SCOTTISH POLICE AUTHORITY
ÙGHDARRAS POILIS NA H-ALBA

Agenda Item 3.4

Meeting	Policing Performance Committee
Date	6 December 2023
Location	Video Conference
Title of Paper	HMICS Assurance Review of PS Demand Analysis & Management (6/21) – Police Scotland Improvement Plan Update
Presented By	Gillian Cherry, Head of DPU
Recommendation to Members	**For Discussion**
Appendix Attached	Yes Appendix A –Summary of Closed Recommendations with Impact on Service Delivery

PURPOSE

The purpose of this paper is to provide Committee members with a summary of Police Scotland's progress on delivery against recommendations from the HMICS Assurance Review of Demand Analysis and Management 2021.

This is the second progress report presented to the Committee on this issue.

Members are invited to discuss the contents of this paper.

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1. BACKGROUND

1.1　The previous progress update on the Demand and Analysis Improvement Plan was last reported to committee on 11ᵗʰ October 2022.

1.2　At that time we reported progress and the following status of the original 12 recommendations:

4　recommendations as closed: R01; R03; R04; R06.
8　recommendations as ongoing: R02; R05; R07; R08; R09; R10; R11 & R12.

2. PROGRESS WITHIN REPORTING PERIOD

2.1　Since the last report, a further **7** recommendations have been closed by HMICS- R02; R05; R08; R09; R10; R11 & R12.

1 recommendation currently remains open:
➢ Recommendation 7 -Formalise Organisation Design Support.

We have identified the key achievements/outcomes and impact on service delivery for the **closed** recommendations which are outlined in the section 2.2 of this report.

Emerging Strategic/Operational Challenges in relation to the delivery of the remaining 1 open recommendation are outlined in section 2.3 of this report.

2.2　**Closed Recommendations - Summary of Key Achievements**

In summary, the implementation of the recommendations now closed has resulted in improvements in the following activities:

Governance: enhanced engagement and reporting at Tactical/Strategic levels.

Guidelines: range of Demand products developed including Demand Profiling Tool and Demand Dashboards; integration of Demand within the Force Strategic Assessment 2023-25.

A summary of the recommendations/outcomes and impact on service delivery for each of the closed recommendations is attached at Appendix **A.**

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In their consideration of closing some of these recommendations, HMICS have identified (i) good practice and also (ii) indicated their expectations within their planned scrutiny for 2024.

Areas of good practice:

R01 Demand Framework and Delivery Plan	The DPU tactical plan provides direction and rationale for DPU activity for the next two financial years (until April 2024) in line with the DPU strategy. The plan highlights key activities and operational plans designed to meet the strategic and tactical requirements of the force. A method pack has been developed which allows for the implementation of demand products (Demand Baseline), including stakeholder analysis, a communications and engagement strategy, aims and principles, design and concepts, a timeline, and contacts for business area engagement. HMICS consider this to be good practice.
R04 Analytical Products - Design, Delivery and Transparency	The inclusion of standards, weights and measures (SWM) within the Police Scotland Data Catalogue will improve the consistency and quality of data reporting by ensuring standardisation across the organisation when applying calculations to demand and productivity-related measurements. Two key supporting documents DPT data log and Statistical unit SWM document provide increased transparency of and confidence in demand data. HMICS consider this to be good practice.

Expectations for planned scrutiny activity:

R03 Continuous Improvement and Organisational Learning Framework	HMICS have indicated that they expect this work to continue under the broader remit of effective demand management within Strategic Workforce Planning Assurance Review Recommendation 5. A workshop has been arranged late Nov to discuss with CI how the DPU products can further support, evidence, and drive continuous improvement across the organisation.
R05 Leadership of Scrutiny Processes	Demand Analysis Assurance Map concluded high levels of assurance activities within the department. HMICS acknowledged that a significant amount of work has been achieved but there is further to be done in terms of both

