



# POLICE DIGITAL SERVICE

## National Solutions Index



## CONTENTS

Background .....	2
Executive Summary.....	2
Summary & conclusions.....	3
<b>Document Information .....</b>	<b>4</b>
<b>Document Location .....</b>	<b>4</b>
<b>Revision History.....</b>	<b>4</b>
<b>Approvals.....</b>	<b>4</b>
Appendix: .....	4
Summary of workshop approach:.....	4

### Background

On the 21<sup>st</sup> October the Yorkshire and Humber forces together with East Midlands forces, City of London and NPCC colleagues attended a PDS regional event in person. During that event (at the request of the host force – Nottinghamshire Police) a workshop was run to explore ideas and principles around sharing technology solutions.

#### **Executive Summary – outline of key themes.**

- **Sharing ideas is actively encouraged:** Sharing solutions is widely supported, but success depends on: suitability of the solution to scalability; resource disparities among forces and adherence to a common set of national standards.
- **Comprehensive documentation is better than comprehensive solutions:** There was an emphasis on sharing knowledge through detailed documentation (e.g., user stories, blueprints, and lessons learned) over merely transferring technology.

- **Streamlined/minimal support is preferable:** All forces stressed aftercare should be minimal, with a focus on light technical assistance and robust documentation to ensure sustainability without overburdening the sharing force.
- **Centralised Index:** An easy to use, easy to access national repository with quality controls and searchability is essential for transparency, collaboration, and innovation while enabling peer-to-peer interactions. The key question is – what data should be included?
- **Managing Challenges:** Addressing issues like version control, skill gaps, and funding frameworks are key to ensure smooth sharing and implementation across a diverse range of forces.

## Summary & conclusions

All forces represented want to collaborate and see value in it. The issue is to what extent do forces want to share their ideas. If forces supported sharing solutions and documentation in a central repository as was posited in the workshop, forces represented alluded to two significant challenges:

- 1) The resource and effort needed to supply extensive data (the actual solution and comprehensive project documentation) is a significant challenge for already stretched forces.
- 2) Standards are repeatedly mentioned and there was no real consensus on who's standards and how they would be consistently applied in a way that would promote sharing.

The conclusion more broadly is that forces want to see what all other forces are working on to identify areas of potential collaboration and innovation. The benefit of loading solutions and supporting documentation into a repository that is rigorously reviewed against an agreed set of standards would have value. However, the resource required from the host force and a centralised function to maintain that catalogue would be substantial and possibly far outweigh the benefits.

This leads to a natural conclusion that a simpler approach would have value. Surfacing innovation and solutions on a searchable table, potentially broken down into categories aligning with national objectives (e.g. safer streets initiatives). The user of this tool could be presented with information such as:

- The technology used.
- The skill levels required to deploy the solution.
- Available documentation on request.
- Key contacts to facilitate a deeper level of sharing.

Practically speaking, PDS could be asked to consider what a solution could/would look like. This could then be presented as an option back to forces and/or the NTB. The design of the repository should something the CTO office should consider and links indirectly to an outstanding ask from the last NTB where a request was

made for a national repository for all programmes from forces. Essentially, this could be the first step in establishing it.

---

## Document Information

---

### Document Location

INSERT LOCATION HERE (INSERT TAB > QUICK PARTS > FIELD > FILENAME > TICK THE ADD FILEPATH BOX)

---

### Revision History

Version	Author	Description	Date
1.1	**S40(2)**	Origin	04/12/2024
1.1.1	**S40(2)**	Minor revision	20/01/2025

---

### Approvals

Version	Name	Role	Date

## Appendix:

### Summary of workshop approach:

Summary of workshop approach:

During the workshop, which consisted of 55 individuals from DDaT functions across 10 forces and the NPCC, the following questions were posed:

- 1) On balance would the forces on the table represented, support the principle of sharing solutions, processes etc – what are the benefits and disbenefits.
- 2) What support should be provided by the sharing force at the time of sharing – what is reasonable and practicable?
- 3) What about after care? – you should consider what is reasonable and practicable?

