

# SmartCop

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A crime  
reporting  
mobile app  
for London



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# CONTENTS

Introduction	1
A brief history of contacting the emergency services	1
Growing demand for mobile technology	2
Law enforcement use of mobile technology	3
Use of mobile technology by the Metropolitan Police Service	5
A Crime App for London	6
What should a crime reporting mobile application do?	6
Who should build London's crime reporting mobile application?	9
Only a London-specific mobile application?	9
Conclusion	11
List of recommendations	11
Feedback	12

# INTRODUCTION

Mobile-based technology, such as smartphones and tablets are becoming commonplace.

More than ever before people are interacting with the services they rely upon online – but public services, such as the police – have been slow to keep up with this mobile revolution.

Across the world law enforcement agencies have embraced mobile technology, especially for the reporting of crime and the accessing of police services in an emergency.

It is high time Londoners had access to a crime reporting mobile application.

## A BRIEF HISTORY OF CONTACTING THE EMERGENCY SERVICES

From 1927, those owning telephones were advised to dial 0 for the operator and request to be put through to the emergency service they required – but this regularly led to long delays and jammed switchboards.

A method for specifically and quickly calling the Metropolitan Police Service in an emergency was introduced in 1934. Whitehall 1212 put members of the public through to Scotland Yard's information room for both emergency and non-emergency business. This remained in place for non-emergency calls until the 1960s<sup>1</sup>.

The UK's 999 emergency telephone service was launched in London in 1937, and was the first automated telephone system to call the emergency services anywhere in the world. It was developed following the deaths of five women during a fire in Wimpole Street, Marylebone.

Glasgow became the second city to introduce the service in 1938, and it was extended to all major cities and towns in the UK by 1948<sup>2</sup>.

Across England and Wales in 2013/14 the police received over eight million emergency 999 calls<sup>3</sup>.

In 2012, a single non-emergency number – 101 – was launched for police forces across England and Wales. With only 25 per cent of calls requiring an emergency response<sup>4</sup>, it was expected that the new number would ease the pressure on 999 services and handle around 18 million calls a year<sup>5</sup>.

Across England and Wales from January 2012 until October 2014 the 101 service handled over 75 million calls<sup>6</sup>.

In 2014 the Metropolitan Police Service received over 5 and a half million non-emergency 101

1. Destination London, Conrad Kisch, 2006 ISBN: 9788702041415

2. Happy Birthday 999! The UK's emergency call service turns 75, BT, 2014 <http://home.bt.com/news/bt-life/history-of-bt/happy-birthday-999-the-uks-emergency-call-service-turns-75-11363796759046>

3. Estimating demand on the police service, College of Policing, 2015 [http://www.college.police.uk/News/College-news/Documents/Demand%20Report%2023\\_1\\_15\\_noBleed.pdf](http://www.college.police.uk/News/College-news/Documents/Demand%20Report%2023_1_15_noBleed.pdf)

4. Single non-emergency 101 police number launched, Home Office, 2012 <https://www.gov.uk/government/news/single-non-emergency-101-police-number-launched>

5. Have you got what it takes, Home Office, 2012 [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/117494/101-calls.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/117494/101-calls.pdf)

6. 101 Calls, Hansard, 2014 <http://www.theyworkforyou.com/wrans/?id=2014-11-17.214746.h&s=number+of+calls+to+101#g214746.q0>