	SPA and DPU. This will be reviewed again as part of the 2024 inspection work on the SPA and strategy and performance.
R09 Promote Demand Products	HMICS have indicated that evidence of products being used at tasking and co-ordinating meetings will also be considered in Strategy and Performance Review in early 2024.
R10 Tasking and Co-ordinating Process use of Demand Products	HMICS have indicated that the effectiveness of Regional Delivery Boards would be considered in planned Strategy and Performance Review in early 2024.
R11 Further Development of Demand Forecasting Approach	The DPU Data Science team are looking to standardise data science practices and in the first instance have begun work to build a forecasting pipeline which when complete can be adapted for different datasets. The Data Science team are exploring natural language processing algorithms and how they can be best applied to the DPU. A workstream now being developed further by DPU (from CDO MSc Students) evaluated which factors contribute to the average speed of answer of our 999 and 101 calls. Understanding what drives this demand will enable more targeted forecasting and ultimately allow our staffing levels in C3 to be more directly aligned with demand.
R12 Analysis Transformation to Include Demand Approach	HMICS consider that notwithstanding financial challenges that the capacity of the DPU has not increased and capability in terms of data science remains a risk. The Chief Data Office (CDO) hosted 3 MSc Data Science placements over the summer, examining various aspects of policing. The DPU supported (as critical friend) feedback and considerations for next steps on the project outputs. The CDO and DPU have also supported a successful bid for researchers from Edinburgh University to work on understanding and optimising resource allocation in rural areas. This funding was secured following participation in an

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	industry AIMday at the University, and work is ongoing to complete the project. The CDO, supported by DPU, have developed a Data Science Strategy and identified both key strategic priorities for data science and current bottlenecks. This strategy is undergoing governance, but once signed off will lay the ground for the long-term development of data science within Police Scotland and, act as a key enabler for predictive analysis in future.		

2.3 **Open recommendations-strategic challenges**

It is recognised that the remaining recommendation requires further consideration and the development of a Force wide approach, in recognition of current Force developments and priorities.

A summary of the current status of recommendation 7 is provided:

Recommendation	What we did	What we still have to do	Revised timescales
R07 Formalise Organisational Design Support	DPU attend the regular LP-SDR meetings, engaging with the Service Design function regarding its methodology for populating the Target Operating Model and exploring how the DPU products can support, and any future developments required to further support. HMICS considers that such a function with appropriate expertise and systematic structures to support implementation of organisational change is essential to	We will consider in the development of the refreshed SWP how we define our approach and processes in relation to Organisational Design, including how we provide organisational design support.	Dependency with the Timescales outlined in the refreshed SWP Implementation Plan.

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	the effectiveness of implementing workforce planning and must be informed by demand analysis.		

2.4 **Next Steps**

A short life working group is to be set up that will determine the best way forward around supporting the Data Scientists with their ICT requirements, supported by digital division applications team, Operations and support, packaging, ISO's, Solutions Architects, DPU and CDO.

Workforce data has now been approved for DPU to access via their data repository and are amid testing the data landed and quality for future analysis, with the intention of overlaying this with other national data sets (e.g. incidents).

Use cases include LP demand because of staff absences and potential triggers, LP demand and the utilisation of overtime and staff turnover and specialisms.

DPU have been approached by LP SDR around our capacity and capability to assist in delivering a revised set of OBLs for the territorial divisions.

Preliminary discussions have begun but keen to highlight the current stance of recommendation 12 - HMICS consider that notwithstanding financial challenges the capacity of the DPU has not increased.

3. FINANCIAL IMPLICATIONS

3.1 There are no financial implications in this report.

4. PERSONNEL IMPLICATIONS

4.1 There are no personnel implications in this report.

5. LEGAL IMPLICATIONS

5.1 There are no legal implications in this report.

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6.   REPUTATIONAL IMPLICATIONS

6.1   There are no reputational implications in this report.

7.   SOCIAL IMPLICATIONS

7.1   There are no social implications in this report.

8.   COMMUNITY IMPACT

8.1   The improvements delivered by these recommendations will improve the service to the public and therefore the communities Police Scotland serves.

9.   EQUALITIES IMPLICATIONS

9.1   There are no equalities implications in this report.

10.   ENVIRONMENT IMPLICATIONS

10.1   There are no environmental implications in this report.

RECOMMENDATIONS

Members are invited to discuss the contents of this paper.

