

Gordon Thomas Honeywell Governmental Affairs monitors the advancement of DNA database programs globally. We frequently advise foreign governments on DNA policy, legislation, law and standards.

As part of our continuous effort to keep global forensic DNA community leaders informed of significant international DNA database developments, I am pleased to provide the following updates:

Algeria first northern Africa country to pass DNA database legislation - On April 20th, 2016 Algeria became the first country in northern Africa to pass criminal offender DNA database legislation. The legislation will require most convicted and arrested criminals to have their DNA placed in the database. Algeria will now start working on the implementation process and hopes to join the other 54 countries that have implemented this legislation in the next few years. Algeria has developed a strong forensic DNA infrastructure, and is looking forward to joining the global DNA database community.

Ireland and South Africa have started - Ireland and South Africa have become the 53rd and 54th countries respectively to implement their legislation to create a national DNA database program. Ireland passed their legislation in June of 2014 and officially began collecting DNA last November from most convicted criminals. South Africa passed its legislation to require DNA from most arrested and convicted criminal in January, 2014. Albeit slow, the collection of DNA in South Africa has official started.

Italy positioned to become country 55 - The Italian Ministry of Justice announced in March that it has completed all of the regulations and lab preparations necessary to begin their long awaited criminal DNA database program. The collection of samples is expected to begin in late 2016. This announcement positions Italy to become the 55th country to implement a criminal offender DNA database program. Legislation to require most arrested and convicted criminals to submit DNA passed the Italian Parliament in 2009, but the implementation process faced many administrative delays. Throughout the delays, the Italian crime labs and other personnel from both the Ministries of Justice and Interior have worked hard to bring the program forward.

Preparations for all population databases continue to advance in the Gulf - Kuwait, Oman and United Arab Emirates all have publically declared their plans to implement all citizen DNA database programs. Other Gulf countries are also in the planning process to develop similar programs. Based on many news reports, declarations from many Kuwait government leaders, and various public tenders, it is likely that the Kuwaiti program will begin, at some level, in 2017. It was recently announced that the Kuwaiti program will collect DNA not just from its citizens and foreign workers, but also from those visiting Kuwait. A common question is whether the all citizen databases being piloted in the Gulf would ever be expanded into western or other democratic governments. The Gulf is uniquely positioned to experiment with these programs due to their monarchy forms of government, unique security concerns, and financial resources. Expansion into other countries would surely be subject to strong debate and opposition. Whether this opposition could be overcome over time will depend on many factors, such as changing views of DNA, privacy strategies and the Gulf experience with the program.

GTH recommends sample destruction of offender profiles - Earlier this month, GTH recommended that countries should consider sample destruction after an offender sample has been profiled. Of the 54 countries that have implemented national DNA database program, approximately 15 countries have offender samples destruction policies. Sample destruction addresses privacy advocates concern that the biological sample could be used by governments in the future for non-human identification purposes, such as genomic research. Sample destruction removes this fear and could provide policy

makers with the assurances they need to allow expanded databases legislation such as arrestee testing to move forward. GTH acknowledges that sample destruction is not a policy answer for all countries. For example, the United States' system relies heavily on the biological sample for quality control purposes.

How's your hit rate? - During the Human Identification Solutions (HIDS) Conference in Barcelona, Spain earlier this month, GTH presented on the unmet potential of criminal offender DNA databases. Fifty-four countries have passed legislation/regulations and implemented these databases. From these databases, GTH estimates that over 70 million offender profiles exist globally. This is an impressive number. However, if the four largest databases are not counted (China, United States, United Kingdom and France) only 11 million offender samples exist. This suggests that very few countries have robust databases capable of hit rates necessary to realize the full potential of DNA databasing. GTH explained that countries with mature arrestee databases, such as New Zealand and United Kingdom, can achieve hit rates near 70%. GTH urged countries to look deep into their "hit rate" potential and consider changing their legislation to maximize their hit rate and consider privacy protection policies, such as sample destruction to make the expansion better positioned to overcome privacy objections.