5TH INTERNATIONAL SYMPOSIUM ON FINGERPRINTS

IPSG LYON, 4-6 JUNE'2008

MINUTES REPORT

Opening- 4 June 2008 (Morning Session)

Members presiding over the conference-

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

An introductory speech on house keeping and other general details related to the symposium were given by **Ms. Kim Legg** from the IPSG Fingerprint Unit.

The executive Director of Police Services; **Mr. Jean-Michel Louboutin** informed the delegates about the speech by the Secretary General of INTERPOL, this was followed by a welcome speech by **Mr. Mark Branchflower**; stating the objective of the symposium and also detailing information regarding the fingerprint department at the IPSG.

Speech by executive director of police services; **Mr. Jean Michel Loboutin**, who introduced the general secretary of INTERPOL and gave an overview regarding the developments in the field of fingerprints.

This was followed by an **Opening speech by the secretary general of INTERPOL; Mr. Ronald K. Noble**; he emphasized on the importance of fingerprint data in solving crimes and discussed some statistical results in relation to the working of the fingerprints unit at IPSG.

DISCUSSION
There were no questions and/or comments following this speech.

All the delegates and IPSG officials attending the conference were invited for a photograph with the Secretary General of the IPSG.

Presentation by Mr. Mark Labonte from the Royal Canadian Mounted Police (RCMP); Canada, who talked about **advanced passenger screening and other**

advancements in the field of Electronic travel in Canada. He focused on the use of biometrics for the purpose of passenger screening which has proved useful in preventing cross-border entry of criminals.

DISCUSSION
There were no questions and/or comments following this presentation.

Coffee break.

Presentation by Mr. Antonio Farelo from the fingerprint Unit at IPSG, Lyon.
He explained about the **AFIS system being used at the IPSG**, Lyon; giving details on its functioning and usage by the member countries. He also emphasized on the facilities that the Fingerprint Unit provides or is going to provide to its members in the near future.

DISCUSSION
- ➤ Question from a delegate from Lithuanian Police Forensic Science Centre, he asked about the 'New System' that IPSG Fingerprint Unit is going to implement in 2009. Has the contract been done and what will be the features of this system?

    - ✓ Response by the speaker- "The contract has been done already with Sagem, it will be in place in the beginning of next year and will help us increase the size of the database for more tenprint storage and will also include palmprint storage and processing facility; which we don't have at present".
    - ✓ Mr. Branchflower (Head of the Fingerprint unit at IPSG) added to this saying that 'the IPSG Fingerprint Unit has had partnership with Sagem since the year 2000 and it will maintain until the next three years. In future, they are going to announce a tender for an AFIS system for 2011'.

- ➤ Question by a delegate, asking about the Inter-AFIS facility; when searching from the respective country into the INTERPOL AFIS, Who will be the INTERPOL expert looking after all the features?

    - ✓ 'Response-'With the new system, the searches will be automatically done by the computer and the results (IF NEGATIVE) will be automatically sent back to the country. If it's a poor quality print then a member of staff from the IPSG fingerprint unit will have a look at it and sort things out'.

- ➤ Further question from the same delegate (as above) - 'If it's a poor quality latent (crime scene mark), is there a way to rectify it in the country by some expert, as the NCB doesn't have any Fingerprint experts'?

- ✓ 'Response-'The automatic response is only for tenprints and not latents, latents are handled by the staff members at the IPSG and also any tenprints with quality issues'.

- ➢ Question by an inspector from the Chile investigation police, confirming whether there are 15,000 fingerprints at the IPSG fingerprint unit? (No it's 75,000; corrected Mr. Farelo).Further question, 'There's an issue in Chile regarding the foreigners that come to the country and create problems, if we want to find out the identity of a European citizen, how fast can we get the results'?

  - ✓ Response -'If the fingerprints are sent in the correct format and it's an urgent request it can be obtained in a day, if it's not that urgent, results can be obtained within 2-3 days, what is important is to send the prints in a correct format, based upon the parameters laid down by the INTERPOL'.

- ➢ Further Question by the same delegate (as above) – 'If we want to have further information for a person who is not within the 75,000 profiles on INTERPOL's AFIS, is it possible for obtaining more information for that person by any means? Can a tenprint from that person be obtained'?

