Assessment Procedure Consultation Responses

P454 ‘Removal of BSC obligations to provide BMRS Data via TIBCO and the High Grade Service’

This Assessment Procedure Consultation was issued on 27 September 2023, with responses invited by 17 October 2023.

ELEXON

Phase

- Initial Written Assessment
- Definition Procedure
- **Assessment Procedure**
- Report Phase
- Implementation

Consultation Respondents

Respondent	Role(s) Represented
Drax	Generator, Supplier
National Grid Electricity System Operator (NGESO)	System Operator
Outlook Energy	Interconnector User, Non Physical Trader, Virtual Lead Party
RWEST	Generator, Supplier
Softwire Technology Limited	Consultant, Supplier Agent
Tom Bowcutt (Independent Personal Views)	Consultant
Confidential Response	Non-Physical Trader

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Question 1: Do you agree with the Workgroup's initial view that P454 does better facilitate the Applicable BSC Objectives than the current baseline?

Summary

Yes	No	Neutral/No Comment	Other
7	0	0	0

Responses

Respondent	Response	Rationale
Drax	Yes	We agree that the proposal could better facilitate applicable objective d) Promoting efficiency in the implementation and administration of the balancing and settlement arrangements so far as the services currently provided are substituted with equivalent or better performing services. This has been the stated objective of the proposer.
NGESO	Yes	(d) Positive impact – improve efficiency of transition to newer systems Yes, the ESO agrees that P454 has a positive impact on BSC Objective (d) in improving efficiency, reliability and enablement to transition to a newer system. Currently under TIBCO if a transmission issue occurs whilst uploading large, zipped files from Elexon, the data is lost, and it is not reloadable. This is evidenced in several empty days within the ESO databases. It is expected that IRIS JSON message data will be easier to read, compared to the data currently being produced by TIBCO and will enable retrieval of the IRIS JSON message in the event of a transmission message failure.
Outlook Energy	Yes	With reference to objective d)
RWEST	Yes	-
Softwire Technology Limited	Yes	P454 will remove a critical BSC block on deploying modern, cloud-native BMRA data services under the umbrella of the Kinnect programme. The existing High Grade / TIBCO service does not fit Kinnect programme objectives, tied as it is to expensive end-of-life technology and on-premises servers. The modification proposal quotes no new subscriptions since 2014 (and a drop of 50% since then), proving that the High Grade service is of no value to new market participants.

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Respondent	Response	Rationale
		Removing High Grade (TIBCO) obligations will allow Elexon to deploy modern low-cost messaging technologies as a replacement service, improving data access and reducing costs across the industry. The impacts against Applicable BSC Objectives are improved efficiency (via lower operational costs for Elexon and BSC Parties, improved data access) and promoting efficient competition in electricity markets (via lowering the barrier to accessing timely and complete market data).
Tom Bowcutt (Independent Personal Views)	Yes	Costs for legacy technology are being born by industry participants (and ultimately Customers). Significant industry investment has been made to modernise systems and manage the transition to more appropriate technology types. It is not appropriate that those avoiding the cost or migration are subsidised by the wider industry.
Non-Physical Trader - Confidential Response	Yes	We agree with the findings for the relevant BSC objectives and reaffirm the positive benefit that this would have on competition. Smaller parties should not have to subsidise a legacy system only used by parties pre-2014. We also see positive benefit to the objective to efficiently implement balancing and settlement arrangements, because without the obligation to provide TIBCO the system can become cheaper and more performant.

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Question 2: Do you agree with the Workgroup that the draft legal text in Attachment B delivers the intention of P454?

