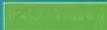


6th International Symposium on Fingerprints

IPSG Lyon, 7-9 April 2010

Minutes Report

FINGERPRINT TRANSMISSION					Reference Number
COUNTRY of ORIGIN		FRANCE			Barcode
Surname	TRAINING & STANDARDS				
Forename(s)					
Maiden Name					
Address		Date of Birth			
Sex	INTERPOL-LYON				
Place of Birth		Offence			
Nationality					
ROLLED IMPRESSIONS					
1. Right Thumb	2. Right Forefinger	3. Right Middlefinger	4. Right Ringfinger	5. Right Littlefinger	
					
6. Left Thumb	7. Left Forefinger	8. Left Middlefinger	9. Left Ringfinger	10. Left Littlefinger	
					
PLAIN IMPRESSIONS					
LEFT HAND	Four fingers taken simultaneously	TWO THUMBS	Impressions taken one at a time	RIGHT HAND	Four fingers taken simultaneously
LEFT		RIGHT			
6th INTERNATIONAL SYMPOSIUM ON FINGERPRINTS					
<i>Lyon, 7-9 April 2010</i>					
Stamp indicating 1st generation copy Ratio to original 1:1		Date Fingerprints Taken			
		Place Fingerprints Taken			

Opening – 7 April 2010 Morning Session

Members presiding over the conference

- Mr. Mark Branchflower - Head of the Fingerprint Unit, IPSPG, Lyon.
- Mr. Antonio Farelo – Fingerprint Examiner, IPSPG, Lyon.
- Ms. Kim Legg – Fingerprint Examiner, IPSPG, Lyon.

An introductory speech on house keeping and other general details related to the Symposium was given by **Mr. Mark Branchflower** from the IPSPG Fingerprint Unit.

The Secretary General of INTERPOL, Mr. Ronald K. Noble delivered the opening speech of the conference;

The importance of comparing fingerprint data of non-nationals with national databases was emphasized and the development of standard procedures to send data to the international database at INTERPOL.

All the delegates and IPSPG officials attending the conference were invited for a photograph with the Secretary General of the IPSPG which is available on the fingerprint page of the INTERPOL website.

The key note speech from **Mr. Giuliano Zaccardelli**, Director of the IPSPG Strategic Planning Sub-Directorate focused on context, culture and choice and the importance of sharing information and developing links between law enforcement and science and technology.

Presentation on Fingerprint Training in the UK by Michael Thompson from the NPIA Forensic Centre.

This presentation focused on the processes used in training a fingerprint expert in the UK.

Presentation on Competency of Fingerprint Examiners by David Charlton from the Sussex Fingerprint Bureau and Dr Itiel Dror a specialist in visual recognition, human performance, expertise and decision making.

This presentation focussed on the Competency of Fingerprint Examiners.

DISCUSSION

- It was said that in the UK the bureau does use some form of visual comparison in a progressive form not just pen and paper to assess the potential of fingerprint experts. There has also been some good research seen from the Dutch and the Met. Therefore it is inaccurate to say that there is nothing out there. Furthermore experts are unable to improve cases previous to assessment as they are unaware when they are being dip sampled. Their daily work is sampled on a monthly basis. The introduction of proficiency testing could lead to increased nerves from capable experts leading to inaccurate results and initiating unmotivated experts to raise their performance just for the test.

Response was that the tests have been looked at that are used by the Met, the Dutch the Swedes including the answers. When they were questioned on why they were using certain images the response was simply that they always have been. There is no criteria on whether the image is an easy or hard one and there is no objective measure determined mathematically of the difficulty of an image. Therefore by using collaboration between science and enforcement it is hoped to produce tests which contain images that are validated and selected quantitatively.

Presentation on How a State-of-the-Art AFIS Can Re-Energize an Urban Police Department to Further Leverage Fingerprint Identification Technology by Mike Barrow Manger of the Houston Police Department's AFIS Unit.