  - ✓ Response – 'No, that's not possible and that's why we request all the countries to send more and more tenprints to feed in our database, as most of the countries send it only when they have the need to do so, we will only be able to make searches when we have the relevant data and that's why we keep asking and encouraging the countries to send in as much data as possible'.

- ➢ Question by a delegate from Italy- What is the response given when there's a hit or a no hit, is it just a 'HIT' or 'NO HIT' message given out or the history of the person as well?

  - ✓ Response-'When there's a hit the information is send to another department in INTERPOL who send the history and other details of the person to the concerned countries but it's important to remember the restrictions from certain countries in which case the history of the person cannot be shared.'

  - ✓ Additional comment to the response by Mr. Branchflower-'From 2009 we'll be sending the nominal data and the NIST files to the country so that they can do the confirmations themselves, at the moment we are only doing NIST files, there may be restrictions from some countries to share data, at the moment we send back the data after a Hit has been verified by the fingerprint experts here at the IPSG but in future we may be sending non-verified data'.

➢ Question from the head of judicial identification in Cote d' Ivore - he says that their country has major difficulty in identifying criminals, they are trying to establish links with other countries who are more advanced in the field of fingerprints and other forms of criminal identification, so, when is the IPSG going to provide these training sessions that they mentioned and when can Cote d' Ivore send their experts?

    ✓ Response- 'In the last training sessions in Nigeria there were people from Cote d'Ivore who attended, the other trainings sessions have been already budgeted but the dates have not been decided, next training is going to be held at San Salvador; discussions are going on with the concerned NCB regarding that, in future the IPSG is going plan trainings at other SRB's.

    ✓ Comment by Mr. Branchflower – 'This year three trainings are already scheduled in Africa (Abidjan; Harare and Nairobi) in the frame work of the OASIS project. These trainings will focus on the NIST viewer, Card Scan and certain other issues related to fingerprint techniques and in the frame work of the OASIS project we'll have some more advanced training courses; probably next year'.

➢ Question by the delegate from the Columbia National Institute of Forensic Medicine, 'what type of crimes do you want the latent prints from, local crimes or all crimes related to foreigners'?

    ✓ Everything but if the suspect is a foreigner and any serious crimes that may take place in your respective countries even if committed by locals.

➢ A doubt clarified by the same speaker (as above), 'Columbia is not sending in data, so what can we do to speed that process because we have problems when we require data and it not available on time'?

    ✓ Response – 'This happens because sometimes the NCB doesn't have the right kind of facilities or direct contact with the fingerprint unit in the country, you can talk to us personally and we'll sort that out, the web page has all the specifications for sending in fingerprint data'.

➢ Question by the Head of Fingerprint Bureau in Malay- 'We need to know how we can learn the correct way of sending in fingerprints, training issue? And other question is regarding local criminals in my country who commit cross border crimes and then come back to the country, can their ten prints also be sent to the IPSG for storage in the database, in case that person commits a crime again we may find a match'?

✓ Response-'Yes certainly, all countries can send in data related to cross border crimes committed by local people. Regarding training, it's not possible for us to go to each and every country; all 186 of them and provide trainings, so presently the trainings are only limited to the sub-regional bureaus but people from all countries can come and participate in that, you may send both; the fingerprint experts and NCB people to attend theses trainings so that they know how to send in tenprints to INTERPOL and other such details'.

➢ Question by the Head of Fingerprint Section, Kuwait- 'Are there standards that should be applied nationally in relation to deported people, as there may be people who are refused entry at the airport depending upon the restrictions in that country'.

✓ Mr. Farelo responded that 'it is country specific issue. I may not be able to answer that'.

✓ Mr. Branchflower added to this saying that 'we can provide you the data for such persons to put in your local database and you can search when ever you suspect whether you want a particular person in your country, alternatively if it is a person you are refusing entry; you can also submit the details to INTERPOL which may help you in future to see if there's a match with any previous crimes before you allow that person to enter your country'.

Presentation by Miss. Kajal Singh from the Fingerprint Unit at IPSG, Lyon.
She presented the results from the **INTERPOL FINGERPRINT SURVEY-2008** and discussed the statistics obtained after analyzing the responses from all the participating member countries. These results did not include the data from all the member countries, as responses were still awaited from many of them.