Summary

Yes	No	Neutral/No Comment	Other
6	0	0	0

Responses

Respondent	Response	Rationale
Drax	Yes	The only question/ issue we do have is there does not appear to be an obligation to provide substitute services before removal of the existing provisions.
NGESO	Yes	Yes, the ESO agrees that the draft legal text in Attachment B does deliver the intention of P454 for the removal of BSC obligations to provide BMRS data via TIBCO and the High Grade service.
Outlook Energy	Yes	-
RWEST	Yes	-
Softwire Technology Limited	Yes	-
Non-Physical Trader - Confidential Response	Yes	Small, code-only change that delivers the intention of P454

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Question 3: Do you agree with the Workgroup that the draft amendments to the CSDs in Attachment C delivers the intention of P454?

Summary

Yes	No	Neutral/No Comment	Other
5	0	1	0

Responses

Respondent	Response	Rationale
Drax	No comment	No comment
NGESO	Yes	Yes, the ESO agrees that the draft amendments to the CSDs in Attachment C delivers the intention of P454.
Outlook Energy	Yes	-
RWEST	Yes	-
Softwire Technology Limited	Yes	-
Non-Physical Trader - Confidential Response	Yes	Appears to remove protocol-specific requirements, which is consistent with the intention of P454.

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Question 4: Do you agree with the Workgroup's recommended Implementation Date?

Summary

Yes	No	Neutral/No Comment	Other
5	1	0	1

Responses

Respondent	Response	Rationale
Drax	No	The removal of the obligation is the start of the process and we trust that Elexon will not decommission TIBCO service until such time as all current users of the solution are satisfied with the replacement Insights Solution, however implementation of the P454 removes the obligation for Elexon to provide the service and could therefore do so unilaterally, without that agreement. i.e. Elexon comiitment to maintain the 'TIBCO service until March 2024', whilst outside the scope of this consultation is insufficient and needs to reference sign-off by current users.
NGESO	Yes	Yes, the ESO agrees with the recommended implementation date of 5 working days after the Authority approval for the document change. We recognise that this is a document-only change and therefore we believe this is an appropriate timescale. In regard, to the March 2024 target date for moving fully to the new Service and retiring TIBCO, the ESO also supports this and has been proactively progressing with this change to ensure this deadline is met. The ESO does recognise that some industry participants would have a focus on winter trading up until that target date and therefore could make it difficult for some TIBCO users to meet that timeframe.
Outlook Energy	Yes	-
RWEST	Yes	-
Softwire Technology Limited	Yes	-

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Respondent	Response	Rationale
Tom Bowcutt (Independent Personal Views)	-	Decommissioning dates are more relevant. There should be a minimum of 6 months between approval and decommissioning but this should be managed directly with those impacted, see comments on Alternative Modification.
Non-Physical Trader - Confidential Response	Yes	We support implementation as soon as possible: this is a small change, the contract renewal deadline for TIBCO is looming, and the industry would be harmed if the Insights solution's development is delayed

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Question 5: Do you agree with the Workgroup that there are no other potential Alternative Modifications within the scope of P454 which would better facilitate the Applicable BSC Objectives?

Summary

Yes	No	Neutral/No Comment	Other
6	1	0	0

Responses

Respondent	Response	Rationale
Drax	Yes	-
NGESO	Yes	Yes, the ESO agrees that there are no other Alternative modifications within the scope of P454 that would better facilitate the BSC Objectives. We feel that the proposed document change is the way forward to facilitate the decommission of TIBCO and the eventual move to the new system.
Outlook Energy	Yes	-
RWEST	Yes	-
Softwire Technology Limited	Yes	-
Tom Bowcutt (Independent Personal Views)	No	I suggest an Alternative Modification is considered to extend lifetime of the service but to target those costs directly to those still using it rather than socialising. This will provide motivation for existing users to accelerate the transition but also avoid just turning off what may be a critical data feed. Costs considered should include TIBCO licences but also ELEXON and other costs in maintaining and supporting legacy solution for the few still utilising. These should be set one year in advance, allowing users to factor in the cost of staying on the legacy service when planning budgets. Whilst there may be a small number of users those may represent a large sector of the market (e.g., if they are a data provider used by the majority of participants).
Non-Physical Trader –	Yes	Removing protocol-specific references is most consistent with the BSC objectives

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Respondent	Response	Rationale
Confidential Resposne		

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Question 6: Do you agree with the Workgroup's assessment of the impact on the BSC Settlement Risks?