An overview on the use of a mobile AFIS system in Texas was presented.

DISCUSSION

- Question 1 – It was raised if problems had been encountered due to dead spots from sky scrapers?

Response from speaker - there are some dead spots however these are very spread out and the signal comes back very quickly.

- Question 2 – This concerned technicality and quality. It was asked as only the index prints are taken and sent to the central site for an automated search and a result sent back without verification were there many quality problems and were there a lot of yellow responses (possible hits)?

Response from speaker - mostly a lot of green (no hit) responses are returned; this is because the ground officers are dealing with a lot of crack users who tend to burn and degrade their fingertips. There have been considerations to start using a five finger search however there are pros and cons with both. Similarly manual workers also experience tip degradation producing green results even though it is know they have been processed before. Presently there have been no false positives which are what would cause the most concern.

Presentation on Proficiency Testing in Poland by Pawel Rybicki CFLP Director, Poland and Chairman Designate of the European Network of Forensic Science Institutes.

This presentation was concerning the quality management and proficiency tests in Poland.

7 April 2010 Afternoon Session

Presentation on Accreditation for Forensic Experts in Slovakia by Zuzana Nemethova from the Forensic Science Institute of Police Corps of the Slovak Republic.

The presentation focused on the Slovak way towards accreditation of the institute (ISO/IEC 17025), their achievements and experience and their accredited educational system for forensic experts.

Presentation on Standardization of the Friction Ridge Discipline by Mike Weiners Chief of the Latent Print Support Unit in the Federal Bureau of Investigation's Laboratory Division at Quantico, Virginia.

This presentation provided an overview of the effort in the U.S. to address the proposed shortcomings outlined in the referenced report and provide an insight into how the report may affect the discipline world wide.

DISCUSSION

- Question 1 – It was asked with regards to the introduction of a National Forensic Institute what is the current situation now..

Response from speaker - there is currently no Institute of Forensic Sciences in the U.S. there are published materials from scientific working groups, the FBI or possibly a state agency. Agencies then attempt to follow the rules set down by these higher entities. Currently there is no single entity which modifies and enforces forensic practices in the US.

- Question 2 – It was asked again as to the current status as the recommendation in the presentation was February?

Response from speaker - as nothing has been published yet it was not possible to fully answer but it was suggested that the scientific working groups are going to be the key in forming a foundation for a national institute of Forensic Sciences.

- Question 3 – It was then asked if a similar institute was needed in Europe we for European standards as there is no European Forensic Science Institute?

Response from speaker - personally I think that yes it would be better and other people do agree with this hence why we have the Prüm treaty and INTERPOL which are attempting to work towards standardized practices, however this is very difficult.

- Question 4 – An observation was given that if you look at the medical profession and if someone in America was to perform an appendectomy and somebody in Botswana was to as well you would hope that the surgical procedure would be pretty similar. In terms of the global perspective of fingerprint science and something which is consistently frustrating is that there are leaders in the field which continuously discuss the need to standardize and professionalize and yet globally it cannot even be decided on whether a non-numeric standard or a point system should be used, which is so fundamental to the science of friction ridge analysis that it is required that the whole area of the science is looked at as a giant elephant that has to be decided on which chunk is going to be pulled out on a global level which will then filter down. NAS is perhaps a good vehicle for that however there is no approach at the moment where somebody from the UK, Australia and Africa are going to come together and agree that these are standard protocols.

Response from speaker - it is tough and once the website is up and running people will be able to see that there is a lot of work going on. In response to the first part of the question it was suggested that the surgical techniques would be very different. In one country they might use a laparoscopy through the bellybutton whereas another country might use a fully invasive procedure. So surgery would not be the same either.

Presentation on an Alternative Trinity: Objectivity, Subjectivity and Transparency by Dr Marcel De Puit head of the latent fingerprint research group at the Netherlands Forensic Institute in The Hague.

