

**POLICE AND CRIME COMMISSIONER (PCC) FOR LINCOLNSHIRE
REQUEST FOR DECISION**

REF: 24 / 2023

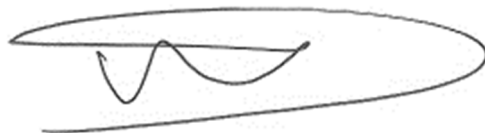
DATE: 8 November 2023

SUBJECT	
CESIUM	
REPORT BY	CHIEF CONSTABLE
CONTACT OFFICER	Detective Chief Superintendent Jon McAdam Tel: 07939 312724
EXECUTIVE SUMMARY AND PURPOSE OF REPORT	
<p>There is a requirement to purchase a cloud-based IT solution that utilises Artificial Intelligence and Machine Learning to run over force systems to readily identify and flag risk of Child Exploitation.</p> <p>Following the successful securing of innovation funding from the Government a solution was designed and developed through codesign and has now moved on from development into a viable platform.</p> <p>This system enables the identification of those at risk from Child Exploitation for the cases to be referred to the Multi-Agency Child Exploitation process whereby problem solving, and risk mitigation can be focussed. Through the introduction of this system there will be increased opportunity to identify those children at risk of exploitation, allowing earlier identification of any risk, and creating the ability to be more proactive in focusing dedicated resources and enable partnership discussions and activity to keep children safe from harm.</p> <p>Children are identified as being of the highest risk of harm from Criminal and Sexual exploitation and a multi-agency response can be arranged to ensure they are supported away from harm and offenders are brought to justice. The procurement of this system will enable staff to focus operational activity and utilise force and partnership resources as necessary, with CESIUM informing the focus of the activity and allowing practitioners to focus on taking the necessary action.</p>	
RECOMMENDATION	<i>That the PCC approve the purchase of the Cesium product with further consideration for ongoing development opportunities.</i>

POLICE AND CRIME COMMISSIONER FOR LINCOLNSHIRE

I hereby approve the recommendation above, having considered the content of this report.

Signature:



Date: 8 November 2023

A. NON-CONFIDENTIAL FACTS AND ADVICE TO THE PCC

A1. INTRODUCTION AND BACKGROUND

1. CESIUM is a risk-based platform that Lincolnshire Police have been developing with a third-party Research and Development company, Tri-Lateral Research, who specialise in data science, GDPR, and sociotech. The development of this platform has been a codesign, with work ongoing for 3 years, following the securing of Government innovation funding. The concept for this funding was whether an Artificial Intelligence (AI) and Machine Learning (ML) platform could be created to run across the data held within Lincolnshire Police to flag those cases of children likely to be at the highest risk of harm. This was to support the Multi-Agency Child Exploitation (MACE) processes, whereby referrals of those deemed at risk of exploitation are sent through by practitioners for MACE consideration, where research is conducted via statutory partner information systems and then provided to the meetings for partners to have case discussions and agree what action (if any) is necessary, who is the lead agency, and what additional support from other agencies is required.
2. The issue identified is that this is a purely subjective process led by the proximity of representatives to the case and the locality they are working within.
3. Discussions with data scientists at Tri-Lateral Research to take this issue and the concept of creating a flagging system using AI and ML, which led to a successful bid for innovation funding. The work carried out throughout the 3 years has led to the development of a standalone web-based system, CESIUM, that enables algorithms to run over Lincolnshire Police data, by using flagging processes and natural language processing to interpret the information held in the system for analysis and identification of risk.
4. The system will state what percentage of people known in Lincolnshire Police data are less likely to be referred to MACE than the one highlighted, demonstrating the need for them to be researched further and referred to MACE against others who have human bias potentially misrepresenting the risk.
5. Due to the amount of data that is held within the police systems to have this level of data reviewed on a daily/weekly basis is not possible without a significant investment of staff, which would only serve to identify the risk and not necessarily research and refer the cases. Current practices have meant that the only research for MACE taking place is where physical referrals are made through any of the partner agencies. These referrals lead to research and then onward transition to the screening process.
7. CESIUM has been developed with practitioners to ensure it is a useable and fit for purpose system that can add real value. Association charts and the detail being linked directly back into our systems mean there is no double keying requirements and that this can be used for live time interrogation and updates. Following the design of CESIUM the concept has now been proven and the system is ready to be made operational, with validation work having identified

children who were not referred to MACE who arguably should have been flagged for consideration of the process, and others who would have been identified through CESIUM 6 months before they were flagged through normal referral processes.

