**Change Request Form**

## Change Request details

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| Change Request details |
| Change Request Title | *Remove requirement to respond to DIP with a JSON body for synchronous requests where all validation is asynchronous (Level 4)* |
| Change Request Number |  |
| Originating Advisory / Working Group |  |
| Risk/issue reference | *NFTWG* |
| Change Raiser | *Nigel Rees* | Date raised: | *19 Sept 24* |

***For further guidance on how to complete this document please see the supporting Change Request Form Guidance for Programme Participants. The guidance will support raising a change and responding to a change request via Impact Assessment. The Change Raiser should consider sharing the draft Change Request Form with impacted programme parties, prior to submission to PMO. The guidance, as well as other key documents are referenced below and can be found via the MHHS website.***

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| Change Request to be read in conjunction with: |
| MHHS Change Request Form Guidance for Programme Participants |
| MHHS Change Control Approach |
| MHHS Governance Framework |
| Ofgem’s MHHS Transition Timetable |

### Part A – Description of proposed change

**Guidance *– This section should be completed by the Change Raiser when raising the Change Request.***

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| Part A – Description of proposed change |
| **Issue statement:***(the issue that needs to be resolved by the change)*Helix Data Acquisition Hub which interfaces with the DIP uses a PAAS Queueing/Streaming service (Azure Event Hub) to receive DIP messages at volume. Azure Event Hub can only respond with a status code indicating that the message was received successfully or otherwise if the EventHub is in a faulted state. Azure Event hub cannot respond with a formatted JSON body as required by non-functional requirement E2E0014. Consequently, Helix is not currently compliant with E2E0014All Helix validation is Level 4 and all Helix Level 4 responses meet requirement set out in E2E0014 and elsewhere.      |
| **Description of change:***(the change being proposed)*     The change being proposed is that participants receiving messages from DIP are only required to respond with a JSON body when one or more messages in the request body fail Level 3 validation. If the recipient is returning a HTTP status code 200 or 201 (indicating that all messages were accepted), then an empty response body shall be accepted as evidence that all messages in the request were successfully received by the participant.If a system error prevents processing of any message (for example, a HTTP 500 status, indicating an internal server error, 429 indicating a temporary overload, or a 401/403 indicating an MTLS failure) then an empty response body shall be accepted as evidence that no messages in the request were successfully received by the participant.If a recipient’s Level 3 validation fails on one or more message (resulting in a HTTP 207 or 400 response), then the recipient must return a JSON message formatted using the Standard Response body schema, providing details of the error.In all cases (success, server errors, and validation errors), participants *may* choose to send a JSON response if is convenient to do so.This change will affect **section 4.6.6 of the End to End Architecture**. The table in **4.6.6.1** should be amended to include a column “*Response Body Required*”, which contains “*Yes*” for HTTP 207 and 400, and “*No*” for all other statuses. (Note that, as would be expected, this aligns with the existing column “Notify Sender via a status message”)**Section 4.6.6.2** should be amended to include the text “*When a response body is required (see table above), the response uses the common Standard Response Body…*”**Section 4.6.6.3** should be amended to include the text “When required, the response body of the HTTP call will deliver a response back to DIP indicating details of any messages that failed validation. It may optionally include details of messages that were successfully accepted”. |
| **Desired implementation date and rationale:** *(proposed implementation date of the change and why this date is required)* |
| **Justification for change:***(please attach any evidence to support your justification including why it should be exempt from the change freeze)*In the case where a message is accepted successfully, or where a message is rejected for a reason other than level 3 validation failure (e.g. authentication failure or a system error), the data contained in a Standard Response message provides no information which the sender (the DIP) does not already possess. Removing the requirement to send a standard response body allows participants who do not perform Level 3 validation (e.g. Helix) to use generic Platform-as-a-Service components to receive messages, without needing a bespoke solution to construct the Standard Response message. This simplifies the participant’s architecture, reduces costs, and increases the reliability of the solution, without reducing the information available to the DIP | **Change Freeze criterion impacted** | **Yes / No** |
| **Fixing a design defect** |  |
| **Critical to M10/M15** |  |
| **Consequences of no change:***(what is the consequence of no change)*The current Helix implementation, as shown in the diagram below, is not compliant with the current End-to-End Architecture, as its responses to the DIP do not include a JSON response body. Should this change not be accepted, Helix would have to introduce an additional component between the DIP and the Azure EventHub, as shown in the diagram below. This component would receive HTTP requests, process the request to extract from the data (*TransactionID* and *SenderUniqueReference*) required for a valid response to the DIP, forward the message on to the relevant EventHub, and then format and send the response to the DIP. This would increase the latency of the Helix ingestion service, would decrease reliability (due to the introduction of an additional component in the processing chain), would increase overall architectural complexity, and would increase operational costs for Helix.   |
| **Alternative options:***(alternative options or mitigations that have been considered)*We have considered meeting the requirements as they stand by including the additional infrastructure to respond with a JSON body as detailed. |
| **Risks associated with potential change:***(risks related to implementation of the proposed change that have been identified)*The CR requires a DIP modification so when a JSON response is not detected in a participant system synchronous response, the DIP will instead record the required ID’s available to it. Any code change creates risk although it is thought this is a minor change that will not affect participants.  |
| **Stakeholders consulted on the potential change:***(Please document the stakeholders, or stakeholder groups that have been consulted to date on this change. The Change Raiser should consult with relevant programme parties in the drafting of the request, prior to submission to PMO).***MHHS/DIP Design Team****MHHS Non Functional Testing team** |
| **Target date by which a decision is required:** |       |