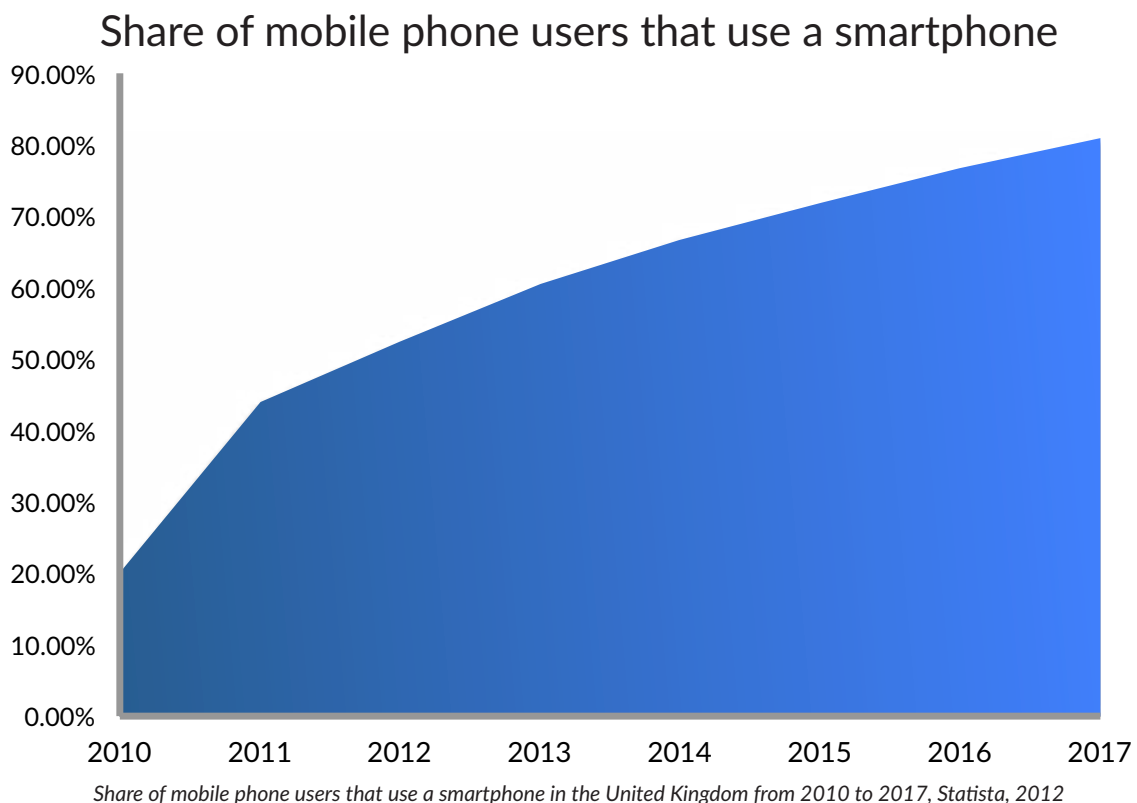
calls<sup>7</sup>, alongside over 960,000 emergency 999 calls<sup>8</sup>.

## GROWING DEMAND FOR MOBILE TECHNOLOGY

Technological advances, specifically the availability of mobile telephones, have led to a drastic increase in the number of calls to the emergency services – particularly the police.

While there has been a downward trend in the number of 999 calls in recent years, and a steady plateau in the number of non-emergency calls<sup>9</sup> – the number of calls is still far higher than the expectations of those who originally developed the call handling systems.

Mobile telephones – especially smartphones, have become an increasingly ubiquitous product, with projections suggesting that by 2017 80 per cent of UK citizens will own a smartphone<sup>10</sup>.



While historically there was a significant age divide between those who owned a smartphone – with young people being more likely to own such a device, the gap is narrowing.

Data from 2011 suggested that while 52 per cent of those 18-24 owned a smartphone, just 11 per cent of those over the age of 55 did. However, by only 2012 these figures had increased to 91 per cent of those aged 18-24 and 30 per cent of those aged 55 and above<sup>11</sup>.

Year on year, the ownership of smartphones is only expected to increase.

