

KBR

Forensics,
Biometrics and
future integration
with 3G/4G/LTE

Martin Bill

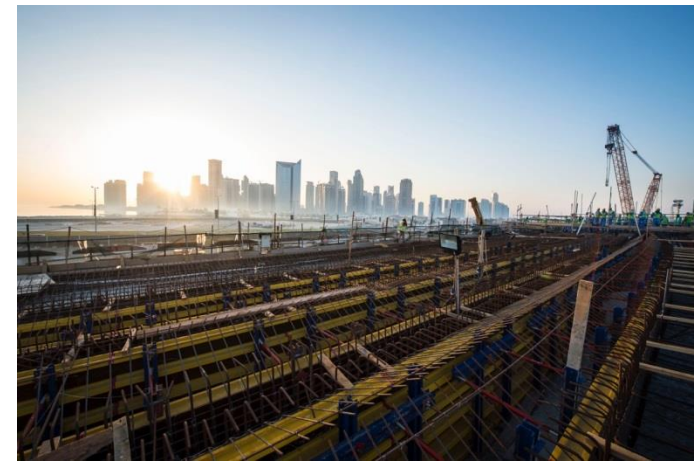


We Deliver

About KBR



- Over 31,000 people
- Operations in more than 80 countries
- World leaders in complex project and programme delivery, support services and logistics
- Proud to support blue light services





1. What is forensic science?
2. Forensic challenges
3. Real-time forensics and LTE
4. The potential benefits
5. In summary

What is forensic science?



Application of science in the pursuit of justice



What is forensic science?



- ~£500 million spend per annum
- Intelligence & Evidence
- 1000's of experts
- Traditional, Digital & Biometric



- 300,000 tests/examinations per annum
- ~1.5m FP/DNA samples from people





1. Maintain public confidence
2. Ongoing desire to increase performance and secure better CJS outcomes
3. Keeping pace with changes in:
 - Criminality; and
 - The requirements of the Law Enforcement community

Forensic challenges



The process takes too long.....



1. Crime occurs & reported
2. Forensic practitioner attends the scene
3. Exhibits transported
4. Exhibits booked in and decisions made on forensic testing
5. Items transported to labs for testing
6. Forensic tests performed
7. Results generated and databases searched
8. Results received
9. Communicated to investigative teams
10. Mobilise
11. Arrest

Actionable
outcomes days to
weeks

Forensic challenges



The process takes too long.....



High cost

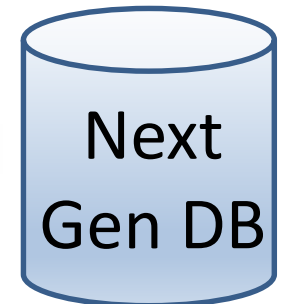
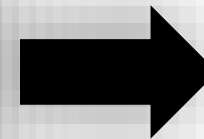
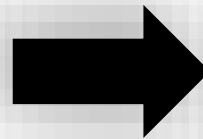
Loss of time



1. New **analytical devices** can enable highly automated, rapid forensic analysis
2. Improved **databases** can provide real-time analysis & matching with higher precision/accuracy

TODAY

TOMORROW



Real-time forensics



1. Quicker scene analysis potentially by a wider group of personnel
2. Reduced need for laboratory testing
3. Faster matching

Faster actionable outcomes



1. Digitisation & **transmission** of forensic/biometric information from the scene
2. Real-time **dissemination** of match information
3. Real-time information **guiding** and improving operational decisions

Real-time forensics & LTE



Hours

Hour

Secs

Hours
days

1. Digital transmission
2. Real-time dissemination of match information
3. Better operational decisions



Mins

Mins

Real-time, improved
outcomes

The potential benefits



1. Reduced costs

- Logistics
- Smarter deployment
- Forensics integrated into wider LE response

2. Improved outcomes

- Recovery of stolen property, reduced re-offence
- Higher accuracy, real-time database matching
- Real-time feedback to scene operatives

3. Public confidence

- Swifter CJS outcomes
- Safer communities



1. New technology is transforming forensic/biometric services
2. We have an amazing opportunity to reduce costs, whilst delivering better and faster outcomes
3. LTE transmission of forensic/biometric data will be at the heart of this transformation



Thanks for listening



KBR working with you for a safer society