### Part B – Initial Impact of proposed change

**Guidance *– This section should be completed by the Change Raiser before being submitted to the MHHS PMO.***

***Please document the benefits of the change and to delivery of the programme objectives***

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| --- | --- |
| Programme Objective | Benefit to delivery of the programme objective |
| To deliver the Design Working Group’s Target Operating Model (TOM) covering the ‘Meter to Bank’ process for all Supplier Volume Allocation Settlement meters |       |
| To deliver services to support the revised Settlement Timetable in line with the Design Working Group’s recommendation |       |
| To implement all related Code changes identified under Ofgem’s Significant Code Review (SCR) |       |
| To implement MHHS in accordance with the MHHS Implementation Timetable |       |
| To deliver programme capabilities and outcomes to enable the realisation of benefits in compliance with Ofgem’s Full Business Case |       |
| To prove and provide a model for future such industry-led change programmes |       |

**Guidance *– Please document the known programme parties and programme deliverables that may be impacted by the proposed change***

|  |  |
| --- | --- |
| Impacted areas | Impacted items |
| Impacted Parties |      NFTWG |
| Impacted Deliverables |      PIT/SIT NFT |
| Impacted Milestones | *<Ofgem’s MHHS Transition Timetable is linked above>* |

**Note *– Please refer to MHHS DEL174 Change Request Guidance for Programme Participants for information on how to score the initial assessment.***

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| --- |
| Initial assessment |
| Necessity of change | 2 | Expected lead time |  |
| Rationale of change | Solution | Expected implementation window |  |
| Expected change impact |  |  |  |

**Guidance *– Please include a reference and link to any additional documentation which the change relates to.***

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| Change Request to be read in conjunction with: |
| **Title** | **Reference** |
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### Part C.1 – Summary of Impact Assessment

### Note – *This section will be completed initially by the Change Raiser and then by Programme Participants as part of the full Impact Assessment.*

### *All Impact Assessment responses will be considered public and non-confidential unless otherwise marked. If there are any specific elements of the response (e.g. costs) that are confidential, please mark the specific sections as confidential rather than the response as a whole. The MHHS Programme will publish all Impact Assessment responses and redact any confidential information as noted.*

**Guidance – Programme Participants are required to:**

**Respond with ‘Agree’, ‘Disagree’ or ‘Abstain’, deleting as appropriate. If the respondent agrees, they can provide additional evidence to further support the assessment. If the respondent disagrees or abstains, they should provide a detailed rationale as to why.**

**Add any additional effects that have not already been identified. In doing so, they should provide as much detail as possible to allow a robust assessment to be made.**

**Indicate whether the change would have a minor, medium or significant impact on their activities, referring to slide 16 of *MHHS-DEL171 Change Control Approach* to assess each criterion, using N/A to indicate no impact.**