7. A million non-emergency 101 calls abandoned, BBC, 2014 <http://www.bbc.co.uk/news/uk-30294094>

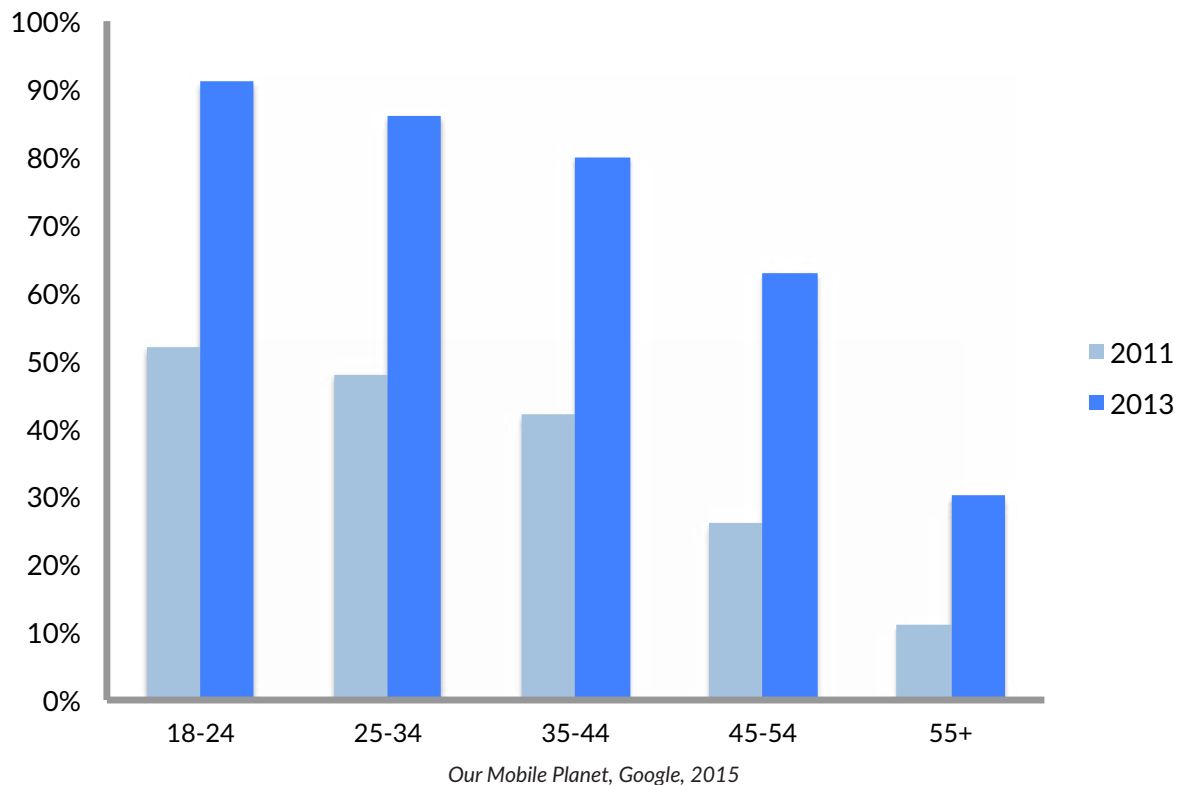
8. Metropolitan Police Service recorded crime figures and associated data, London Datastore, 2015 <http://data.london.gov.uk/dataset/metropolitan-police-service-recorded-crime-figures-and-associated-data>

9. Estimating demand on the police service, College of Policing, 2015 [http://www.college.police.uk/News/College-news/Documents/Demand%20Report%202023\\_1\\_15\\_noBleed.pdf](http://www.college.police.uk/News/College-news/Documents/Demand%20Report%202023_1_15_noBleed.pdf)

10. Share of mobile phone users that use a smartphone in the United Kingdom, Statista, 2012 <http://www.statista.com/statistics/257051/smartphone-user-penetration-in-the-uk/>

11. Our Mobile Planet, Google, 2015 <http://think.withgoogle.com/mobileplanet/en/>

## Smartphone usage by age 2011 vs 2013



As the Institution of Engineering and Technology says, in many cases the public is now “digital by default”<sup>12</sup>. This means that there is an increasing demand for services to accommodate the use of mobile technology but unfortunately public services – especially the emergency services have been slow to catch up.

Mobile technology has become such a fundamental part of everyday life that even in 2012 at least 78% of people didn’t leave home without their smartphone<sup>13</sup>.

There is an expectation that alongside commercial businesses, public services will have an online presence. However – unlike businesses, the public sector appears hesitant to allow access to its services to be instigated online.

However, alongside the public demand for an online presence is the demand for interactivity, the sort of which is usually only available via a mobile application. Research suggests that 73% of mobile users have the expectation that mobile applications will be easier to use than mobile optimised websites<sup>14</sup>.