In this lecture Dr Puit spoke about the paradigm shift within latent fingerprint examination he focused on the standard for generating fingerprint evidence in criminal investigations. He also stated that fundamental scientific research is needed to establish a basis for individualizations with latent fingerprints.

Presentation on Automated Person Identification by Palm Print Latent's and Palm Prints as an Instrument of Crime Detection Increase. Used Technologies and the Results of Work of AFIS/APIS in Russia by Alexy Podchinenov marketing department specialist of PAPILLON ZAO.

Mr. Podchinenov's presentation included information about features of LiveScan technology, features of person identification by palmprints latents and palmprints, interesting examples of identifications etc.

Presentation on UNODC Crime Scene Awareness and Investigation Training Programme by Magali Bernard a forensic scientist from the United Nations Office on Drugs and Crime.

Ms Bernard presented on the recently developed UNODC crime scene awareness and investigation programme and the training courses delivered in Africa and Pakistan jointly with INTERPOL.

This was followed by a presentation from a representative of Benin on their experience of the training they received from UNODC in collaboration with INTERPOL in Cote d'Ivoire last year. In Benin the benefits of these CSI trainings were outlined. Their awareness shall now lead to developments of their own abilities to begin building a database to prevent convicted criminals from seeking refuge in their country. Benin received CSI kits, an Epson scanner and an AFIS system.

DISCUSSION

- Question 1 - It was said that Benin had received CSI kits and scanners and was asked if there existed an AFIS or a database to which the fingerprints can be scanned and if there was a national database?

Response from speaker from Benin – there is no computerized database for the time being and they are currently working in paper format and hardcopy. Currently they are in cooperation with France and the US negotiating authorities in the hope that in the near future they can start building a computerized database.

- Question 2 - it was asked to the UNODC, in terms of capacitating Africa, now that training sessions have been started with the conventional crime scene methods are thoughts being given to upgrading these in line with other technology which is now available elsewhere for example chemical processing of fingerprints.

Response from Ms Bernard - the approach is building of basic capacities first before any development can occur. This is depending on the country and whether or not they can sustain the improved capacity. It is necessary to ensure the basics are being done properly before moving onto the next step.

- Question 3 – It was asked if it was planned to create schemes to enhance the standards that are being established.

Response from Ms Bernard – It was explained that UNODC are standardizing the general approach that these are the topics which should be present in these trainings and it is not being said that your countries should change their procedures to the way UNODC are doing things. It is made clear in the document that consideration needs to be given to the legal framework and what is already present in the country because the UNODC and INTERPOL are not trying to change the way you are working but at best practice level these are the general themes which should be covered. There is no intention to change a countries procedure but improve what is already there.

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Presentation on GSI by Gary Wheeler Chief of the Global Initiatives Unit, FBI, Clarksburg.

Mr. Wheeler highlighted the value and effectiveness of global biometric identity intelligence sharing and rapid identification capabilities and operations in combating crime and preventing terrorism.

Presentation on the Prüm Treaty by Dr. Reinhard Schmid Head of the Central Biometric Identification Service in the Federal Ministry of Interior Austria.

Mr. Schmid gave an overview on the current status of the Prüm Treaty

DISCUSSION

- Question 1 – It was asked if EURODAC should be combined with searching criminal databases as was suggested a few years ago?

Response from speaker – It was said that the draft exists and when it is finalized countries will be able to send searches. This is not the same as the Prüm Treaty as the technical solutions are not used to transmit the minutiae information. It will be possible to send a print and run the automatic coding system however the hit rate will not be very high due to poor quality.

- Question 2 – It was questioned if EURODAC was an implementation of the Prüm Treaty.

Response from speaker – explained that they are different. EURODAC is a central system from the European Commission and up to now the aims had been strictly restricted for checking countries current circumstances. For the future it is hoped to use the database stock of 1.6 million for law enforcement agencies to search against.