Summary

Yes	No	Neutral/No Comment	Other
6	0	0	0

Responses

Respondent	Response	Rationale
Drax	Yes	-
NGESO	Yes	The ESO agrees with the assessment on BSC Settlement Risks in that there are none anticipated.
Outlook Energy	Yes	-
RWEST	Yes	-
Softwire Technology Limited	Yes	-
Non-Physical Trader – Confidential Response	Yes	-

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Question 7: Do you agree with the Workgroup's assessment that P454 does not impact the European Electricity Balancing Guideline (EBGL) Article 18 terms and conditions held within the BSC?

Summary

Yes	No	Neutral/No Comment	Other
6	0	0	0

Responses

Respondent	Response	Rationale
Drax	Yes	-
NGESO	Yes	The ESO agrees that P454 does not impact EBGL Article 18.
Outlook Energy	Yes	-
RWEST	Yes	-
Softwire Technology Limited	Yes	-
Non-Physical Trader – Confidential Response	Yes	-

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Question 8: Will P454 impact your organisation?

Summary

High	Medium	Low	None	Other
0	2	2	2	1

Responses

Respondent	Response	Rationale
Drax	Medium	The removal of the obligation to provide the high-grade service does not directly impact the organisation, so long as Elexon maintain the high grade (TIBCO) service. Implementation of P454 would give Elexon the ability to unilaterally withdraw this service and Drax would therefore manage this risk through the initiation of a replacement solution, assumed to align with the current IRIS service and monitoring of Elexon's intent. The consultation does mention Elexon's intent to withdraw the service in March 2024, which is not acceptable without agreement of the current service users.
NGESO	Medium	P454 will have the following impact on the ESO: • A message in JSON format will be provided for consumption in place of the current TIBCO file. This benefits NGESO, as currently a transmission outage can result in lost TIBCO data, evidenced by several empty days within NGESO data. • Accommodation of P454 implementation changes will be affected against NGESO back-end systems. • NGESO business users will continue to use downstream systems without any impact. • All changes will appear seamless to the NGESO business users. The magnitude of change to NGESO back-end systems will be medium in comparison to if the changes were applied to front-end systems and if that were to be the case, the change would be large. Consequently, changes to the back-end systems are preferable as it would avoid impact to NGESO front-end systems, business users and working processes.
Outlook Energy	None	-

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Respondent	Response	Rationale
RWEST	Low (Some – perhaps)	We no longer use TIBCO but use data push. The removal of TIBCO will impact our ability to backfill any data push gaps.
Softwire Technology Limited	Yes	As a software provider and consultant to the electricity industry, P454 approval will materially impact how I advise energy industry clients on IT strategy and cloud adoption. P454 will provide a clear signal about the direction of change in critical industry infrastructure. If approval, I would be re-assured that Elexon & BSC Parties are pressing ahead with IT modernisation, cloud-native development and modern data interfaces and can advise clients on how to align with these patterns.
Tom Bowcutt (Independent Personal Views)	No	No - but the general migration to Insights does have impacts and these need to be managed. For example, endpoints that will be decommissioned in Mar don't even exist yet. For example, it is not even possible to get the latest imbalance prices (possibly the most core data item on BM Reports). A minimum of 6 months should be allowed from availability of all end points to decommissioning.
Non-Physical Trader – Confidential Response	Low [Low (direct), High (indirect)]	The benefits are diffuse but important. This change enables a better, more cost-effective roll-out of the Insights solution which is of high importance to our business.

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Question 9: How much will it cost your organisation to implement P454?

