



Parse & Correlate 2024 Consultation

DCC Conclusions on proposed changes to Parse
& Correlate software components and DCC
procurement approach

Date: 17 September 2024

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Classification: DCC Public

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1. Introduction and Context

1. The Data Communications Company (DCC) is Britain's digital energy spine, supporting the transformation of the energy system. DCC is licensed by the Government and regulated by the energy regulator Ofgem to connect smart meters in homes and small businesses across Great Britain to a single secure, digital network. DCC supports the roll-out and operation of second-generation (SMETS2) smart meters, as well as the migration and operation of existing first-generation (SMETS1) meters onto the network.

1.1. Background

2. SEC Section H11 requires the Smart DCC (DCC) to develop, maintain and provide support and assistance to DCC Users for the supply of computer software known as the Parse and Correlate (P&C) software. More information on P&C can be found on the DCC website¹.
3. In accordance with SEC Section H11.6 the DCC is required to consult with Users when proposing to develop any version of the P&C software.
4. DCC previously consulted on updates to P&C software, moving from Oracle Java 7 to Oracle Java 8 in October 2021² and published conclusions to this consultation in December 2021³. An uplift to Oracle Java 8 was implemented through the June 2022 SEC Release.
5. In 2023 Oracle announced changes to its Java licensing model, which impacts the arrangements that DCC has in place today. Therefore, DCC must make appropriate technical changes to ensure that our P&C obligations continue to be met and ask for stakeholder feedback on our recommended approach within Section 2 of this document. Additionally, we ask for views on future P&C service considerations.
6. Further to the technical changes we cover within Section 2, the contract with Critical Software (CSW) for P&C is due to expire on 30 November 2024. This document sets out an update on DCC's commercial approach within Section 3.
7. DCC's next steps are outlined within Section 4 of this document.

1.2. DCC P&C 2024 Consultation

8. DCC consulted⁴ between the 13 June 2024 and 29 July 2024 on matters relating to provision of P&C software. This consultation sought stakeholder views on both the proposed technical changes to the P&C service and the commercial approach needed for ongoing provision of the service.
9. DCC and CSW attended Technical Architecture and Business Architecture Sub-Committee (TABASC) on 4 July 2024 to discuss the content of the consultation with customers and answer any questions or clarifications to support customers in their response. A further engagement with TABASC took place on 5 September 2024 where DCC provided an update on the technical aspects of our P&C proposals.
10. TABASC Update 5 September 2024. Customers agreed with DCC's recommendations on the outcome of the consultation, no further comments were captured. The TABASC chair

¹ <https://www.smartdcc.co.uk/our-smart-network/network-products-services/parse-and-correlate/>

² <https://www.smartdcc.co.uk/consultations/parse-and-correlate-consultation/>

³ <https://www.smartdcc.co.uk/consultations/dcc-response-to-the-parse-and-correlate-consultation/>

⁴ <https://www.smartdcc.co.uk/consultations/parse-correlate-2024-consultation/>

requested that the Final Impact Assessment was to be brought to the next TABASC meeting for endorsement on 03 October 2024.

2. Consultation Questions & Responses

2.1. Questions

11. The consultation presented the consultation questions as set out in Table 1.

Q1	Do you agree with DCC's recommended approach of using the latest version of Java 8 rather than the Java 8 patch version? Please provide your rationale if you disagree with the proposal.
Q2	Do you agree with the recommendation to uplift P&C to Java version 21? Please could you estimate a suitable timeframe of when you would like this uplift to take place. Please provide your rationale if you disagree with the proposal.
Q3	Do you agree with the proposal to implement a containerised P&C solution? Please provide your rationale if you disagree with the proposal.
Q4	Do you agree with shutting down the current P&C solution after the proposed 18-to-24-month window? Please provide your rationale if you disagree with the proposal.
Q5	Do you agree with DCC's proposal to continue supporting the P&C library in addition to the containerised solution, at a marginal cost? Please provide your rationale if you disagree with the proposal.
Q6	Do you agree that access to P&C software be made available through the DCC's website and that no alternative is required? Please provide your rationale if you disagree with the proposal.
Q7	Do you agree with the procurement approach suggested? If No, please provide your rationale and suggested preferred approach.
Q8	As P&C Users, do you perceive any costs or other impacts to yourselves should a new service provider be awarded the P&C contract? Please could you quantify the potential disruption. This will support any future cost/benefit analysis to inform the DCC's procurement strategy.

Table 1 – consultation questions

2.2. Responses

12. DCC received a written response from 6 respondents.

3. Analysis of Responses

13. DCC has analysed the feedback provided and views of stakeholders. Subject matter experts within DCC have reviewed every response.
14. DCC has structured the analysis of responses by question, with each including:
 - an overview of the responses on the topic; and
 - a DCC response.