- Question 3 – It was asked if the same standards are used for the exchanges in the 5 different systems discussed during the presentation, Prüm, EURODAC, CIS, VIS and INTERPOL

Response from speaker - the standards of the fingerprints are up to type 4 and all are much the same except with Prüm where there is the possibility to send stains and minutiae information as well. This is not possible against the EURODAC AFIS however a country can submit 10 prints which provide the same fingerprint information. It is a NIST standard just like the other systems. In Prüm existing standards are used.

- Question 4 – It was asked if it could be assumed that all systems are using the INTERPOL implemented NIST format?

Response from speaker - no this is the NIST 2000 the most recent NIST standard in use.

Presentation on Fingerprint Exchange within the European Union (FEEU) Project by Nicholas Apps Senior Manager in the ACPO Criminal Records Officer.

Mr. Apps' presentation gave an overview of the Fingerprint Exchange Project that seeks to promote fingerprint exchange across the EU and beyond.

DISCUSSION

- Question 1 - it was asked why a further solution for the exchange of fingerprint information is required because fingerprint information in a database is police information and the database should be linked internationally which is being strived for through the Prüm treaty for example.

Response from speaker - as is already known there is the exchange of criminal records going on whose methods have proved really valuable and which has actually driven operational reasons to identify people that offend across borders. There are some problems with the accurate identification of people and when we convict an individual in our country how do we actually determine what nationality they are? And how do we determine what country to send the conviction to? How do we know that the details we have been given are accurate and so on. If we only capture a name and we don't have an identity card or a passport when we send that information to an EU colleague will they actually know who they are dealing with? I'll use Latvia as an example as they are our official partners in this work, we have has numerous examples of convicts who we are say are of Latvian nationality when actually their names just differ by one letter or their date of birth by one day or year. The authorities say that if a name is one letter out or date of birth out by one day or year it cannot be registered on the system therefore preventing the exchange of criminal records and preventing fluidity within the system. Another thing which strikes me as a difference from Prüm is that we are talking about a routine exchange as opposed to one on request.

- Question 2 - it was asked if the work done in 2004/2005 by the European Commission which looked at having a Central European Database of convicted people in Europe based on fingerprints which was based on the EURODAC model not Prüm had been looked at. Prüm requires the ability to exchange data by country so given that there are 30 countries in Europe more than 800 connections need to be managed whereas with EURODAC it is a centralized system.

Response from speaker - there has been a huge amount of work done since then by the European Commission and all the EU states about criminal record exchange and they've very much moved away from the idea of having a centralized database for all convictions. What they are looking at now and what I have just described to you is the idea of developing a decentralized exchange resulting with a depository on your own national database.

Presentation Mobile ID – Los Angeles by Leo M Norton, Lieutenant of the Los Angeles County Sherriff's department & Thomas J Smith, Sergeant of the Los Angeles County Sherriff's department.

The speakers gave an overview of the use of their mobile LiveScan system and process of improving training standards.

DISCUSSION

- Question 1 - it was asked about the stamina of the battery?
Response from Sergeant Smith - the battery life lasts for 30 days and 2 weeks with constant use.
- Question 2 - it was asked as to what kind of database the mobile ID is connected to?

Response from Sergeant Smith - the mobile devices is connected to the local AFIS which contains criminals and a few applicants. We are currently requesting to be linked with the FBI RISC list.

- Question 3 – it was questioned what prompted you to put nature of confirmation bias into your training?

Response from Lieutenant Norton, latent supervisors in our county formed a sub committee creating a list of trainings they desired. There is no mandate to maintain this and is therefore done voluntarily. Officers often provide useful feedback for improvement.

Presentation on Interoperability by Jim Jasinski Cogent's Executive Vice President of Federal and State Systems.

Mr. Jasinki's presentation highlighted the various standards for biometric interoperability from the record format level to the minutia level.

DISCUSSION

- Question 1 – it was asked with regards to interoperability has any work been done to make the enrolment process more robust and where do you see that going?