Summary

High	Medium	Low	None	Other
0	2	1	3	0

Responses

Respondent	Response	Rationale
Drax	Medium	'P454' - The removal of the obligation to provide the high-grade service does not directly impact the organisation, whilst ever the high-grade service is maintained. However, the consultation does mention Elexon's intent to withdraw the service in March 2024, Drax would therefore, as a minimum monitor the risk of the service being withdrawn and as an action to manage the risk of withdrawal initiate a project to replace the existing solution. Given Elexon's expressed intent, it is not possible to distinguish between withdrawal of the obligation (P454) and decommissioning of the high grade (TIBCO) service.
NGESO	Medium (Appr. cost £150k)	The ESO has performed an impact assessment which determined the estimated costs of the decommissioning of TIBCO and the implementation of a replacement service. Although we recognise that P454 is only a document change, the impact of this change consequently leads to the transition to IRIS and therefore our cost assessment is reflective of this. Costs have been broken down into project deliverables: 1. Commercial Monitor/IBM system support. 2. QES – User Acceptance and SIT support. Taking these two aspects into account, along with the project costs for delivering the new service and decommissioning TIBCO, the estimated service transition is £150k. This estimate includes the development and systems testing by IBM and UAT by QES. The cost impact on the ESO is therefore considered a medium impact.
Outlook Energy	None	-
RWEST	Low	We are implementing an IRIS solution and continue to use data push

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Respondent	Response	Rationale
Softwire Technology Limited	None	-
Non-Physical Trader – Confidential	None	If anything, there is a negative cost because there will be fewer potential protocols to interface with during the transition to Insights

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Question 10: What will the ongoing cost of P454 be to your organisation?

Summary

High	Medium	Low	None	Other
0	0	3	3	0

Responses

Respondent	Response	Rationale
Drax	Low	P454 - The removal of the obligation to provide the high-grade service does not directly impact the organisation, though the consultation does mention Elexon's intent to withdraw the service in March 2024. Drax would therefore look to move from the highgrade service to a replacement solution. The estimate reflects the on-going cost of running the replacement service and the amortisation of the investment.
NGESO	Low (Appr. Cost £5-8k)	The ESO has estimated that ongoing costs related to P454 and the move to the new system, is £5k - £8K. This is attributed to RTB costs. Based on the categories outlined above, this is therefore considered to be low.
Outlook Energy	None	-
RWEST	Low	-
Softwire Technology Limited	None	-
Non-Physical Trader - Confidential	None	If anything, there is a negative cost because there will be fewer potential protocols with which we must consider interfacing.

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Question 11: How long (from the point of approval) would you need to implement P454?

Summary

0 months	Implemented by March 2024	Other
3	2	1

Responses

Respondent	Response	Rationale
Drax	Not Applicable in respect of implementation. Six months in respect of implementing impact if high grade service is withdrawn.	P454 - The removal of the obligation to provide the high-grade service does not directly impact the organisation and questions 8,9 & 10 make explicit that P454 is a facilitative change. From that perspective, there is no time to implement. If the intent of this question is to consider the implementation of the impacts of withdrawing the high grade (TIBCO) service, then this will take a minimum of six months, assuming that the replacement service meets all of the capabilities of the current service, including: • Scaling of the Insights Solution is made to ensure current high grade response times are maintained • ALL transaction types, currently supported by the TIBCO service are available in the Insights Solution • An historic data service is available, replicating capability within current TIBCO service (i.e. current IRIS service is restricted to 3 days for a specific API method) The consultation does mention Elexon's intent to withdraw the service in March 2024, which is not acceptable without agreement of the current service users and/or that all services within the high grade service are available.
NGESO	March 2024	The current timeline is planned for implementation is Q4 FY24 and therefore is in line with the March 2024 deadline that Elexon has outlined. It is important to note however, that this is dependent on timely delivery of all files from Elexon, currently scheduled to be received by the end October 23.
Outlook Energy	0 months	N/A

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Respondent	Response	Rationale
RWEST	March 2024	We are working with a lead time of an IRIS solution by end of March 2024. Our contingency would be continue use of Data push beyond March 2024
Softwire Technology Limited	0 months	-
Non-Physical Trader – Confidential Response	0 months	No action required on our end

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Question 12: How would the retirement of the BMRS High Grade Service/TIBCO impact your organisation?