DISCUSSION
There were no questions and/or comments following this presentation.

Presentation by Mr. Wayne Towson from the INTERPOL-NCB at Washington (U.S.) along with Lee Moser who works with Cogent Systems about how they send in or exchange data with IPSG Fingerprint Unit, **the I-AFIS used at the US-NCB** and other developments they are making in the fingerprint section.

DISCUSSION
There were no questions and/or comments following this presentation.

Presentation by Mr. Arie Zeelenberg from the National Police of Netherlands on **Altered Fingerprints**. He discussed two cases related to changing of fingerprints; from the Netherlands belonging to Mexico and Luxembourg.

DISCUSSION
- ➢ Question by the delegate from the National Institute of Forensic Medicine-Columbia, he mentioned a case of altered fingerprint and also facial surgery and wanted to know what can be done in that case?

  - ✓ Response-'We can ask an expert to manually look at the prints and search through the local databases and the INTERPOL AFIS system. It is also a good idea to check for the DNA of the person as it is hard to change it'.

- ➢ Question by the delegate from the Federal Police in Argentina- We haven't seen any such cases in our country, may be because the first cases are difficult to be noticed. How can we train people in my country to analyze such fingerprints?

  - ✓ Respose- 'Any latent examiner will immediately identify if he comes across any such case, there are scars all over, and the natural flow of the ridges is spoiled and noticeable number of wounds are present'.

- ➢ Question by the Crime Scene Expert from Kuwait, we have a DNA database and palm print database, when INTERPOL sends a profile to us why does it not include DNA profile or palm print details?

  - ✓ Mr. Branchflower responded-'We don't' have DNA profiles together with fingerprints, we have separate database for DNA and we are encouraging countries to send us more and more DNA data but in future we are going to send in DNA information along with fingerprints and search both of them internationally'.

Lunch Break

Afternoon Session

Véronique Bruet (General Secretariat) made a presentation on Interpol's I - link, a central database management system aimed in assisting police investigations by exchanging criminal information to member countries. She spoke about the advantages of

using I–link and showed the audience how to submit information and make search queries.

DISCUSSION
- Mark Branchflower asked how access was gained to the I-link project as there seemed to be a security feature (seen on the presentation slide) that could restrict users
  - o Ms Bruet said that access to the page could be made by contacting the I-link project leader. Access to the I-link project could only be made on the NCB website and not on the public INTERPOL website.

- A delegate asked whether a relationship would be created with AFIS (or ASF) once the NIST file is uploaded, the I-link form is filled and the information is submitted
  - o Ms Bruet said there would be a relationship with AFIS and I-link. However no definite answer could be given at the moment as this feature – uploading prints as a NIST file had been tested. The goal however was to establish this link. Ms Bruet added that if a member country had an issue concerning this to contact her.

Bruce Grant (UK) made a presentation on the contribution of biometric intelligence and exchange programmes in counter terrorist investigations. He spoke about the UK legislation, the Terrorism Act 2000 and the use of Livescan at UK ports. He provided data on the UK National AFIS Fingerprint Database and the Counter Terrorist Operational Response Database. Two case examples were also presented.

DISCUSSION
- A delegate mentioned that Australians were being fingerprinted for work visas in the UK and suggested these fingerprints be run through the Australian database system and the UK's local fingerprint databases.
- A delegate asked whether there was a link with the national fingerprints and national DNA databases
  - o Mr Grant said that there was no link at the moment however this may happen in the future. He said there was a link with the counter terrorist fingerprints and DNA databases.
- A delegate said that many companies were promoting and prioritising iris and voice prints over fingerprints. He said that this was not based on scientific fact and asked that INTERPOL promote the value and importance of fingerprints in finding the identity of people, in favour of other prints.

Mike Garris (USA) made a presentation on NIST's work on biometric programs and their supportive roles in such areas like law enforcement and identity management. Biometric projects included fingerprint (latents), face, iris, voice and DNA.

Patrick Grother (USA) updated the audience **on NIST standard developments** and gave an overview on NIST testing programs. He spoke about the evaluations made on latent fingerprint technology, plain impression segmentation algorithms, fingerprint accuracy and iris recognition technology.

