the Portuguese Assembly of the Republic. Its general purpose is to control and supervise the processing of personal data in strict accordance with the human rights and guarantees prescribed in the constitution and the law. The DNA markers to be incorporated into the file of DNA profiles are fixed after consultation with the National Commission of Data Protection by joint order of the members of the government responsible for the areas of justice and health and in accordance with international standards and scientific knowledge on the matter.

In terms of *organizational imperatives and principles*, the 2008 law also defined that the INMLCF, responsible for the activities carried out within the framework of database management and maintenance, must be overseen by an independent entity created for that purpose: the Supervisory Board for the DNA Database (*Conselho de Fiscalização da Base de Dados de Perfis de ADN*). The Board is responsible for providing information in the form of publicly available annual reports and statistics about the DNA database; it also provides reports to the Portuguese Parliament. The Board for the Portuguese forensic DNA database must also consult the National Data Protection Commission for any clarifications regarding the processing of personal data and must comply with its decisions.

Supervisory boards do not commonly accompany DNA database systems among the European Member States. ENFSI recommends that the Member States should set up an infrastructure that addresses the role of DNA databases in society: ‘Because DNA databases have a very important yet very delicate role in society, the custodian of a DNA database should develop tools to make objective information about the DNA database available to politicians, the public and the media’ (ENFSI, 2017, p. 49). However, it remains the responsibility of each state to translate responsible governance principles into operational routines. The organizational imperatives of the forensic DNA database in Portugal thereby reflect how

governance principles, such as commitments to high levels of data protection and public accountability, are translated into the operational and organizational infrastructures of the database.

The most recent report from the Supervisory Board for the DNA Database states that, as of 31 December 2019, the Portuguese forensic DNA database contained 12,980 DNA profiles. The distribution is as follows: 6 profiles from volunteers; 31 profiles obtained from samples for civil identification purposes; 18 reference profiles of missing people and their relatives; 2508 profiles obtained from samples collected from crime scenes; 10,270 profiles from offenders convicted to a sentence of three years or more; and 146 samples of professionals.⁶ The Portuguese DNA database is thus small in comparison to those of other European countries (Reed & Syndercombe-Court, 2016; Santos et al., 2013).

In terms of public understandings of DNA databases in Portugal, there exists a broad acceptance of such technology as a tool for criminal investigation. Based on an online survey of 628 individuals in Portugal, Helena Machado and Susana Silva outline that more than three quarters of the respondents believed that the Portuguese forensic DNA database could help fight crime more efficiently and provide swifter and more accurate justice. However, only approximately half of the surveyed sample considered that DNA databases could deter and prevent crime. In terms of risks, respondents outlined the lack of security and control over access to data and the possibility of unforeseen misuses of genetic information in the future as concerns (Machado & Silva, 2015). The general acceptance of DNA databases should, however, be framed within a wider context, in which Portuguese citizens have, for long, demonstrated apparently passive compliance with the state's collection of diverse types of personal identification data, including fingerprints, for civil identification purposes (Machado & Prainsack, 2012, p. 42)

Finally, in terms of the *development of DNA technology* and other uses of DNA technologies, up to the date of writing, there has not been a detailed debate and/or deliberation about the use of technologies such as familial searching and forensic DNA phenotyping in Portugal. Contributing to the lack of debate might be the fact that, given that the scientific standards adopted in the Portuguese forensic DNA database are meant to be solely restricted to the coding region of the DNA, the use of the potentially

⁶Data available here: <https://www.cfbdadosadn.pt/pt/bdpadn/sobreabd/Paginas/ConteudoFicheiros.aspx> (last access on 23 June 2020).

controversial technologies of familial searching and forensic DNA phenotyping is, in legal terms, not allowed.

BORDERING PRACTICES AND ORDERING TRANSNATIONAL DNA DATA EXCHANGE

Portugal's aim to 'keep up' with more experienced countries in terms of criminal investigation and transnational cooperation has been emphasized since the creation of the Portuguese DNA database in 2008 (Machado & Silva, 2010, p. 219). In terms of *the motifs and notions of nationhood mobilized to comply with the Prüm system*, Portugal joined other countries in technologically modernizing, integrating into Europe, and catching up with international crime control standards. In this, Portugal's trajectory is similar to Poland's (see Chap. 6).