Impacts	No impacts
5	2

Responses

Respondent	Rationale
Drax	The high grade (TIBCO) service is the primary method by which Drax is provided with updates to BMRS data. Retirement of the TIBCO service would therefore require Drax to: • Implement parallel solution, replacing existing TIBCO service with an alternative (assumed to be the Insights Solution – IRIS) • Run service in parallel to ensure all data is provided to meet existing systems utilisation within Drax • Test recovery mechanism, in event end to end service is unavailable (e.g. how missing data is added to Drax BMRS repository) • Decommission existing TIBCO solution and withdraw from high-grade service.
NGESO	The ESO identified changes to the systems below from the Issue 95 impact assessment. Below we have listed the impacts of retirement of the BMRS High Grade Service/TIBCO service on our systems: **Commercial Monitor** Elexon currently transfers TIBCO data via FTP to the ESO CM server. The change will provide the IRIS JSON message data to an identified ESO receiving database/ server. **NED /BAS** TIBCO data is currently deployed to downstream systems. The change will provide the IRIS JSON message data to be deployed to downstream systems. **CM/ BAS/ NED** Queries are currently made against TIBCO data. Following the change, queries will be made against IRIS JSON message data, which will provide

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Respondent	Rationale
	the same response to queries from users, as would be expected from the TIBCO data. **CM/NED** Currently if there is a failure in the transmission of the TIBCO file to CM, the data is lost. The change will enable retrieval of the IRIS JSON message in the event of an IRIS JSON transmission message failure. Although changes have been noted with these systems, they are not considered a blocker to the change and are considered to have low level of impact on the ESO.
Outlook Energy	None, apart from allowing us to compete on a more level playing field.
RWEST	Provision of Archive to catch-up our data push implementation
Softwire Technology Limited	No impact.
Tom Bowcutt (Independent Personal Views)	Although not directly impacted, it is likely that the retirement could be significant for those affected be it industry participants or data providers that they rely on. It is important that the transition is well managed with existing users.
Non-Physical Trader – Confidential	No negative impact, only the indirect impact of enabling Insights which is of vital importance to our business

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Question 13: Once the BSC Panel (or delegated authority) is satisfied the Insights Solution conforms to the Acceptance Criteria currently excepted by January 2024, Elexon will support a minimum transition period of 4 weeks before sunsetting the legacy application. Do you have any challenges in achieving the timescales and if so please provide further details and expected timescales?

Summary

Yes	No	Neutral/No Comment	Other
2	4	0	1

Responses

Respondent	Response	Rationale
Drax	Yes	Given that P454 is in respect of the removal of the obligation to provide a high-grade (TIBCO) service, this is an issue that goes beyond that consultation. Appendix A to the consultation specifically references: Elexon recognise that the Workgroup will likely only be comfortable with removing the TIBCO service upon demonstration that the IRIS service addresses feedback received during Issue 95 and ultimately delivers a more reliable service than TIBCO As per response to Question 11, Drax require a minimum of six months to implement to implement the required changes, assuming ALL of the current high-grade services are provided. The key factor for Drax, is having this period of time to implement the changes required and this assumes successfully running the revised solution in parallel. On that basis, Drax preference is a minimum of six months from the point that P454 is implemented, given that Drax will need to act at that point (see response to question 9) The current suggested timescales are: • Closure of P454 consultation – 17th October • Approval of P454 – to be confirmed • Acceptance criteria shared with BSC Panel – 9th November • Acceptance criteria confirmed – January 2024 • 4 weeks' notice – End February 2024 Elexon potential withdrawl of TIBCO service – March 2024 Given that P454 has not yet been approved, a four week notice period from January 2024 is NOT acceptable. If P454 is approved in November 2023, six months for Drax to complete their project would require Elexon to maintain the TIBCO service through May, 2024.
NGESO	No	No, the ESO do not anticipate any challenges in achieving the timescales. The ESO has already