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Appendix A-summary of closed recommendations with Impact on Service Delivery

Recommendation	Recommendation description	What we did	Impact on service delivery
R01 Demand Framework and Delivery Plan	Police Scotland should develop a demand framework and delivery plan as soon as possible to include the implementation of a structured engagement model to support the effective analysis and interpretation of demand information.	We developed (I)a DPU tactical plan to provide direction and rationale for DPU activity for the next two financial years (until April 2024) in line with the DPU strategy,designed to meet the strategic and tactical requirements of the force and (ii)a method pack which allows for the implementation of demand products (Demand Baseline), how to create these products, how to conduct business engagement and a timeline.	The document set is in place to deliver against the recommendation and to imrpove the understanding of demand and the use of the data by "customers" within Police Scotland and the SPA
R02 Annual Demand Baseline Product Integration .	Police Scotland should integrate the development of the annual demand baseline product with the force strategic assessment to ensure a more strategic focus, consistency of approach and address areas where demand information is currently lacking	We integrated our Demand Baseline 2022 into the Force Strategic Assessment 2023/28. We have established governance arrangements for monitoring the STRA 2023/28 recommendations through the performance framework with Regular (six monthly) reports provided to the Strategic Operational Performance Board (SOPB).	A streamlined Thematic Demand Baseline will still be completed each year, based on our established Demand Assessment model ,and will report on thematic areas that have seen significant changes in demand;consistent with the longer-term approach to assessing demand as part of the STRA.
R03 Continuous Improvement and Organisational Learning Framework	Police Scotland should develop a cohesive approach to failure demand as part of a corporate continuous improvement and organisational learning framework.	DPU have engaged with the Open University and is now working in collaboration with Professor Paul Walley. Prof Walley specialises in failure demand, and has worked with other Police forces across Britain examining this area of demand. We identified Crime Demand Survey data collected by the DPU as the dataset for collaborative work to develop an approach to learning from failure demand.	This approach will form part of overall continuous improvement and contribute to an organisational learning framework for the service;Implementation of this approach is dependent on other areas of the organisation. HMICS have indicated that they expect this work to continue under the broader remit of effective demand management within Strategic Workforce Planning Assusrance Review Recommendation 5
R04 Analytical Products - Design, Delivery and Transparency	Police Scotland should further build on the approach to capturing the standards, assumptions, caveats and quality issues around demand information (both source systems and data repository) and ensure increased transparency around these in designing and delivering analytical products.	DPU have been working alongside the Data Governance and Management Team to transfer our Standard Weights and Measures into Police Scotland's Organisation wide Data Catalogue. Two key supporting documents have been created to support our demand and analytical products as part of the new governance procedure	The inclusion of SWM within the Police Scotland Data Catalogue will imporve data quaility and ensure standardiasion across the organisation when applying calculations to demand and productivity-related measurements Two key supporting documents DPT data log and Statistical unit SWM docuemnt provide increased transparency of and confidence in demand data. HMICS consider this to be good practice
R05 Leadership of Scrutiny Processes	Police Scotland and the Scottish Police Authority should, in line with a demand framework, review the operational leadership, governance and focus of their scrutiny processes around demand analysis and management.	DPU have developed an assurance map of scrutiny processes around demand analysis and management. The DPU provided high-Level demand analysis contributing to the strategic assessment for the following boards/groups: Organisational Demand and Delivery Group (ODDG) Operational Delivery Board (ODB) Demand Design Resource Board (DDRB).	Demand Analysis Assurance Map concluded high levels of assurance activities within the department. Request for additional resources considers alignment with strategic priorities, demand, service design, change and best value and provide for increased scrutiny through responses from both key and enabling functions together with relevant approval process. HMICS acknowledged that a significant amount of work has been achieved but there is further to be done in terms of both SPA and DPU. This will be reviewed again as part of the 2024 inspection work on the SPA and strategy and performance.