DISCUSSION
- A delegate asked if the programs were used to certify the companies that sold products linked to biometrics and fingerprints
    - o Mr Grother said there was an effort within the US to establish criteria for labs to be accredited to do good tests and be reviewed. This would develop into a network of commercial laboratories to test products to certain criteria. He added that one aspect of the NIST study which was required for US government ID cards was the ongoing MINEX (Minutiae Interoperability Exchange Test) certification which is a "core baseline accuracy for producing and matching standard templates" and without this certification one cannot sell to the government PIV (Personal Identity Verification) program.

Ivanka Spadina (General Secretariat) made a presentation on the Stolen Lost Travel Documents (STLD) database and its role in border control. She described its functionality and spoke about how it is compatible with integrated border systems requirements, which includes the implementation of e-borders/e-passports and biometry systems. She outlined the challenges that have been faced using STLD and also provided data on the number of countries participating, the number of searches that have been made and the number of hits that have been generated since STLD began in 2002.

DISCUSSION
- Mark Branchflower asked whether there were any countries other than the US that were checking fingerprints when a person entered a country against the "lookout" database
    - o Ms Spadina said not at the moment and mentioned a few tests that were occurring in different countries on the iris, biometrics and fingerprints. She said there was a need to validate the whole procedure and that this could be done once chips are digitally signed, public key infrastructure and depository are in place and reference databases are connected. At the moment countries were performing individual tests. She added that people should be following existing standards such as NIST standards.

- A delegate asked if any studies were made on how much accuracy could be achieved by using 3-D facial recognition systems compared to 2-D facial recognition systems
  - o Ms Spadina said that there were solutions in facial recognition packages that were achieving high accuracy rates and low false acceptance and rejection rates. She added that 100% match or accuracy rates could be reached if there was a combination of facial recognition and fingerprints. Ms Spadina mentioned that at the moment there was limited information on the accuracy of iris technology.

Robert Gough (Australia) gave a presentation on Smart Gate, a biometric system used by the Australian Customs Agency. SmartGate functions to authenticate travellers against their E passport presented at the border. Mr Gough spoke about the main objectives of the biometric system, its capacity, design and deployment and performance. He also mentioned the results of pilot tests conducted and the advances in facial recognition

Mark Branchflower thanked all delegates for their attendance and the speakers for their presentations. He closed Day 1 of the 5th International Symposium on Fingerprints.

5 June 2008 (Morning Session)

Romică Potorac (Romania) made a presentation on the research Gheorghe Popa of the Romanian Police that looks at the link between age of fingerprints and blood groups. He spoke about the aims of the project, the methodology carried out, the results obtained and the conclusions gathered.

DISCUSSION
- A delegate asked how would a latent print or mark be preserved to account for the degradation that would occur on the latent while waiting for the known sample of an individual to degrade at the same degree in order to determine the age of the latent
  - o Mr Potorac said that the current study only looked at fingerprints deposited on standard supports like glass, metal or plastic.
- A delegate said that when determining the age of fingerprints humidity would play a critical factor as would different surfaces
  - o Mr Potorac said this was possible; however in this research fingerprint morphology was only one of the aspects looked at. The biochemical and biological aspect were also being looked at. He said that DNA quantification and the genetic profile of fingerprints were also used and

that the degradation of these were proportional to the degradation of fingerprints
- o The delegate added that based on similar research he was conducting it was seen that the fingerprint powder being used could interfere with DNA profiling.

- Mr Popa added his comments. In reference to the first question that was asked he said that two methods were used to preserve the status of the fingerprints for a long period of time and to present as evidence in court. The first method involved taking the fingerprint on sticky plastic foil that is kept at a constant temperature for a long period of time and the second method is through direct photography (before the fingerprint is put on the foil).

- Mr Popa then added his comments to the question asked by the other delegate. He said that the method explained involved only those situations where fingerprints were discovered and revealed on thin or continuous supports like plastic or glass and inside (?) because it was known that fingerprints could be influenced by many factors like the human body or external conditions. The study that had been done and presented refers to just one type of fingerprint on a support and the environmental conditions on which the fingerprint was created. He added that the most important thing that results from this study was that it allows the investigator to establish a fairly accurate time that the fingerprints were created. Mr Popa added that this study was showing that fingerprints were aging differently according to a person's blood group and this would allow, from an operational point of view, to establish a suspect circle as accurate as possible.