8. Meetings and demonstration have been held with Police Digital Services (PDS) and the NPCC Centre for Data & Analytics in Policing (CDAP) with regards CESIUM, with the scalability of the platform being of significant consideration.

There is nothing on the market that has been identified to have the functionality or benefits of CESIUM at this time, with Lincolnshire Police leading the way with the design and implementation. The next steps would be to work with the Local Authority for partnership data to be added and through working with PDS and CDAP other force area data can be realised too as part of the national technology programmes.

A2. LINKS TO POLICE AND CRIME PLAN AND PCC'S STRATEGIES / PRIORITIES

Through the adoption of CESIUM this will not only see Lincolnshire Police at the forefront of technological development, but ultimately meet the PCC's and the Force strategies stopping crime, protecting people from harm, and helping those in need. The children identified are vulnerable victims being exploited and CESIUM will support the PCC and Force priorities in identifying and preventing harm and supporting victims away from associated criminality.

B. FINANCIAL CONSIDERATIONS

- 3.1 The system is provided on a "software as a service" (SASS) basis, so the costs will be revenue. As this new system will address one of the force's high priorities i.e. protecting vulnerable victims, it is proposed that the revenue costs are built into the force budget for the period of the contract, and the force will consider balancing the budget as a whole during budget setting. The part year cost for 2023/24 can be covered within the existing force budget.

The costs to Lincolnshire Police will be at a reduced rate to those other forces would be expected to pay, with the additional added value that onboarding of the system will not be required given this has been achieved during the development process. The proposal is for an initial 3 year contract with the following year on year costs:

C. LEGAL AND HUMAN RIGHTS CONSIDERATIONS

[This should include the legal powers the PCC has for making the decision]

The Police Reform and Social Responsibility Act 2011 ("the Act") makes provision for the governance and administration of police forces. The Act charges the Police and Crime Commissioner for Lincolnshire with securing the maintenance, efficiency and effectiveness of Lincolnshire Police.

This proposal will impact directly on improved public satisfaction, reduced crime, ASB and victimisation by focusing on those who are amongst the most vulnerable. This will meet statutory obligations and enable partnership working to protect children from harm. Through such a system it will ensure we are working to prevent harm and to identify those causing the most harm to prevent offending and where necessary bring offenders to justice.

D. PERSONNEL AND EQUALITIES ISSUES

The PCC requires all providers / contractors to have policies in place to demonstrate their commitment and meet all applicable legislative requirements in relation to personnel and equality issues

E. REVIEW ARRANGEMENTS

Review and evaluation arrangements will be put in place to assess whether intended outcomes have been achieved.

F. RISK MANAGEMENT

This will be managed in accordance with existing Force policies and procedures.

G. PUBLIC ACCESS TO INFORMATION

Information in this form along with any supporting material is subject to the Freedom of Information Act 2000 and other legislation. Part 1 of this form will be made available on the PCC's website within one working day of approval. However, if release by that date would compromise the implementation of the decision being approved, publication may be deferred. An explanation for any deferment must be provided below, together with a date for publication.

Is the publication of this form to be deferred? No

If Yes, for what reason: N/A

Until what date: N/A

Any facts/advice/recommendations that should not be made automatically available on request should not be included in Part 1 but instead on the separate part 2 form.

Is there a part 2 form? Yes

If Yes, for what reason: The attached approved business case contains operationally sensitive data alongside commercial sensitive information

ORIGINATING OFFICER DECLARATION

	Initial to confirm
Originating Officer: D/C/S Jon McAdam	JM
Financial advice: The PCC's Chief Finance Officer has been consulted on this proposal.	JF
The CC's Chief Finance Officer has been consulted on this proposal.	SC
Monitoring Officer: The PCC's Monitoring Officer has been consulted on this proposal	MB
Chief Constable: The Chief Constable has been consulted on this proposal	CH

OFFICER APPROVAL

Chief Executive

I have been consulted about the proposal and confirm that financial, legal and equalities advice have been taken into account in the preparation of this report. Consultation outlined above has also taken place. I am satisfied that this is an appropriate request to be submitted to the Police and Crime Commissioner for Lincolnshire.

Signature:



Date: 2 November 2022