3.1. Question 1

15. DCC sought views on Java 8 version preferences, asking: ***Do you agree with DCC's recommended approach of using the latest version of Java 8 rather than the Java 8 patch version? Please provide your rationale if you disagree with the proposal.***

Respondent View

16. DCC received six responses to this question.
17. Three respondents agreed with DCC's proposal to use the latest version of Java 8 rather than the Java 8 patch version to support our P&C service. Benefits noted included that this seemed the easiest and simplest approach, plus avoids unnecessary licencing discussions.
18. One respondent was neutral to which version of Java 8 was used; however, required that OpenJDK (an open-source implementation of the Java Platform) support is not affected and DCC would be running the latest version in order to easily adopt any security fixes which are published.
19. Two respondents disagreed with DCC's proposal due to the latest Java 8 version being around 5 years old and this introduces an increased risk of security vulnerabilities.

DCC Response

20. Having considered consultation responses, DCC proposes to continue support of Java 8 (patched) through OpenGDK until support for this version expires in November 2026. This will not require P&C Users to enter into any new licence arrangements. Users that rely on Java 8 after this point will potentially need to explore licence arrangement through Oracle who will be supporting this platform until around 2030. This approach does not introduce any security vulnerabilities.

3.2. Question 2

21. DCC sought views on P&C uplift to Java 21, asking: ***Do you agree with the recommendation to uplift P&C to Java version 21? Please could you estimate a suitable timeframe of when you would like this uplift to take place. Please provide your rationale if you disagree with the proposal.***

Respondent View

22. DCC received five responses to this question.

23. Four respondents were supportive of an uplift to Java version 21, one respondent was neutral on the basis the Docker container they use to host P&C does not currently offer an OpenJDKv21 build (but does support v17).
24. Additionally, other software components and services critical to the support of utilising P&C were identified as not presently supporting Java 21 (but do support Java 17).
25. Respondents provided a range of dates for suitable timeframes for this uplift to take place from within a couple of months of this consultation to early 2026.

DCC Response

26. DCC welcomes the support for moving to Java 21 but recognises that there are potential challenges for Users of the P&C software. DCC continues to support an approach where P&C moves from Java 8 directly to Java 21. A transition period will be required where both Java 8 and Java 21 P&C versions are supported to allow users to update their systems.
27. DCC recognises that users of the P&C software rely on other third party software components and services and that some of these may not yet have committed to dates when Java 21 could be supported. As such, DCC will consult towards the end of the transition period so this risk can be identified and managed. This consultation will take place around April/May 2026 to allow sufficient time in advance of OpenGDK Java 8 expiration.

3.3. Question 3

28. DCC sought views on P&C containerisation asking: ***Do you agree with the proposal to implement a containerised P&C solution? Please provide your rationale if you disagree with the proposal.***

Respondent View

29. DCC received five responses to this question, all of which were supportive of implementing a containerised P&C solution. One respondent noted that they were reliant on the P&C library and that any changes to this should be consulted on.
30. The support of two respondents for a containerised solution was on the understanding that there would also be continued support for the current non-containerised solution.
31. One respondent provided support for a containerised solution providing the DCC version of the container supports the same HTTP API (Application Programming Interface) and confidence that all packages deployed into the container are released under suitable licences.

DCC Response

32. DCC welcomes support for providing a containerised P&C solution. We respond to points raised directly in relation to the P&C library within our response to Question 5. We confirm support for non-containerised solution will continue through the P&C Library. We can also confirm that the HTTP API will be deployed and supported. The APIs would be preserved across the update from the current P&C solution to the proposed one.
33. DCC notes that the most cost-effective solution would be if all P&C Users moved to using a Java 21 containerised version where DCC would release patched versions of the container meaning that P&C Users would not need implement patches themselves.

3.4. Question 4

34. DCC sought views on P&C close down timeline, asking: ***Do you agree with shutting down the current P&C solution after the proposed 18-to-24-month window? Please provide your rationale if you disagree with the proposal.***

Respondent View

35. DCC received five responses to this question, all of which were supportive of shutting down the current P&C solution after the proposed 18-to-24-month window. This was on the understanding that:

- a. Both a containerised and non-containerised version of Java 21 P&C would be made available at the time of transition from Java 8 to Java 21.
- b. The Application Programming Interfaces (APIs) are preserved across the update.
- c. The licencing terms of the container solution are acceptable.
- d. Third party software components and services are compatible with the version of Java used.
- e. The timeframes are clearly communicated.

DCC Response

36. DCC welcomes the support and considered responses to this question, we address the specific points raised below:

- a. Yes. Both a containerised and non-containerised version of Java 21 P&C will be made available until such time that DCC can consult and receive industry-wide support for ending the option of a non-containerised version.
- b. Yes. The APIs would be preserved across the update from the current P&C solution to the proposed one.
- c. P&C Users will not need to enter license agreements with third parties to use any P&C versions whilst it remains supported by OpenGDK. OpenGDK support expires for version 8 in November 2026.
- d. DCC cannot guarantee that support of P&C User third party software components and services will be compatible with Java version 21; however, we will consult towards the end of the transition period so this risk can be identified and managed. This consultation will take place around May 2026 to allow sufficient time in advance of OpenGDK Java 8 expiration.
- e. Yes. The timeframes will be discussed with TABASC; however, OpenJDK Java support ends in November 2026 therefore this is a likely end to the transition period.