R06 Strengthen Strategy Development to include Demand Analysis	Police Scotland should further strengthen its approach to strategy development to include consistent involvement of demand analysis and organisational design elements.	We developed our approach using our strategy development toolkit to develop an evidence base for a strategy, including demand and other data, and how this links through, including to design and delivery. Relevant design products, as well as demand baseline and bespoke products form part of the scoping, research and development stages Demand analysis is a key element which informs the Strategic Assessment, as is organisational assessment.	The strategic assessment and demand products are used to prioritise in force planning, for example the creation and refresh of the Annual Police Plan and portfolio delivery plans.
R08 Performance Reporting Framework	Police Scotland should further develop its performance reporting framework to better integrate demand information and analysis and provide improved transparency at local level.	We reviewed our performance framework and include new demand led performance measures,supporting our Strategic Outcomes.	Quarterly Performance reports presented to the SPA PPC provides increased transparancy in relation to delivering our Strategic Outcomes. Ongoing enaggament with SPA Head of Strategy and Performane consider improvements to performance reporting
R09 Promote Demand Products	Police Scotland should further promote demand products, including direct input and support to divisional management teams, regarding their use and benefits, as well as setting out the role, responsibilities and authority of the Demand and Productivity Unit and Analysis and Performance Unit in providing support and guidance.	A fully refreshed stakeholder analysis has been conducted and infomed the DPU Tactical Plan.his will inform a new Communications & Engagement plan which will promote demand products and provide enhanced support and guidance to stakeholders. The DPU has presented the published Dashboards throughout the organisation, advertising their existence and how to use them. This has been done through first line manager briefings, Intranet publications and at formal board meetings such as the regional and operational delivery boards.	The usage of DPU products provides an evidence base to understand policing demand. HMICS have indictaed that evidence of products being used at tasking and co-ordinating meetings will also be considered in Strategy and Performance Review in early 2024
R10 Tasking and Co-ordinating Process use of Demand Products	Police Scotland should ensure consistency and compatibility (not requiring mandatory compliance) in revised tasking and co-ordinating processes and the associated use of demand products across all local policing divisions.	We included engagement with Local Policing and Operational Delivery Board in our DPU Tactical Plan.focus on engagement with Local Policing andOperational Delivery Board (ODB) chaired by DCCs considers current/emerging threats and demands and maintains the Threat and Demand Register. DPU Tactical Plan highlights further focus for DPU to engage with Local Policing, with DPU now a regular fixture at national meetings, particularly change programmes, such as Local Policing Design and National Public Protection review. .Tactical Assessment, including Threat and Demand Register ;Changing Threats & Demands and Look forward at emerging threats/demands presented on regular basis for consideration/decision at ODB.	Use of demand products in Local Policing Divisions to enhance tasking processes. Increased DPU engagement with Local Policing in the promotion of DPU products,dashboards and Demand Baseline reports. HMICS have indicated that the effectiveness of RDBs would be considered in planned Strategy and Performance Review in early 2024.
R11 Further Development of Demand Forecasting Approach	The Scottish Police Authority and Police Scotland should commit to further development of the demand forecasting approach to support medium to longer term planning and decision-making.	Data Sceince Working Group DSWG had developed a high level DS Strategy an output of the Discovery Phase providing a Force wide integrated approach to Data Science. Our approach to the new STRA of integration of demand information and use of improved horizon scanning and forecasting	Demand discussions are embedded in SPA Policing Performance Committeee papers. Further progress on the Data Sceince Strategu and Demand Forecasting abd will be further evidenced in People Strategy and SWP Plan and further considerared by HMICS within our response to recommendations 6 and 7 of the Strategic Workforce Planning Assurance Review.

R12 Analysis Transformation to Include Demand Approach	Police Scotland, in its development of the Full Business Case for the Analysis and Performance Unit re-design, needs to include proposals for further development of the demand approach and the Demand and Productivity Unit itself.	Business case for APU/DPU transformation developed and fully considered by Change Board and the SPA. In March 2023 due to the financial climate re PSoS revenue funding it was not possible to secure the desired funding to take Analysis & Demand Transformation to the next stage.	The DPU have planned service delivery improvements and measures in place to develop skills and capacity within the team to support Police Scotland Demand approach, the impact of which will be measurable in the implementation of Recommendations 5,6 and 7 of the HMICS Assurance Review of Police Scotland Workforce Planning. We will continue to review opportunities to implement the overall plan in differing stages incrementally where financially possible. Over the next six to twelve months, work will be progressed in areas such as training, technology and tasking and reporting. Full implementation of Analysis & Demand Transformation will continue to be highlighted as a priority and a future bid for funding will be presented at the next available opportunity. HMICS consider that not withstanding financial challenges that the capacity of the DPU has not significantly increased as yet and capability in terms of data science still remains a risk.