- 4) How do forces flag their capabilities to other forces – think of all potential options and come up with a preferred approach(es)
- 5) How should we share our ideas and solutions? (KH, SP List, Forms etc). Consider the pro's and con's of each solution you suggest.
- 6) Should we use a central platform (like the solution catalogue) or do we encourage direct peer to peer sharing based on a visible 'national catalogue'? – assess the pro's and cons of each option. You should consider here the issue of data visibility (ie in broad brush strokes - how much information do you want to be visible?)

Delegates were arranged evenly into 6 tables and each table was asked one of the six questions. The information below represents the output from 40 mins of discussion in the room followed by a feedback session from each of the tables.

#### Table 1 – Question 1

The table concluded that sharing solutions with other forces should be done on balance. They considered the pros and cons of both options.

For

In principle overall support for the sharing of solutions. However, there should be mandation of certain requirements or the deployment of consistent standards.

There were a number of challenges that needed to be addressed:

- It should be done in support of national standardisation of solutions.
- Solutions should be shared with the understanding that the solution is scalable outside the developing force.
- There was reference to consistency with procurement and that it supported a national commercial model (this was at slight odds with the presentation from PDS commercial who felt the commercial impact of sharing was very light touch as all solutions built and shared were likely crown commercial owned)
- The table felt that solutions shared should seek to have a degree of academic research attached to them.
- The big take away was the need to have national standards and that solutions shared should be built to those standards.

Against:

The key element was that all forces models and technologies were quite different and this would be a natural barrier to sharing.

Other factors representing barriers to sharing:

- Funding within Policing and the models applied meant that it was difficult to plan long term so forces wanting to build a solution that others could share (thereby increasing cost and complexity) would make this less attractive. In addition smaller forces just didn't have the capacity to do anything other than local development at small scale.
- Forces had differing strategic priorities so the structure of solutions might present a challenge to sharing (eg Cloud v on-prem)
- Strategic leaders did not broadly support working for the greater good v working for local benefit.
- Change Management costs were sighted as a barrier to sharing – specifically the costs of changing a solution to the latest version, informing other (non-host force) users together with upgrade documentation.
- Development resources were referenced – this was a point made about the varying quality and skill of dev teams across regions. Some forces may need more help and support to lift and shift solutions which may result in extended effort from the sharing force.

From a technology sharing perspective, despite the table agreeing that it is in the best interests of the tax payer and encouraging innovation to proliferate from the ground up. The challenges listed were significant and would incur cost (mostly resource) but this is more about leadership i.e. a willingness to support the approach and a clear mandate to follow through. That said if everyone agreed to a solution and pooled resources there would be scalability in cost.

Table 2, Question 2:

What should be provided by the sharing force?

A number of suggestions were made and in fact the majority were not technical elements. The focus was very much on the supporting documentations. Often the solution that is delivered has been built on weeks and months of research and support. It is these elements that are of greater value than the solution itself.

Key elements of sharing:

- User stories, use cases, requirements, business cases.
- Project plan, risk logs and timescales.
- Investment proposal, financial resource plans
- IRARs and DPIAs – back end documentation.
- Training, BAU support documentation, App support information,
- Organisational understanding eg staff structure to deliver a solution and the skills required.

- Technical Blueprints and core building blocks of the solution.
- Integration details, costs and technologies (separate from the solution or app)
- Lessons Learned, benefits realisation work.
- This is not about sharing technology but more about sharing solutions.

#### Table 3, Question 3:

##### What aftercare should be provided?

The general consensus on the table was that it should be very light touch. Support that is provided should be based on broad ideas and terms and not detailed. The table were concerned that anything beyond basic support would be a drag on the providing force and that would impact local delivery. There was a view that protracted or detailed support from a technical perspective should be charged to the receiving force.

The table were clear that support on sharing is almost always technical in nature and that is where the providing force have the biggest challenges in terms of resourcing.