- A delegate asked if the same method was used to look at the development of fingerprints on dust surfaces and how many individuals were used in this study
  - o Mr Popa said that tests were performed to apply fingerprints on different support materials but from the scientific point of view, in order to get a conclusion based on scientific research the study was carried out on certain conditions that were similar to ideal conditions. Originally in the study, fingerprints were being revealed using chemical substances however at that time the fingerprints were degrading and the level of degradation was being influenced by the chemicals. Because of this some of the research criteria's could not be reflected. Mr Popa added that further studies could be developed considering some other types of materials that fingerprints are created on and when the fingerprints are created on external environmental type of conditions.

Anthony Allen (Australia) gave a presentation on the current upgrades being made to the Australian CrimTrac NAFIS to provide greater accuracy, improved fingerprint processing workflows and portable biometric identification.

DISCUSSION
- A delegate asked if there was the possibility to reveal and take fingerprints from other supports and use them within the database that was shown in the presentation. For example revealing fingerprints from vegetable supports, like tree leaves, and afterwards the result of the identification being used in the system that was presented
  - Mr Allen said that criminal fingerprints received on the fingerprints system do get matched between ten prints and that the statistics that were presented were on ten prints matching and not for latent matching.

Carole Gaudes (Canada) updated the audience **on the Real Time Identification Project** which will enhance the efficiency of Canada's national fingerprint and criminal record repository. She also made reference to the Canadian Criminal Real Time Identification Services.

DISCUSSION
- A delegate asked if every person when charged is fingerprinted in Canada?
  - Ms Gaudes said if a person is charged with an offence they are fingerprinted. However they are unable to keep or examine any fingerprints that are from a summary conviction offence as it falls into a dual procedure offence.
  - The delegate then asked how those records are resolved within RTID which do not have fingerprints associated with them
  - Ms Gaudes said that if there are no fingerprints associated to the records then the records would not be in RTID. There has to be a set of fingerprints with a valid charge. She added that when RTID is fully implemented it will allow for the multiple set of fingerprints to be retained.
- A delegate wanted to know the real time for ten prints to latent match (TPL) received from the live scan
  - Ms Gaudes said that for a ten print to unsolved latent search there was no service level agreement (SLA)
  - The delegate said he believed that a lot of hits were being missed on real time when the suspect was in the police station
  - Ms Gaudes explained that unsolved latent files did not belong to them but belong to different police agencies who may not want the suspect held on latent identification on the ten prints that came in. She repeated that there was no SLA for ten prints to an unsolved latent file however clients could use an authority to release indicator (ATRI).

William Blenkinsopp (UK) made a presentation on IDENT1, the UK's central national database. It stores, searches and compares biometric information of people charged with an offence, and includes fingerprints, palm prints and crime marks. He

outlined the development of IDENT1, the functionality within it and its benefits to the police service and others.

DISCUSSION
- A delegate asked whether any research had been done on high resolution printers and what was being looked at for resolution and dots per inch
  - o Mr Blenkinsopp said that the project was in the early stages of planning. He mentioned that a test on a printer was done several years ago but there were a number of issues, including the cost to replace ink cartridges. He would inform the delegate of any updates
  - o The delegate said that he had done research on printers and that he would be willing to share this information.
- A delegate questioned IDENT1's function with latent prints and questioned whether investigators would be able to locate fingerprints in time so that no conflict would arise between workers at the scene of the crime and people using the place where the crime took place
  - o Mr Blenkinsopp said that the police working databases were partitioned databases and that ten prints were in a partitioned database. He said that with any information that came out, police would carefully look for legitimacy before any arrest was made.

Paul Osborne (UK) gave a presentation on IDENT - 1's service, design principles, architecture and its status in today's world.

Nick Megna (USA) spoke about **the FBI's Integrated AFIS (IAFIS) system** which is part of the Next Generation Program (NGI). He provided information on the success of IAFIS and the capabilities of NGI within the multimodal biometric framework, objectives and future potentials.