On 23 June 2006, Portugal requested access to the Prüm Convention. The countries that had signed the Convention—Belgium, Germany, the Netherlands, Spain, France, Luxembourg and Austria—welcomed the Portuguese request. This allowed Portugal to start participating in the working groups preparing the implementation and full operation of the measures contained in the Prüm Convention (Ministério da Administração Interna, 2006, p. 78). In 2011, following an evaluation visit carried out by experts from Germany and a successful pilot run, Portugal was authorized by the EU Council to exchange data (Council of the European Union, 2011). However, the country only began to connect with the Prüm system's genetic data exchange in 2015 (Council of the European Union, 2015).

As mentioned above, Portugal's integration into Prüm was characterized by the full enforcement of the requirements of the EU regulations and by swift implementation. One indicator of that is that Portugal has established connections with 19 countries since 2015 (Council of the European Union, 2020). According to the annual report of the Supervisory Board for the DNA Database, among all countries with which Portugal is exchanging data, there have been more hits (valid matches) with Spain, France, Germany and, to a lesser extent, also Austria and the Netherlands.

As previously discussed, the *national legacies of DNA databases and DNA technologies* in Portugal are derived from the strength of the judicial regime, which works through formal and bureaucratic procedures, in contrast with the more informal and pragmatic orientation of the police forces

(Machado & Granja, 2019). The regulatory regime prevailing in Portugal allocates significant power to judges, who play a prominent and active role in assessing evidence and processing court procedures. In this sense, Portugal's approach to bioborders is influenced by its inquisitorial system, as well as by its restrictive database legislation. The legislation and regulation in Portugal have created a tendency to oppose the EU imperative to expand transnational DNA data exchange. This is the case because the transnational exchange of genetic data requires the authorization of a judge (Article °21 of Law 90/2017) and because Portugal has severely restricted access to border-crossings of specific data categories. That is, despite the different types of genetic profiles held in the national database, Portugal only exchanges data pertaining to convicted individuals and crime scene samples (Brito et al., 2019; Council of the European Union, 2020). In fact, Portugal and Greece exchange the least number of data categories among all operational Member States (Council of the European Union, 2020). Brito and colleagues (Brito et al., 2019)—members of the National Institute of Legal Medicine and Forensic Sciences, which deals with the daily management of Portugal's DNA database and acts as the first step of the Prüm system—have conducted a study on the impact of the Prüm system on the Portuguese forensic DNA database. According to their analysis of the number of hits obtained with other countries specified by sample type, there has been a decrease in the number of forensic unknown genetic profiles exchanged with other countries through the Prüm system. According to the authors, this reflects the reduced number of profiles for this category in the national database (Brito et al., 2019). Finally, through the reporting activities of the Supervisory Board for the DNA Database, Portugal enforces organizational imperatives of transparency that run counter the opacity of the Prüm system as a whole (Toom, Granja, & Ludwig, 2019). The Portuguese mode of biobordering, therefore, results in *latent rebordering dynamics*. It is, however, important to note that such rebordering dynamics are more a consequence of the particularities of the Portuguese historical-political regime than of intentional opposition to the EU's vision of borderless data circulation.

The particularity of the historical and political context of Portugal is even more prominent when we consider Portuguese *circumscribed debordering efforts*, which co-exist with the country's latent rebordering dynamics. Such *circumscribed debordering efforts* are expressed, firstly, in the decision to use CODIS, the *de facto* standard software used by most of the Member States to facilitate data exchange. Secondly, *circumscribed*

debordering efforts are also expressed through the relatively quick progress made in connecting with the Member States: as mentioned, Portugal has established connections with 19 Member States in a relatively short period of time (Council of the European Union, 2020).

In terms of hidden (dis)integration, it can be argued that Portugal has followed a debordering approach in terms of techno-scientific and operational infrastructures. Simultaneously, the Portuguese case is also an illustrative example of how the particularities of judicial and legal traditions, as well as regulations foreseeing ethical oversight of DNA data exchange, partially counter and balance the debordering dynamics of the EU level (Amelung & Machado, 2019).

From the Portuguese biobordering approach, we therefore learn about *latent rebordering dynamics*. Portugal has enforced restrictive modes of biobordering by, for example, severely restricting the type of data exchanged and by enforcing control principles of oversight and transparency deriving from judicial and legal cultures. However, as such dynamics co-exist with *circumscribed debordering efforts* expressed by the speed of developing connections and the number of connections established with other countries, we refer to *latent rebordering*.

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