3.5. Question 5

37. DCC sought views on ongoing support for the P&C library, asking: ***Do you agree with DCC's proposal to continue supporting the P&C library in addition to the containerised solution, at a marginal cost? Please provide your rationale if you disagree with the proposal.***

Respondent View

38. DCC received five responses to this question.
39. The majority of respondents were supportive of continued support for the P&C library with a number of respondents noting that significant changes would need to be made should this not be available in the future; recommending that any planned closure would need industry engagement and support.
40. One respondent suggested the 'marginal cost' of keeping the service open should be a consideration.

DCC Response

41. DCC confirms that the P&C Library will continue to be available and changes to this will be through consultation only. Future costs relating to the library service will be presented to SEC Sub-committees and these committees can provide direction on maintaining the library.

3.6. Question 6

42. DCC sought views on P&C software access, asking: ***Do you agree that access to P&C software be made available through the DCC's website and that no alternative is required? Please provide your rationale if you disagree with the proposal.***

Respondent View

43. DCC received five responses to this question. Three respondents supported the proposal, and two respondents expressed the need for further information noting that 'container-builds' are not single file downloads that can be downloaded from a standard website.

DCC Response

44. DCC can confirm that P&C Users will continue to be able to download P&C from the same SharePoint site that they do today. DCC consulted using the term 'website', which did not fully describe the SharePoint (which is available only to DCC users) and is in addition to our public facing website.
45. To minimise any security risks P&C Users can download a docker file from the DCC SharePoint into their local registry before building the P&C application.

3.7. Question 7

46. DCC sought views on DCC's proposed P&C procurement approach, asking: ***Do you agree with the procurement approach suggested? If No, please provide your rationale and suggested preferred approach.***

Respondent View

47. DCC received six responses to this question, all of which were supportive of the DCC proposed approach.
48. One respondent said that given the P&C Service Provider contract term will end in November 2024 and taking into account the criticality of the P&C services, engagement would have been expected to start sooner. Additionally, the respondent welcomed proposals by DCC to further engage with the SEC Panel and Sub Committees on this matter.
49. One respondent asked whether the DCC owns the Intellectual Property (IP) for the P&C service.

DCC Response

50. DCC acknowledges the point made that engagement with the industry should have started earlier, given the contract expiration during November 2024. DCC can confirm that there has been no impact / risk to service and do not foresee any additional cost to the service as a result of this. DCC welcomes support for further engagement, we can confirm that following initial engagement DCC has engaged with the Security Sub Committee in August, the Technical Architecture and Business Architecture Sub-Committee (TABASC) in early October and will be presenting to the SEC Panel in October.
51. DCC can confirm that we own IP in relation to the P&C service and so no permissions are required from the incumbent provider.

3.8. Question 8

52. DCC sought views on impacts to P&C Users if the DCC service provider were to change, asking: ***As P&C Users, do you perceive any costs or other impacts to yourselves should a new service provider be awarded the P&C contract? Please could you quantify the potential disruption. This will support any future cost/benefit analysis to inform the DCC's procurement strategy.***

Respondent View

53. DCC received five responses to this question.
54. One respondent's view was that there shouldn't be a cost or service impact given the baseline assumption is that any new provider should provide the same level of service and functionality. P&C Users should be further engaged if this is not the case.
55. A number of respondents suggested that there may be concerns as to the reliability, stability, and performance of a new product and risk to the current steady state of performance in live service. It would be difficult to understand these potential costs at this time.
56. One respondent noted that a new Service Provider may require a re-UEPT testing phase and re-certification of all of the currently held User Roles which could have associated time and resourcing costs.

DCC Response

57. DCC is grateful for the points raised by respondents and confirms that these have been captured in advance of any P&C contract award. DCC can confirm that if as a result of the re-procurement of P&C, any changes to the service or a transition period is needed, these will be undertaken only following stakeholder engagement.

4. Conclusions

58. DCC has addressed the comments that have been received from industry as a result of this consultation. DCC does not believe that the views expressed require a change in our approach to either the proposed technical change or re-procurement of the service, other than where specifically noted within Section 3 of this document.

5. Next Steps

59. DCC will present the final costs of the Impact Assessment with regards to the technical changes as presented on the consultation to TABASC on 03 October 2024. Following customer endorsement at this committee a paper will be submitted to SEC Panel for approval.

60. DCC will follow the same approach as above in relation to the progress of the procurement activity with a view to having SEC Panel approval at the end of October 2024.