## LAW ENFORCEMENT USE OF MOBILE TECHNOLOGY

Internationally, law enforcement agencies have embraced mobile technology – with many launching their own standalone mobile applications.

The Spanish Ministry of Interior launched the mobile application AlertCops on the Google

12. Contacting the Emergency Services in the Digital Age, Institution of Engineering and Technology, 2015 <http://www.theiet.org/factfiles/comms/999-digital-page.cfm>

13. Our mobile planet UK, Ipsos MediaCT, 2012 [http://www.mmaglobal.com/files/UK\\_English.pdf](http://www.mmaglobal.com/files/UK_English.pdf)

14. UK mobile devices usage and demographic and demographic roundup, WeAreApps, 2013 <http://www.weareapps.com/digitalreport.pdf>

Play Store and Apple App Store in 2014. The application creates universal access to state law enforcement authorities, enabling users to report incidents of crime either as a victim or witness and either in real-time or afterwards<sup>15</sup>.

The application is designed to be used by both Spanish citizens and tourists, being available in a large number of languages. All users are required to do before using the application is provide some form of government-issued identification during the sign-up process.

From the application's main page the user can select the type of situation which they feel requires a police response. For example if they wish to report the theft of some property – and this incident happened the previous day, they follow the instructions within the application and are prompted to provide all of the information the police require to file an incident report. This is then processed and the appropriate response provided.

Users are also able to report on-going incidents via the application – and this works in a similar manner to dialling the police directly.

However certain aspects are automated, like the use of GPS technology which allows the police to pinpoint the location of the incident within a range of approximately 60 meters. This removes the need for a user to provide location information themselves – something which during typical telephone calls to the emergency services can be difficult to obtain accurately.

There is also a chat function built within the application that allows operators to provide information to users when they are faced with an emergency, or require advice related to crime prevention.

AlertCops has been considered a success by the Spanish Ministry of Interior, and the geographical area it works within has been widened. It has also been directly marketed towards foreign nationals living or staying in Spain in order to lessen any language barriers they may face contacting the police using traditional methods.

There have been examples of the application helping protect the victims of sustained domestic abuse who had felt uncomfortable using traditional methods to contact the police. There was also an incident where a hiker became lost and used the application's inbuilt chat system to seek assistance from the Guardia Civil. He received detailed help, using the information automatically available about his location, and was able to find his way back without the need for any physical intervention from the police at all<sup>16</sup>.

In Malaysia – there is the MyDistress application which is available on all well-known mobile operating systems. It allows the user to send an emergency message to the police alongside using GPS to pinpoint their location. This enables officers to be dispatched as soon as possible. There is, however, no scope for generally reporting crime – the application is only designed to be used when help is needed immediately<sup>17</sup>. A similar style of application called HELP! is widely available in the Netherlands<sup>18</sup>, and one called Community Alerts SOS is used in Singapore<sup>19</sup>.

In the UK, police constabularies have been slow to embrace mobile technology but do provide some limited opportunities to report crimes via their website.

However the charity Witness Confident developed the application Self Evident in 2013. The application allows victims and witnesses to report non-emergency crime from their smartphone

15. Briefing from Spanish Embassy Home Affairs Department, September 2015

16. AlertCops App, Seaside Gazette, 2015 <http://www.theseasidegazette.com/2015/06/32633/alertcops-app/>

17. What is MyDistress?, Free Malaysia Today, 2012 <http://www.freemalaysiatoday.com/category/opinion/2012/12/16/what-is-mydistress/>

18. HELP! App, Enviu, 2015 <http://enviu.org/our-work/help-app/>

19. Community Alerts SOS, Google Play Store, 2015 <https://play.google.com/store/apps/details?id=com.wiseyes.commalerts&hl=en>

to the constabulary which is responsible for their geographic location. Users are able to attach photographic or video evidence and statements to their reports; and this data is independently corroborated by the application<sup>20</sup>.

While Self Evident had around 4,800 downloads by January 2014, it has not been formally endorsed by the National Police Chiefs' Council (formerly the Association of Chief Police Officers) or the Home Office, but the Home Office has recommended that that police forces in England and Wales handle reports made via the application<sup>21</sup>. The reason for the lack of endorsement is linked to concerns about how data may be handled, and fears about the accuracy of reports coming via a third-party application damaging chances of prosecutions<sup>22</sup>.

