

Searching for Needles in an ever expanding haystack: Cross-border DNA data exchange in the wake of the Prüm Treaty by Eric Topfer

Having “abandoned” proposals for an EU DNA database, the Member States are instead linking their national databases to achieve the same objective

Three years after the signing of the Prüm Treaty, the automated comparison of police cross-border networked DNA databases is in operation in six European countries. Core elements of Prüm were transferred into the legal framework by Council Decision 2008/615/JHA on 23 June 2008, and the other 21 EU countries will log in within the next few years. Although the establishment of the network was justified by the need to combat serious crime, interim reports reveal another story: most hits on the DNA database relate to property crime and often to anonymous “stains” (DNA from unidentified persons left at a crime scene). However, the number of stored DNA profiles is growing. More than 5.5 million people are registered in the EU member states’ databases, 13 years after the United Kingdom established the first national database in Europe, which accounts for 70 per cent of total entries.

After having “successfully” completed a test phase, Germany and the Netherlands started the comparison of their national DNA databases in late June 2008. This was reported by the German Federal Minister of the Interior, Wolfgang Schäuble, and the Dutch Minister of Justice, Ernst Hirsch Ballin, at a meeting on 1 July in Berlin. Hence, the Netherlands began the operation of automated cross-national database comparison in the domain of DNA data as the sixth European country.

It was reported that for Germany, the comparison produced almost 600 hits in the Dutch database with more than 1,000 Dutch hits on the German side. These will be assessed and, if necessary, cleared. However, Schäuble was satisfied: “The benefits of data exchange are already obvious.” He stressed the “enormous time-saving effects and the significant increase in efficiency” for cross-border cooperation.[1]

The legal basis of the automated database comparison is article 4 of the Prüm Treaty which was signed on 27 May 2005 by Austria, Belgium, France, Germany, Luxemburg, the Netherlands and Spain in the German town of the same name. Prüm, also known as Schengen III, does not only govern the automated searching and comparison of police DNA databases for the purpose of criminal investigation, but the automated searching of fingerprint data and national vehicle registration data for preventive purposes and, in the case of vehicle data, even to track administrative offences. Moreover, the Treaty sets out the framework for information exchange to prevent ‘terrorist crime’ and cross-border police operations such as joint patrols and administrative assistance in case of major events or natural disasters.[2]

The Prüm Treaty has also been signed by Finland, Hungary, and Slovenia. Italy, Portugal, Slovakia, Sweden, Bulgaria, Romania and Greece are in the process of negotiating their accession. However, on the initiative of the German Presidency, the Council of the European Union decided to transfer core elements of the treaty into the legal framework of the EU on 12/13 June 2007. The recent Council Decision on “stepping up cross-border cooperation” of 23 June 2008 completed the transfer of Prüm eventually and, thus, established the legal basis for the creation of the largest pan-European network of police databases.[3] Moreover, it is planned to authorise the police to access the Visa Information System (VIS), which is supposed to start operation in 2009, and the European fingerprint database EURODAC, which is currently only allowed for asylum

proceedings.[4] A joint European backbone for SIS II, VIS, EURODAC, Europol, Prüm etc. came into existence with the start of the “Secured Trans European Services for Telematics between Administrations” (sTESTA) communications infrastructure in 2007.[5]

Furthermore, Germany and Austria in particular are striving for the further expansion of participating states: on 4 June 2008, the German government adopted an initiative by Schäuble and Justice Minister, Brigitte Zypries, to establish automated data searching procedures for DNA data (though, in contrast to Prüm, no automated comparisons) and fingerprints between Germany and the United States, designed after the Prüm model, which was already paraphrased in March, when their US colleagues Michael Chertoff and Michael Bernard Mukasey visited Berlin.[6] Austria is also examining plans for transatlantic data exchange and, following the police experts’ wish list, is striving for the integration of associated EU states such as Switzerland, Norway or Iceland into the Prüm framework.[7]

Civil liberties advocates and data protection officers criticise the Prüm Treaty and its transfer into EU law not only because of its limited protection of fundamental rights but also for the undemocratic nature of the proceedings.[8] Although the Treaty stipulates that database access has to be log-filed and should follow defined purposes, the automated cross-border exchange of police data is only limited by national legal protections, and these differ regarding data protection standards and the regulation of DNA analysis and DNA databases. Thus, Peter Hustinx, the European Data Protection Supervisor, called forthcoming EU-wide information sharing a ‘nightmare’ and criticised the fact that the Framework Decision on Data Protection for the Third Pillar of the EU has still not been implemented.[9]

It is also the case that Interpol has been operating a “DNA Gateway”, a platform for the international matching of DNA profiles, since 2002. But this Gateway, with around 77,000 entries from 47 countries, is an autonomous centralised database and the participating countries contribute only selected DNA profiles.[10] Moreover, as a rule Interpol member states request a matching procedure by fax and these are processed manually by the Interpol headquarters in Lyon. Although an opportunity for an automated matching procedure via the I-24/7-network for international police communication has existed in theory since 2005, so far very few member states have signed the relevant Charter. For example, Austria, which contributed significantly to the development of the “DNA Matching System”, did, while Germany is not a signatory.