Response from speaker - agreed that enrolment has always been a challenge for certain individuals and there is no one set solution whether it is iris, fingerprint or gate identification. There will always be aberrations and when you hear claims of vendors being 100% accurate you know that that is something more imaginary than real. The process has been improved in terms of quality and number of pixels in a print and the ability to capture sub dermal information. All of that being done to make it even more universal there are data systems which offer choice so these users become the exception not the rule.

Presentation on 3rd Level Detail by Samuel Alfonso Delgado Caballero, Lawyer in Criminology and Lofoscopy Expert.

This presentation outlined the importance of using 3rd level details in fingerprint identification.

DISCUSSION

- Question 1 – the speaker was asked to explain the 3 levels of detail and where access could be gained to the published documents in French or even in English?

Response from speaker - all of the materials are accessible on the INTERPOL website. Explaining levels 1, 2 and 3 at this point is quite complex but in general terms level 1 is the shape of the print, level 2 is the particular points and level 3 is the microscopic details which determine that the minutiae are from a physiological origin and not a smudge, smear or a deficiency in the print.

- Question 2 - A participant clarified that concerning the differences in minutiae there was a very old conference in 1964 in Geneva and there was a general agreement that the minimum number of minutiae would be 12. If I have a fingerprint today with 14 similar marks and 1 different miniature then this print will be ruled out in accordance with this agreement. Also the levels that are recognized today, as said, are three, the type of the print some are old some are flat for example, this is the first level, the second level which is the general shape of the lines and the 3rd level which is used to validate the origin and identify whether the print is artificial or not. If I work on a print which is artificial and as you said will therefore not have any pores and if I have all of the technical details then the distance between the two lines should not be a problem. You also said that you can often rely on 3 lines and 40 pores. Let's suppose there are other marks, do you take into consideration the pores or the minutiae?

Response from speaker - what I managed to understand is what I was putting forth that level 1, 2 and 3 hold the information of the whole fingerprint but when I reach level 3 and I analyze the pores with 3 points I am not saying that a print only has 3 points I am just referring to using a fragment under the microscope. When you are looking at the 3rd level details you are looking at the pores but when you are looking for an identification you are looking at all 3 levels. I cannot say that two prints are similar unless I have looked at the 1st and 2nd levels. The general shape of the print can be supported by the pores and used as information to identify a person. If we go deeply into level 3 we can determine originality and identify if the print is artificial or not. This could have evidential value in court and this is what I mean when talking about originality.

- Question 3 - in terms of 3rd level details I understand it is extremely microscopic and am I right in thinking that you study one pore in relation to the corresponding pore on the other print? Why is it necessary to have 3 points for you to go ahead with analysis? Furthermore in terms of the current minimum number of points a majority of countries have now gone to a zero minimum therefore if you were thinking of bringing in 3 points for a starting point of analysis is it not reverting back to a numerical minimum.

Response from speaker - no, what I was suggesting from a microscopic point of view is that you take are analyzing the pores of the print you are analyzing in relation to the one you are comparing it to you must look at 3 points. It is similar to typography where you take measurements at a crime scene. You have to have two fixed points in order to have a third. I then correlate the pores with the papillary ridges allowing me to position myself into the area I am examining. The points are difficult to define and I am not suggesting we revert back to a numerical aspect. I am saying that the 3 levels provide enough detail to establish the identity of a person. If the 3rd level details are neglected then it opens the window for the defense in court to claim that the print is artificial.

- Question 4 - we have heard today about Livescan and how we are moving towards digital imaging. What resolution of digital imaging do you require for using 3rd level details?

Response from speaker - there are studies that reflect that third level details can be seen by 1000ppi. So the resolution should be at least 1000ppi. However, there are now sensors in digital imaging that detect life confirming a person left the fingerprint behind. A majority of my research is also targeted at latent prints of unknown origin.