**Recommendation: The Metropolitan Police Service should launch a mobile application which allows the reporting of crime.**

## USE OF MOBILE TECHNOLOGY BY THE METROPOLITAN POLICE SERVICE

The Metropolitan Police Service (MPS) has historically been slow to embrace mobile technology both for police officers and the public. While significant steps have been made to encourage police officers to use mobile technology such as tablets while on duty to record witness statements and access information – this is not always possible due to the MPS's internal computer system design.

There has been even less progress when it comes to developing internet-based systems for the public to use to report crime. Again, this is in part because of the MPS's current internal computer systems.

Currently a limited number of crimes can be reported via the MPS's website; however these reports are not automatically linked to its central database. Instead the reported incident has to be re-entered manually into the system in order for it to be progressed, this is a clear drain on resources. This is one of the reasons why only a limited number of crimes can be reported online currently<sup>23</sup>.

The MPS's Total Technology Strategy is seeking to address such issues, but it is still unclear how any new system will be future-proofed to ensure it keeps pace with developing technology.

Often the MPS has sought to develop such large systems in-house, making them expensive to update or amend. It would be advisable that in future for the MPS to work with external providers in order to ensure it is confident that any systems are able to keep up with technological advancements rather than require a complete re-design.

**Recommendation: Any future computer system used by the Metropolitan Police Service should allow for all crimes to be reported online.**

**Recommendation: The Metropolitan Police Service should not develop any new computer system in-house, and instead work with an external provider to ensure it can be easily updated to keep up with technological advancements.**

20. Self Evident Application, Witness Confident, 2013 <https://www.witnessconfident.org/self-evident-app>

21. From a system to a service, Witness Confident, 2014 <https://www.witnessconfident.org/research-policy/157-from-a-system-to-a-service>

22. Conversation with Association of Chief Police Officer's Press Officer (now National Police Chief's Council), February 2015

23. Conversation with MPS staff member, April 2015

## A CRIME APP FOR LONDON

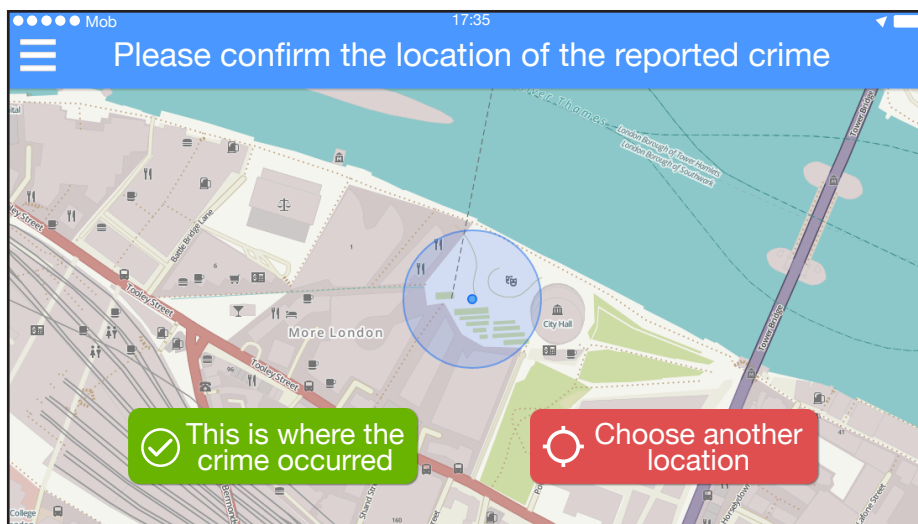
It is high time that the MPS develops a mobile application for reporting crime in London for use on smartphones and tablets.

There is a clear gap in the market for a mobile application which is endorsed by the MPS. While there is already an application for MPS police officers to record their overtime and expenses, designed by the Metropolitan Police Federation<sup>24</sup>, nothing is available for the victims of crime to use on their smartphones or tablets.