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Respondent	Response	Rationale
		started the transition away from TIBCO with the focus on implementation of the IRIS solution.
Outlook Energy	No	No. We have plenty of time and warning.
RWEST	Yes	4 weeks to [too] short a period – we have been working to a timeline of March 2024 as reported by Elexon
Softwire Technology Limited	No	No challenges.
Tom Bowcutt (Independent Personal Views)	-	4 weeks is very short for any migration. I suggest rather that a transition plan is agreed with existing users on a case-by-case basis. Any costs of extending support should be recovered directly from those users rather than the wider industry.
Non-Physical Trader - Confidential	No	No challenges with sunsetting TIBCO. We also note that the Insights solution generally has a more consistent API and data formats to work with than the legacy system, has more modern code samples and is relatively easy to work with. With sunsetting the legacy BMRS as a whole, we can manage the proposed transition period as long as there really is at least full feature parity (other than those features deprecated through proposals, or where enhancements have been made through consultation in the design phase) and superior performance. We recognise that these are covered by the Acceptance Criteria and have high confidence in the team delivering the Insights Solution. As we approach the decision point for this, we would find it helpful to be able to review the final evidence that the new Insights the Acceptance Criteria (e.g. time series of latency and performance benchmark results; a list mapping all non-deprecated functionality on the legacy service and showing how Insights provides the same or better; etc).

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Question 14: Do you have any further comments on P454?

Responses

Respondent	Response
Drax	In respect of the acceptance criteria, Drax require that all services provided by the existing TIBCO solution should be available with in the Insights Solution. This impacts upon the following criteria: 1. Data coverage. ALL transactions (Both declarative statements and forecasts) currently supported today are covered. This should include an ability to consume a feed of all published messages for a date range as we do today with no limit ability to go back in time. This is required in recovery situations 11. Functionality – Needs to support historic data download function, if this is not provided by main data coverage
NGESO	The ESO supports the change to remove BSC obligations to provide BMRS data via TIBCO and the High-Grade Service. The requirements for the TIBCO have long been recognised as a potential barrier for new entrants, particularly with lead times, costs and bandwidth restrictions of the High-Grade line. The ESO recognises the effort and costs associated in maintaining current service and are supportive of an alternative solution. We can accommodate this decommission of the TIBCO service and have already started the IT delivery needed to implement the change. The proposed change which will lead to the implementation of IRIS will prevent empty days within ESO data.
Outlook Energy	No
RWEST	We still need clarity on the cutover date. We are not in place to sign off the insights solution yet and we are still implementing a solution. We need a date to be agreed across all participants and the back-up of continued data push provision.
Softwire Technology Limited	No
Tom Bowcutt (Independent Personal Views)	Having used the new Insights Solution and engaged with ELEXON as it has progressed, I believe the process has been well managed and communicated with plentiful opportunities to input and shape the approach. Documentation and usability of the new solution is a welcome step improvement. It is widely recognised that the transparency and accessibility of the GB market data is ahead of many others, and it is good to see efforts being made to continue this and modernise the underlying technology.
Non-Physical Trader – Confidential	Re: acceptance criteria, core functionality of the legacy platform should be a Must Have, rather than a Should Have (other than deprecated functionality through this and other proposals, or where agreed for deprecation through design consultations with users)

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Respondent	Response
	99.9% availability still averages a full workday of outage time each month. Given the criticality of BMRS data to the Industry, we strongly support the aspiration to target 99.99% uninterrupted service (~8 hours outage per year) and believe the minimum availability should be progressively increased toward this. Re: performance standards, we would expect a 20MB API call to have longer internal processing than a 20kB API call, so perhaps the latency should be defined relative to the size of the data set. This would then allow for more confident percentile target (e.g. p99 within x seconds per MB, floored at 2 seconds)

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