**Proceed to Part C.2 for Impact Assessment Recommendation response once completed.**

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| Part C.1 – Summary of Impact Assessment (complete as appropriate) |
| **Effect on benefits***Change Raiser to provide initial impact assessment.* |
| *<Delete as appropriate>:* **Agree Disagree Abstain** |
| *Impact Assessment respondents to add supporting commentary to support their selection. Where possible, Impact Assessment respondents to identify and describe any further impacts.**Impact Assessment respondents should consider and provide detail of any additional effect e.g. whether there will be an impact on when a benefit will be realised; who will realise the benefit; the extent to which the benefit will be realised.* *Where possible, contextual information should be included e.g. the benefit will be delayed by X weeks; the change means Y population will also realise the benefit.**Please indicate below, using an (X), the extent to which you believe implementing this change would impact Programme benefits.*

|  |  |  |
| --- | --- | --- |
| 1. *Minor impact*
 | 1. *Medium impact*
 | 1. *Significant impact*
 |
|  |  |  |

 |
| **Effect on consumers***There will not be an impact on other participants due to this change as they can continue with JSON body responses if that has been implemented.* |
| *<Delete as appropriate>:* **Agree Disagree Abstain** |
| *Impact Assessment respondents to add supporting commentary to support their selection. Where possible, Impact Assessment respondents to identify and describe any further impacts.**Impact Assessment respondents should consider and provide detail of any additional effect e.g. whether there will be an impact on service delivery to consumers; will there be a cost impact to consumers; will there be a choice impact to consumers?* *Where possible, contextual information should be included e.g. what is the scale of the effect? Will the effect be permanent?**Please indicate below, using an (X), the extent to which you believe implementing this change would impact consumers.*

|  |  |  |
| --- | --- | --- |
| 1. *Minor impact*
 | 1. *Medium impact*
 | 1. *Significant impact*
 |
|  |  |  |

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| **Effect on schedule***From a Helix perspective, this change involves retaining the current architecture, it will have no impact on the schedule. Not accepting the change will require Helix to implement additional infrastructure. This can be implemented based on current schedule. Accepting the change will require a DIP change and schedule consideration.* |
| *<Delete as appropriate>:* **Agree Disagree Abstain** |
| *Impact Assessment respondents to add supporting commentary to support their selection. Where possible, Impact Assessment respondents to identify and describe any further impacts.**Impact Assessment respondents should consider and provide detail of any additional effect e.g. will the schedule/milestones be directly impacted; will the schedule/milestones be indirectly impacted.* *Where possible, contextual information should be included e.g. the change will delay the project by X days; the change will require additional resource to complete (though detail resource in resource section); the delay can/cannot be recovered by condensing Y activity.**Please indicate below, using an (X), the extent to which you believe implementing this change would impact your ability to meet the Prohgramme schedule.*

|  |  |  |
| --- | --- | --- |
| 1. *Minor impact*
 | 1. *Medium impact*
 | 1. *Significant impact*
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|  |  |  |

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| **Effect on costs***As this change involves retaining the current architecture, it will have no impact on the cost. There will be a cost for DIP to make the change that they should estimate.* |
| *<Delete as appropriate>:* **Agree Disagree Abstain** |
| *Impact Assessment respondents to add supporting commentary to support their selection. Where possible, Impact Assessment respondents to identify and describe any further impacts.**Impact Assessment respondents should consider and provide detail of any additional effect e.g. will the change cause a loss of income; will the change cause additional cost; will the change cause a reprofiling of cost?* *Where possible, contextual information should be included e.g. whether it is capital or operating expenditure that will be affected; what period costs will be affected in; what the rough order of magnitude of the cost impact will be and if organisation will be able to absorb it?**Please indicate below, using an (X), the extent to which you believe implementing this change would impact your organisation’s costs.*

|  |  |  |
| --- | --- | --- |
| 1. *Minor impact*
 | 1. *Medium impact*
 | 1. *Significant impact*
 |
|  |  |  |

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| **Effect on resources***As this change involves retaining the current architecture, it will have no impact on Helix resources. Not accepting the change will require additional work that may impact Helix resourcing. Accepting the change will need to be estimates by DIP including resourcing.* |
| *<Delete as appropriate>:* **Agree Disagree Abstain** |
| *Impact Assessment respondents to add supporting commentary to support their selection. Where possible, Impact Assessment respondents to identify and describe any further impacts.* *Impact Assessment respondents should consider and provide detail of any additional effect e.g. will there be an impact on tools or equipment; will there be an impact on staff capacity; will there be an impact on staff skills or capability?* *Where possible, contextual information should be included e.g. the change will require X additional staff for Y period of time; the change requires Z training or support.**Please indicate below, using an (X), the extent to which you believe implementing this change would impact your organisation’s resources.*

|  |  |  |
| --- | --- | --- |
| 1. *Minor impact*
 | 1. *Medium impact*
 | 1. *Significant impact*
 |
|  |  |  |