### WHAT SHOULD A CRIME REPORTING MOBILE APPLICATION DO?

Any mobile crime reporting application should offer the ability to both interact with the police during an emergency, and report incidents which have already taken place.

The use of a mobile application to interact with police during an emergency offers many valuable opportunities, not only the ability to capture geographical information instantly – allowing any police response to have no difficulty in locating an incident.



*Mockup of location features for the proposed app*

The same can be said for the use of a mobile application to report an incident which has already occurred. There should also be the ability for police to receive photographic or video evidence, to permit them to provide an appropriate response.

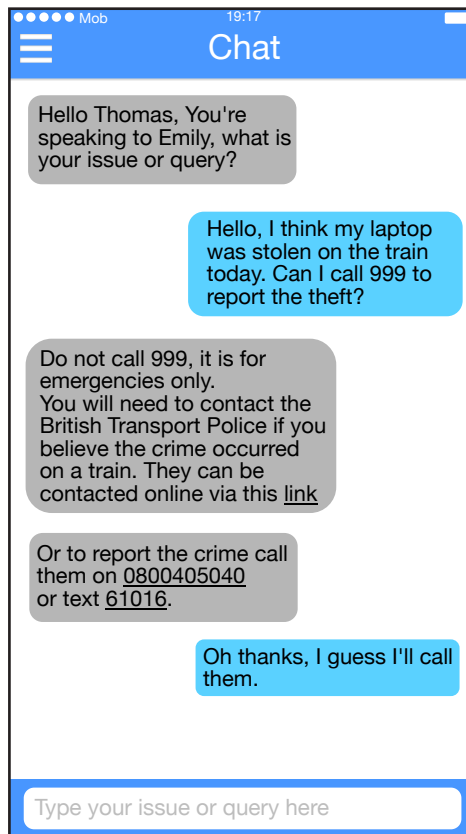
24. MetFed, Metropolitan Police Federation, 2014 <https://itunes.apple.com/gb/app/metfed/id664722076?mt=8>





AlertCops App via Google Play Store, 2015


A chat function, similar to the one available in the Spanish AlertCops application would allow a call handler to offer advice when required. This could assist individuals who require help but are not in a position to make a phone call.



Mockup of the chat features for the proposed app

As suggested in the *eReport: Improving the reporting of rape using technology*, written by Andrew Boff AM – a mobile crime reporting application could be the most convenient way for someone under coercion to contact the police. A chat function would allow them to not only contact the police but receive a response alerting them as to the best actions they could take.

Any application should be linked automatically to the MPS's new internal database once it has been developed. This should allow for it to provide those using it with their crime number immediately after they complete a report. These numbers are generated automatically when an individual telephones the police, and therefore the same should happen when the application is used.



Crime Type	Date	Reference	Progress	Details
Vandalism	19-07-2014	1010101/22	Closed	Details ⓘ
Theft	23-08-2015	2020202/33	Investigating	Details ⓘ

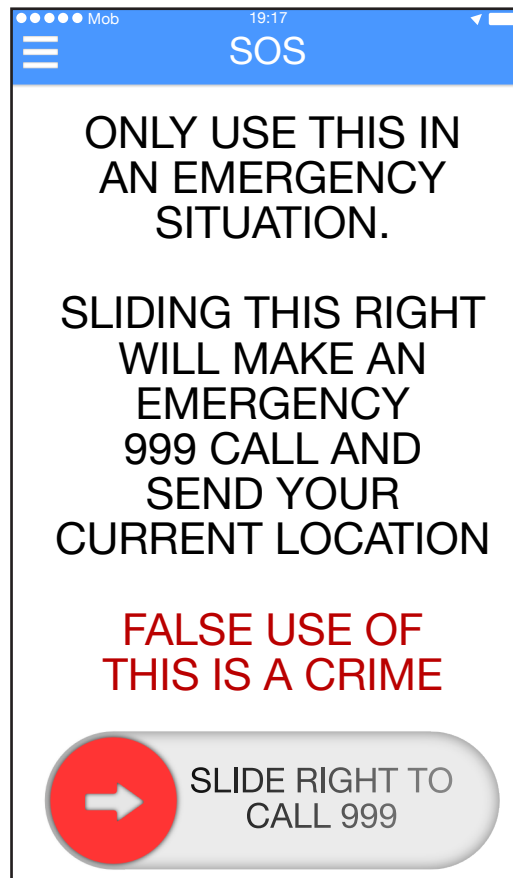
*Mockup of reference function for the proposed app*

This automatic provision of a crime reference number would make reporting thefts to insurance companies more efficient, for example.