The table were also very keen on sharing documentation after the solution has been provided and this could be post implementation e.g. benefits or lessons learned documentation.

Not documented but worth considering under the same issue as document sharing might be version change control documentation and any technical documentation supporting this.

#### Table 4, Question 4:

##### How do forces flag their capabilities?

There was a range of suggestions which underpin a national catalogue of activity rather than a range of solutions that could be lifted and shared. On this basis the following items were highlighted as important around the delivery of a national portal:

- Single Gatekeeper – this suggests a centrally held repository with an administrator but no specific repository was suggested other than the knowledge hub which was not well liked.
- There should be a review process prior to the addition of any particular details of a solutions/innovation. The group suggested a periodic review but it may be more appropriate to have an administrator responsible for the review process.
- The catalogue should have required pre-requisites i.e. minimum standards before being accepted onto the catalogue.
- There should be a rationale added to support the addition of a new item.
- Ther catalogue should be categorised – which suggests that it should be searchable on a range of details e.g. problem statements, delivery area, solution technology etc.

- The solutions and the catalogue could be given greater prominence by building in regular show and tell events.
- The catalogue should be made available to NPCC portfolio leads, regional and national working groups/leads. It was felt that national portfolio leads were often unsighted on solutions to known problems because forces have worked independently. A national catalogue would be used to uncover pockets of local innovation.
- It should also be visible to industry so that the solutions could be developed further with 3<sup>rd</sup> sector involvement. (Clearly there will be the issue of IP under this scenario).

#### Table 5, Question 5:

How should we share our ideas and solutions?

There was significant overlap between Q4 and Q5. However the table considered some of the pro's and cons of a solution catalogue. Some of the key benefits of a solutions catalogue approach where the solution has been packaged up for ingest were:

- The solution was readily available and largely complete for purpose.
- There was an understanding that the solution was assured and secure.
- The upload or ingest process was also secure.

The disadvantages of this approach were:

- Version control was always a struggle to keep current.
- Change communication is not always easy and can be missed, it also relies on the host force to push the updates outside their own force boundaries.
- There is a conflict around technical assistance. Who's responsibility is it – sharing force or their own organisation.

Knowledge Hub was discussed and there was a large amount of negativity in the room around the platform though there was a strong defence of its current capabilities i.e. it was much improved and staff should give it another try.

East Midlands Regional Network was mentioned as an option:

The advantages were similar to those of the solution catalogue. The disadvantages were again very similar to those identified for the National Solution Catalogue, a further disadvantage was that it was only available to forces in the East Midlands Region.

#### Table 6, Question 6:

Should we have a central catalogue?

The overriding feedback from the table was a need to have a central catalogue which highlighted what was available to share. The catalogue could/should include the area the solution supported; a problem statement it was looking to address; the documentation used to help build the solution (everything from PID's to full business cases). The solution itself was actually not that key but the work and effort to finding a solution was material that should be made readily available.

Some key responses:

- In addition to a central repository there should be the option to have peer to peer contact. This could be built into the central repository perhaps ie a SPOC for the solution in the force. This would inevitably have to have an expiry date assigned to the SPOC as they often move on.
- Standards that were used by the sharing force, these should be agreed prior to any sharing taking place.
- Skills of staff required to complete the work should be highlighted (some of the challenges faced when sharing solutions is the differing skill levels of the developer and receiver). Typically when there is a skill gap, the sharing force has to spend more time packaging and supporting the share.
- The table questioned who would fund the support to other forces and how forces would be billed (the principle outlined at the start of the session was that sharing should be done on a quid pro quo basis and that billing should not be part of the discussion) however, the concerns on the level of support are valid)
- There was some discussion on versioning and tracking changes to the solution – there was no clear view from the table around who should do this.
- There was some discussion around the pros and cons of peer to peer working. The benefits being that uncontrolled demand into a force from multiple forces would be reduced. However, this does increase the risk of solution duplication.