Steve Rawlings (UK) gave an overview of **the history and progress of the Lantern project** which provides mobile live identification through fingerprints. He also spoke about several criminal cases in which Lantern helped to provide positive identification.

DISCUSSION
- A delegate asked if there was any specific legislation which allowed for the capture of the fingerprints (as it was said in the case example that police had to coerce a person to have their fingerprints taken)
  - o Mr Rawlings said there was a power included in the Serous Organised Crime Police Act 2006 which would allow police officers to take fingerprint from any person, if need be by force, subject to any offence.

However this had yet to become activated by the government. At the moment police have to rely on consent of the person to take their fingerprints. Mr Rawlings believed that police officers needed powers to be reinstated to them to identify people for identification purposes and that they needed the backing of legislation which at the moment requires changes. He also added that there should be a new legislation to look at other databases as used by the government to make sure there is a joint approach dealing with passports as people were being issued passports without checking whether they had a criminal profile/history.

M.S. Rao (India) spoke about fingerprint transmission and collection from the scene of the crime. He spoke about the current process performed in India where latent fingerprints are developed, photographed, scanned and then added into a database. He later spoke about the pilot study being undertaken on the development of tele-forensic facilities for the management of fingerprints from the crime scene.

Afternoon Session

Presentation by a delegate from Sudan - The Role of Fingerprints in Law Enforcement
The delegate presented to the group the role of science and fingerprints in law enforcement. He spoke of the basics of Fingerprinting, and defined both fingerprinting and DNA in order to compare and contrast. He also suggested several aspects regarding fingerprints, such as using them globally in all ID documents, and to create a common database for Fingerprints and DNA for international comparison.

Presentation by Mr. Simon Dzidrovski from the IPSG, Lyon, DVI Unit - Unidentified and Missing Persons Database
Mr. Dzidrovski from the INTERPOL DVI unit gave a presentation about the development and function of the MPUB database. He spoke of INTERPOL's role during the Tsunami and the technological considerations about building a centralized IPSG database. He also showed an illustrative proposition for the MPUB system.

Presentation by Mr. Karl Lejak from IPSG, Lyon - INTERPOL databases for IMEST (INTERPOL MAJOR EVENTS SUPPORT TEAM)
Mr. Leja explained the importance of INTERPOL and its strategy to assist member countries which are planning major events. He spoke of the importance of having many databases, as this would improve INTERPOL's involvement in security for such big events. Also, he discussed deployments and planned events.

Presentation by Mr. Rolf Hallauer from the Swiss National Identification Unit - Electronic Exchange of Fingerprint Files

Mr. Hallauer gave a presentation, by first describing the Swiss National Identification Unit. He also explained the electronic exchange of fingerprints in Bern. He finally spoke about quality management in Switzerland, and proposed to apply scales to INTERPOL EFSL solutions. He also stated that in the future, rejections of forms will diminish as most of the countries will submit forms in the correct format.

Presentation by Mr. Michael Wieners from the FBI – Four Years after Madrid
Mr. Wieners started his presentation with giving a review about the Madrid explosions, and what the LPU in the FBI experienced. He spoke of the good working relation that developed between the FBI and the Spanish National Police, and then explained to the group the misidentification of a print found, and the measures taken by the FBI afterward.

Presentation by Mr. Samuel Alfonso Delgado from the Colombian National Police – Pre and Post Mortem Fingerprint, the Originality of Fingerprints
Mr. Delgado gave the group a presentation aiming to recognize the originality of fingerprints. He insisted on the two axims of fingerprinting: Persistence and Uniqueness. He addressed the concerns regarding fingerprint stamps and graphic arts which reproduce fingerprints. Moreover, he explained to the groups methods of how to distinguish a real print from a fake one, and methods of how to distinguish prints that generated from both, living and dead individuals. In the end of his presentation, he showed some real cases of where post mortem, and graphically made prints were used.

CLOSING - 6 June 2008 (Morning Session)

Presentation by Mr. Mark Branchflower (Head of the Fingerprint Unit, IPSG, Lyon) on the Training session held in Nigeria in February'2008. He gave an overview on what the training was all about and informed the delegates about the nature of the training that INTERPOL provides to its member countries. It is a '5-day training on Forensic Science' including information on Fingerprints, DNA and Disaster Victim Identification.
An important aspect of this training session is that it also provides training on using 'Card Scan and NIST viewer' to electronically send fingerprints to INTERPOL. He also mentioned about the next training sessions that are planned in Africa this year.