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| **Effect on contract***As this change involves retaining the current architecture, it will have no impact on the Helix contract. Not accepting the change will require additional work that may impact.*  |
| *<Delete as appropriate>:* **Agree Disagree Abstain** |
| *Impact Assessment respondents to add supporting commentary to support their selection. Where possible, Impact Assessment respondents to identify and describe any further impacts.* *Impact Assessment respondents should consider and provide detail of any additional effect e.g. whether there will be an impact on contracts with sub-contractors; whether there will be an impact on contracts with vendors; whether there will be an impact on contracts with regulators/ESO.* *Where possible, contextual information should be included e.g. the changes will require new contracts to be created; the changes will variations to existing contracts; the changes will affect ability to meet contract requirements.**Please indicate below, using an (X), the extent to which you believe implementing this change would impact your organisation’s contracts.*

|  |  |  |
| --- | --- | --- |
| 1. *Minor impact*
 | 1. *Medium impact*
 | 1. *Significant impact*
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|  |  |  |

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| **Risks***As this change involves retaining the current architecture, it does not introduce Helix risks. Not accepting the change will increase HELIX > DIP Resilience risks* |
| *<Delete as appropriate>:* **Agree Disagree Abstain** |
| *Impact Assessment respondents to add supporting commentary to support their selection. Where possible, Impact Assessment respondents to identify and describe any further impacts.* *Impact Assessment respondents should consider and provide detail of any additional effect e.g. will existing risks be affected; will new risks be created?**Where possible, contextual information should be included e.g. the change will affect the likelihood of a risk occurring, the change will affect the impact the risk would have, the change will require additional controls and mitigation.**Please state any additional risks introduced by the change.*  |

### Part C.2 – Impact Assessment Recommendation

### Note – *This section must be completed initially by the Change Raiser and then by Programme Participants as part of the full Impact Assessment.*

**Guidance – The primary reporting metric of the Impact Assessment is the recommendation response. The consolidated response will be presented to the relevant governance group(s) and decision maker(s) with the totals for ‘Agree’, ‘Disagree’ or ‘Abstain’. As such, please ensure this section is completed before the form is returned to MHHS PMO. Provide detailed rationale and evidence in the commentary field.**

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| Part C.2 – Impact Assessment Recommendation (mandatory) |
| **Recommendation***Change Raiser to provide initial recommendation.***It is recommended by the Change Raiser the change is approved.** |
| *<Delete as appropriate>:* **Agree Disagree Abstain** |
| *Impact Assessment respondents to add supporting commentary to support their selection.**Please indicate below, using an (X), the extent to which you believe implementing this change would impact the Programme and/or your organisation overall.*

|  |  |  |
| --- | --- | --- |
| 1. *Minor impact*
 | 1. *Medium impact*
 | 1. *Significant impact*
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|  |  |  |

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| **Change Freeze***Change Raiser to provide justification that their Change Request meets the Change Freeze criteria (critical to M10 and/or fixes a defect in the design).* |
| *<Delete as appropriate>:* **Agree Disagree Abstain** |
| *Impact Assessment respondents to add supporting commentary to support their selection.*  |

**Impact assessment done by:** <Name>

**Guidance*: If you are a third party responding on behalf of another Programme Participant, please state this in your response.***

**Impact assessment completed on behalf of:** <Name>

### Part D – Change approval and decision

**Guidance*: The approvals section will be completed by the MHHS PMO once the Impact Assessment has been reviewed.***

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| Part D - Approvals |
| **Decision authority level**<Based on the impact assessment, state who is required to make a decision concerning this change> |

**Guidance** - ***This section will be completed by the MHHS PMO and Change Owner following the review of the impact assessment and decision reached by the SRO.***

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| Part D – Change decision |
| Decision: |       | Date |       |
| Approvers: |       |  |  |
| Change Owner: |       |
| Action: |       |
| **Changed Items** | **Pre-change version** | **Revised version** |
|  |  |  |
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### Part E – Implementation completion

**Guidance *- This section will be completed by the MHHS PMO at the end of the post-implementation process.***

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| Part E – Implementation completion |
| Comment |       | Date |       |

**Guidance *– The Closure Checklist in MHHS DEL175 Change Log must also be completed by MHHS PMO at this stage.***

|  |  |
| --- | --- |
|      Checklist Completed | Completed by      |
| Yes/No |  |

**Guidance – *This section will be completed by the MHHS PMO at the end of the post-implementation process and should be* used to add any appropriate references of the change once it has been completed.**

|  |
| --- |
| References |
| **Ref** | **Document number** | **Description** |
|       |       |       |
|       |       |       |