- Question 5 - the problem with IC is the following, you have the latent on one hand and on the other you have the ten print in the database. The ten print therefore must be printed off to produce a hardcopy for comparison. However all ten prints are stored at a maximum of 500 ppi in the database there are no 1000ppi

images for comparison with the latent. Therefore how can you compare the latent and ten print at 3rd level detail?

Response from speaker - In that case you start from the fact that there is a suspect that is being investigated and if you want to reach that level detail then you must obtain the patterns from the suspect. We must also bare in mind that the medium is fundamental and the latent mark is detected by fat and sweat and is revealed by certain chemicals or from direct capture in forensic use. The images you are going to compare have to have similar characteristics to salvage the third level. In order to view the third level we have to view the prints in the same media. We can therefore only compare latent to latent's or prints to prints; we cannot compare latents to prints because the mediums are different.

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Presentation on CSI Training and the Reorganisation at the Portuguese Criminal Police (Policia Judiciária) by Fernando Viegas, head of the crime scene investigation section of the Criminalistics department of the Forensic Laboratory of the Portuguese Criminal Police.

Mr. Viegas' presentation explained the operational and training reorganization that had occurred in the field of crime scene examination in Portugal since 2005.

Presentation on NIST by Brad Wing, leader of the ANSI/NIST-ITL standards work.

Mr. Wing's presentation outlined the standards which form the basis for biometric data transfer to INTERPOL and other law enforcement organizations around the world.

DISCUSSION

- Question 1 - with regards to technology perhaps something which could be thought about in the future are the standard protocols for presenting evidence in the court room thinking about the use of visual display screen. Is NIST planning anything along these lines?

Response from speaker - that point shall be covered in the next presentation. Melissa Taylor shall be talking about assistance in law enforcement agencies as well as commenting on legal aspects. I am more involved in the data transmission and storage area.

Presentation on NIST Human Factors in Latent Print Analysis by Melissa Taylor Project Manager for the OLES Forensic Science Program.

This presentation gave an overview of the working groups of NIST including specific projects.

DISCUSSION

- Question 1 - has anybody in your group consulted with the higher stance 1702/1705?

Response from speaker - one of the working sub groups is responsible for looking over the existing standards and seeing how to apply them to forensic science and how they can be used, they are currently looking over ISO, NIST and AMCM standards.

- Question 2 - do you have any preliminary findings on the difference between 8, 10, 12 and 16 hour shifts?

Response from speaker - no we currently don't but we have started to collect data from other industries particularly NASA and transport systems to see how they have researched managing shift work. These studies have said that performance degrades the later it gets in the night, linking this we have looked into how we can implement changes in the management structure.

- Question 3 - so preliminary findings are saying that during night shifts, between 10pm and 6am, they've seen degradation but there is no study on length of shift at this moment.

Response from speaker - no not yet but when we do we will be putting together a human factors in forensic science website and all information will be posted on there.

- Question 3 – you are talking about human factors, is there a specific group that are looking into the standards for recruiting fingerprint experts.

Response from speaker - that is one of the projects that NIST is funding for research and one that Itiel Dror was presenting on yesterday. They are looking into creating cognitive profiles and creating a test for the best candidate for the position, we are currently 6 months into a 20 month study at the end of which we hope to have developed a test for latent print managers to identify the best person for the job.

Presentation on the FBI Biometric Centre of Excellence by Johnna Hoban Program Manager for the FBI Biometric Center of Excellence Program.

This presentation gave an overview of The Biometric Center of Excellence, a Science and Technology Branch entity headquartered at the Criminal Justice Information Services Division in Clarksburg, WV, which is the FBI's program for exploring and advancing the use of new and enhanced biometric technologies and capabilities for integration into operations.

DISCUSSION

- Question 1 - with regards to DNA is anybody looking into DNA touch capabilities?

Response from speaker - currently we are not investing in DNA touch capabilities but I cannot say it is not being pursued by someone else.