There should also be the inclusion within the application of the ability to immediately summons help – similar to the Dutch HELP! application.

Activating this part of the application should work in a similar manner to dialling 999 and requesting an immediate response, or the response provided to an emergency call which gets cut off.

However unlike a telephone call, using this aspect of the application would not require a call to be traced, as the application will have already automatically provided the location of the individual requesting help.



*Mockup of the SOS function for the proposed app*

## WHO SHOULD BUILD LONDON'S CRIME REPORTING MOBILE APPLICATION?

The initial design for a native smartphone application would usually cost between £15,000 and £25,000 per platform for which it is designed<sup>25</sup>. However with the introduction of a new internal computer system for the MPS, which would be automatically designed to accommodate a mobile application, these costs could fall significantly.

What is clear is that the private and third sector has been quick to grasp the power and effectiveness of mobile technology, whereas the public sector has not. Therefore the design of any crime reporting mobile application should include external influences and design aspects.

One way for this to be achieved would be for the Mayor of London to hold a competition for application programmers to design London's crime reporting mobile application.

This would enable the brightest and best programmers to submit proposals, and have them implemented by the MPS. Any eventual winner should be heavily involved in the future development of the application.

**Recommendation: The Mayor of London should host a competition for mobile application designers to create London's crime reporting mobile application.**

## ONLY A LONDON-SPECIFIC MOBILE APPLICATION?

Because of the way policing works in the UK, any mobile application would only be able to be used within the geographical area covered by the MPS. It would take agreement at national level for an application to be useable across the whole country.

25. What is the cost of developing apps for the mobile marketplace?, Computer Weekly, 2011 <http://www.computerweekly.com/news/1280097329/What-is-the-cost-of-developing-apps-for-mobile-marketplaces>

Once a crime reporting mobile application has been launched in London, the Mayor of London should seek to get the Home Office, National Police Chiefs' Council and the Association of Police and Crime Commissioners to work together in order to widen the scope of the application to cover the entire country.

While applications like Self Evident already cover the whole country, they are not endorsed by any constabularies – for an application to be truly effective it requires this endorsement.

Once an application has been launched in London, the Mayor of London would be best placed to lead discussions, and help instigate work towards a crime reporting mobile application that would work across the entire country.

**Recommendation: The Mayor of London should work with the Home Office, the National Police Chief's Council and the Association of Police and Crime Commissioners to eventually have a crime reporting mobile application developed for the entire country.**

## CONCLUSION

The MPS needs to be future-proof, and it needs to embrace the types of technology Londoners are already using on a daily basis.

With access to smartphones and tablets becoming commonplace, it is time for users of this technology to be able to interact with public services such as the police.

In many situations the use of a mobile application would make the interaction between citizen and the police more efficient – whether automatically tracking an individual's location in an emergency via GPS or providing the victims of crimes with the ability to provide evidence easily.

London is well known as a world leader for technology, and this is an ideal opportunity for the Mayor of London to invite mobile application programmers to work with the MPS and develop the crime reporting mobile application Londoners want and need.

## LIST OF RECOMMENDATIONS

**Recommendation 1:** Any future computer system used by the Metropolitan Police Service should allow for all crimes to be reported online.

**Recommendation 2:** The Metropolitan Police Service should not develop any new computer system in-house, and instead work with an external provider to ensure it can be easily updated to keep up with technological advancements.

**Recommendation 3:** The Metropolitan Police Service should launch a mobile application which allows the reporting of crime.

**Recommendation 4:** The Mayor of London should host a competition for mobile application designers to create London's crime reporting mobile application.

**Recommendation 5:** The Mayor of London should work with the Home Office, the National Police Chief's Council and the Association of Police and Crime Commissioners to eventually have a crime reporting mobile application developed for the entire country.



## FEEDBACK

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