DISCUSSION
> ➢ Question by a delegate on Card Scan; what is it basically?

> > ✓ Response - It is software used to scan paper copies of fingerprints and convert them to electronic (NIST) format.

Presentation on 'practical use of biometrics for identification' by Dr. Fred Preston from Motorola Company. He talked about the biometric products that Motorola has launched in order to provide security solutions.

DISCUSSION
There were no questions or comments following this presentation.

Presentation by Mr. Jim Jasinski from the Cogent Systems on 'AFIS technology - Today & Tomorrow'. He highlighted the developments that COGENT manufactured AFIS systems' are undergoing and what new products have they come up with.

DISCUSSION
There were no questions or comments following this presentation.

There was a **presentation by Mr. Luc Tombal from SAGEM SECURITE** who talked **on the 'Future of biometric information exchange'** and detailed the products from the SAGEM group those are available or will be introduced in the future, precisely the developments they are undergoing presently.

DISCUSSION
There were no questions or comments following this presentation.

Presentation by Mr. Mark Branchflower; Head of the Fingerprint Unit; IPSG; Lyon on Altered Fingertips. He discussed few cases which INTERPOL has come across in the near past related to modifications of fingers and palms.

DISCUSSION
There were no questions or comments following this presentation but some general announcements.

There were questions for the delegate from Columbia; Mr. Samuel Caballero from the Columbian National Police on his presentation on 'Pre and Post Mortem Fingerprint Originality of Fingerprints' that was delivered at the end of the previous day (5th June) at the conference.

DISCUSSION

➤ Question by a delegate from Chile police-asking about 'the number of minutiae that the speaker may advise for countries to have'?

  ✓ Response- 'It is country specific; every country has its own rules. If fingerprint isn't in a good condition we may try to do PEROSCOPY (using pores for identification**)'.**

➤ Question by a delegate from Algeria – 'What is the number of pores for every 1 sq. mm of the palm of a living person? Are the number of pores reduced after death, can we use the number of pores to determine the time of death'?

  ✓ Response – 'Each person has a distinct number of pores and microscopic distance between each pore is different for each individual. Yes, the number if pores keep reducing as time passes by after a person's death; the longer the death, the reduced the pores unless they completely close. It is difficult to determine the time of death after the pores have closed completely'.

➤ Question from a delegate asking about 'the difference in the number of pores when the climate changes'?

  ✓ Response- 'The change in weather doesn't affects the number of pores, it may affect sweating but not pores, until a person's living pores will always be present'.

➤ Question by a delegate from the Criminal Division of Cuba – 'Should originality or authenticity of fingerprints be studied before third level of investigation'?

  ✓ Response - 'No, it goes hand in hand with the third level of investigation. It is inherent to establishing fingerprint identity'.

Presentation by Ms. Nicole Egli, University of Lausanne, Switzerland on 'Evidence Evaluation in Fingerprint Comparison using AFIS'. She talked about her research project on statistical strength of comparison using AFIS technology.

DISCUSSION
There were no questions or comments following this presentation.
From the National Institute for Legal Medicine & Forensic Science in Columbia a **presentation on 'La evolucion de la identificacion en Colombia'** (The evolution of Identification in Columbia) was given **by Mr. Hector Armando Garzon Perez**. He explained how the developments have taken place in Columbia in the area of making identifications.

DISCUSSION
There were no questions or comments following this presentation.

Presentation on 'Fingerprints - from Crime Scene to Database' by Mr. Torabzadeh Hossein from Iran. He talked about the way they process fingerprints in Iran; right from obtaining them at the crime scene to loading them on to the database and making searches.

Mr. Branchflower clarified certain doubts raised by the delegates on Card Scan; SAGEM; etc. and made some necessary announcements.

The closing Speech by Mr. Brian Minihane; the Director for Operational Police Support Directorate, IPSG, Lyon.

CLOSING OF THE SYMPOSIUM DECLARED