Thus, Prüm was the first international treaty which arranged the automated cross-border matching of biometric data. In contrast to the networking of vehicle registers, the biometric data matching works on the basis of a hit/no-hit procedure at an index database without nominal data. In case of a hit, the requesting police department receives an index number, which can then be used under article 5 and 10 of the Prüm Treaty for administrative assistance requests for:

further personal data and other information referring to the existing source of information.

The DNA matching process was kicked-off between Germany and Austria immediately after both parties signed the Prüm

Implementation Agreement ATIA on 5 December 2006; in June 2007, both parties started the automated exchange of fingerprint data and a few weeks later the networking of vehicle registers followed. In the domain of DNA data, Spain and Luxemburg, the latter established a national DNA database only in the aftermath of Prüm, were connected in May 2007. Slovenia followed – on a partial basis – in April 2008.[11] The automated searching of fingerprint databases is only in operation between Germany and Austria but tests are underway in Spain, Luxemburg and Belgium. Vehicle registers are searched on an automated basis across borders in Germany (so far limited to incoming requests), Spain, Luxemburg, the Netherlands and France.[12]

At least at the moment, it seems that the full realisation of Prüm is hindered by problems of interoperability and lack of standardisation. No surprise then, that the “Future Group” recently proposed a “convergence principle” as an “underlying thread to a coordinated management of European... security issues”,[13] and that these issues and a proposal for a three-phase “IT interoperability programme” (convergence being the final phase) were top priority at a joint seminar of the Article-36-Working-Group and the Strategic Working Group for Immigration, Border and Asylum Issues (SCIFA) held in January 2008 in Ljubljana and at the Conference of the “Chief Information Officers (CIOs) of Police Forces in Europe” held in Stockholm in June.[14]

The cross-border networking of police databases is usually justified with reference to the solving of spectacular criminal cases, for example, when the alleged perpetrators of a double murder in Tenerife were identified through a data exchange between Austria, Spain and Germany after a gang of burglars was caught in Austria.[15] But how representative are such examples? Until 24 September 2008, Germany achieved 4,170 hits in the DNA databases of Prüm signatory countries.[16] An interim report on DNA data matching with Austria, Spain and Luxemburg, published on 1 June 2007, shows that around 85 per cent (1,257 hits) of the then 1,508 hits were related to property crime, such as theft or fraud.[17] Moreover, a more detailed account of the results of German-Austrian DNA data matching published in March 2007 reveals that nearly one half of the German hits are only related to anonymous crime scene stains from Austria.[18] Thus, European data exchange has not changed the balance of the national databases: the quantitative criminalistic value lies in the domain of property crime.

At the beginning of 2008, more than 5.5 million DNA profiles of known persons were stored in the national databases of the EU-27 countries, plus 627,000 stains from unknown persons.[19] The British National DNA Database accounts for around 70 per cent of the total entries and is the largest DNA database in the world. In continental Europe, the German database run by the Federal Criminal Police Office (*Bundeskriminalamt*) since April 1998 is the largest: almost 570,000 DNA profiles were stored by the end of June 2008.[20] However, in relation to its population, Estonia is second to the UK in the EU-27, with more than 20,000 entries; around 1.5 per cent of the total population are registered in the Estonian DNA databases. The number of registered Europeans is growing, not least because the legal limits for taking DNA samples from citizens are gradually weakening. For example, in Germany, where currently the police can only take a “genetic fingerprint” with the approval of a judge, crime detectives have been demanding for several years the right to make mandatory DNA sample-taking a standard measure of police recording.[21]

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Sources

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Country	Persons	Stains[*]	Population 2008	Pop. on DNA Database
Austria	105639	29203	8331930	1,27%
Belgium	12515	13101	10666866	0,12%
Bulgaria	16201	966	7640238	0,21%
Cyprus	0	0	794580	0,00%
Czech Republic	12639	4740	10381130	0,12%
Denmark	30185	13071	5475791	0,55%
Estonia	20558	7159	1340935	1,53%
Finland	60959	9875	5300484	1,15%
France	506085	27170	63753140	0,79%
Germany	524782	123862	82221808	0,64%
Greece	0	0	11214992	0,00%
Hungary	55179	1102	10045000	0,55%
Ireland			4419859	0,00%
Italy	0	0	59618114	0,00%
Latvia	0	0	2270894	0,00%
Lithuania	23757	2764	3366357	0,71%
Luxemburg	218	226	483799	0,05%
Malta	0	0	410584	0,00%
Netherlands	47350	34155	16404282	0,29%
Poland	16118	174	38115641	0,04%
Portugal	0	2160	10617575	0,00%
Romania	2452	41	21528627	0,01%
Slovakia	6439	3425	5400998	0,12%
Slovenia	12120	4040	2025866	0,60%
Spain	21432	24800	45283259	0,05%
Sweden	41417	17002	9182927	0,45%
United Kingdom	4011954	308503	61185981	6,56%
EU 27	5527999	627539	497481657	1,11%

National DNA Databases in EU-27 in 2008

Figures on population: EUROSTAT (01.01.08).

[*] STAINS = DNA from unidentified persons left at a crime scene