Presentation on Automated Latent Processing Technology – Current Progress and Practical Application of this technology in Law Enforcement Solutions by Kris Ranganath, CTO at NEC's Government and Public Global Solution Division.

Mr. Ranganath's presentation outlined how emerging technology can be used to supplement the current manual latent processing to increase system accuracy.

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Presentation on the FBI Latent Print Training Program: The Third Level Details – by Scott Hecker Training Program Manager with the Latent Print Support Unit (LPSU) at the Federal Bureau of Investigation Laboratory in Quantico, Virginia.

This presentation outlined the recruitment of candidates, class structure, curriculum, and testing and certification requirements for becoming a latent print expert for the FBI.

DISCUSSION

- Question 1 - with regards to the failure rate what efforts do you make to salvage a trainee before they are released?

Response from speaker - obviously a lot of time and effort is invested in a student and we want to help as much as possible. If a trainee is having problems they are generally assigned to a senior examiner who helps them to work through any issues they might have. If the problems still persist after 3 months at some point one must accept that they are perhaps not suited to the field.

- Question 2 - Do you find that graduates job hop?

Response from speaker - it is a difficult field to job hop because it is a hard skill to learn and it is a tough job. If you are going to sit in front of a glass for 8 hours straight it has to be a job you want to do.

- Question 3 - is the accreditation an in house certificate?

Response from speaker - it is an FBI certificate which is equivalent to the one awarded by the IAI.(International Association of Identification)

- Question 4 - what career path opportunities do you have for graduates?

Response from speaker - there is an extensive advancement opportunity for graduates. They work as examiners for 4-5 years before moving into supervisory roles or programmes (major incidents/research). They then can have the opportunity to move into a chief of unit position and even section chief or lab director.

Presentation on the INTERPOL Webpage by Antonio Farelo from the Fingerprint Unit at IPSPG, Lyon

An overview of the Fingerprint Web page was given including a demonstration to the participants..

Presentation on the Latest Developments in Searching for Fingerprints Using Forensic Light Sources by Paul Butler Regional Sales Manager for Foster and Freeman.

Mr. Butler's presentation covered the latest in developments and application for evidence recovery using LED based forensic light courses including a new covert infra-red product.

DISCUSSION

- Question 1 - have you found issues with fluorescence on denim?

Response from speaker - there has not been any issues noted however an increased resolution of violet light will improve visibility on denim.

Presentation on Large Scale Testing of Biometric Capabilities by Scott Swann Unit Chief for the Services, Evaluation & Analysis Unit for the FBI.

This presentation highlighted the testing programmes that support the FBI's biometric activities

Presentation on the use of 1000ppi Finger and Palm Prints in Modern Livescan Systems by Roberto Wolfer Director Product Management at Cross Match Technologies in Germany.

Mr. Wolfer's lecture discussed examples of 1000pi implementations in law enforcement agencies and the general conditions from the front to the back end required to use and benefit from 1000pi.

- Additional point from delegate, we are currently using this technology and I would just like to point out that transcodes from 1000 ppi to 500 ppi can be transferred to agencies which don't use 1000ppi still producing an improved resolution however the only negative is that 1000ppi has a slower capture time.

Response from speaker - another point on this is that we are currently working on the capture time.

Presentation on Sagem Security by Gillian Ormiston, Director, Business Development Identification Solutions

The presentation covered the new developments in operation since the merger of Motorola Print Trac and Sagem Security

Presentation on NGI by Jon Kevin Reid Deputy Program Manager for Next Generation Identification.

This presentation highlighted the IAFIS production and the achievements to date with NGI

Present and Future of the INTERPOL Fingerprint Unit – Mark Branchflower head of the Fingerprint Unit at IPSG, Lyon.

The presentation included the main aims of the INTERPOL Fingerprint Unit and the future developments

Closing of Conference by Werner Schuller Sub Director of the Forensic Support and Specialised Technical Databases Department, IPSG, Lyon.

The closing speech was delivered and all delegates were thanked for their participation