

**To:** Lindsay Goater[Lindsay.Goater@ofgem.gov.uk]; Niketa Patel[Niketa.Patel@ofgem.gov.uk]; Paul Heigl[Paul.Heigl@ofgem.gov.uk]; Michelle Murdoch[Michelle.Murdoch@ofgem.gov.uk]; Morag Drummond[Morag.Drummond@ofgem.gov.uk]  
**Cc:** Andy Luckhurst[Andy.Luckhurst@ofgem.gov.uk]; Rita Chohan[Rita.Chohan@ofgem.gov.uk]; Jacqueline Balian[Jacqueline.Balian@ofgem.gov.uk]; Oliver More[Oliver.More@ofgem.gov.uk]  
**From:** Sophie Jubb  
**Sent:** 2012-09-03T14:33:14Z  
**Importance:** Normal  
**Subject:** RE: NI RHI Use Case Discovery document - Business Review  
**Received:** 2012-09-03T14:33:24Z

Hi  
 Lindsay I believe the RRS has been updated with your comments by Niketa (?).

Niketa, I will have a review as discussed to see if there's anything I missed from our walkthrough earlier – broadly speaking though I am happy to wait for you to send out the amended doc with my requested changes from the walkthrough, and will complete a full review and RRS updates then. If as discussed you could send me the full list of UCs/other docs too that would be very helpful.

Thanks

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**From:** Lindsay Goater

**Sent:** 03 September 2012 09:23

**To:** Niketa Patel; Sophie Jubb; Paul Heigl; Michelle Murdoch; Morag Drummond

**Cc:** Andy Luckhurst; Rita Chohan; Jacqueline Balian; Oliver More

**Subject:** RE: NI RHI Use Case Discovery document - Business Review

A few comments – I have no time for record sheet, if someone (Paul?) can pls complete it - thx

General point: Pls can I see where we do reference “non-functional requirements” – I would like to change some at some point (eg active hyperlinks)

2. The aim of this project is to:

- extend the existing RHI system for GB to also support the NI RHI scheme,
- meet the scalability, security and reporting requirements,
- help prevent non compliance / fraud, and
- provide a high level of service that will encourage take up of the NI RHI scheme.

Wrt reporting being part of the key aims, any “manual solution” must surely therefore support this.

3.1.2 Biomethane currently Registration, not accred, but set to change for GB to accred later

**Register does NOT store all data** – far from it – this is one of the key problems for us. Data is also in **3 other places** 1) CRM, 2) SP, 3) Wintel servers (N drive)

**CRM** – even if it does have **workflow**, this is **not used**. Basic email and case assignment is all that is used. Having actual workflow would be great... Does CRM have an actual workflow that could support the process? How does it work? Can it be queried and reported on?

DMS – is this a Wintel drive? This ignores the need to use SP

4.2.1

- the accreditation number for NI RHI applications will be prefixed with “NIRHI” and GB applications will continue to be prefixed with “GB”

GB *continue* to be prefixed? They *aren't* prefixed?

- an external user will not be able to change their application from a GB application to an NI application or vice versa; if this situation occurs, the external user will need to complete a new accreditation application for the relevant country.

How are these defunct applications, once submitted, to be deleted?

4.2.2

- As this is a multi-staged process, the internal NI RHI or GB RHI Scheme Administrator (who is identified as the “owner” of the application) can choose to assign the review to another person.

No, the reviewer is **NOT** the owner – that is not how we use the system. Any comments on the process and how operations use the IT system should reflect what is **actually** done pls.

5 – I am not commenting on payments

6.2.2 Stage 2 was delayed until Feb

Will it be on Ofgem website or DETI?

6.2.3 & poss other reports (6.2.4) – will need to **consider all changes**, eg diff tariffs

Lindsay

**Lindsay Goater**

Senior Manager Generation, RHI

New Scheme Development

9 Millbank

London

SW1P 3GE From OFGEM on 11.05.2017

Annotated by RHI Inquiry

Tel: 0207 901 7043

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**Have you read the following documents which will assist you in submitting a properly made and high quality RHI application:** The Renewable Heat Incentive Application Process – An Overview and Key Guidance: [Applicant Guidance Note 3](#); Ofgem E-Serve's Guide to the RHI Application Form: [Applicant Guidance Note 2](#). Further supporting information can be found on Ofgem's [How to Apply for Accreditation](#) webpage.

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**From:** Niketa Patel

**Sent:** 29 August 2012 17:52

**To:** Sophie Jubb; Paul Heigl; Michelle Murdoch; Lindsay Goater; Morag Drummond

**Cc:** Andy Luckhurst; Rita Chohan

**Subject:** NI RHI Use Case Discovery document - Business Review

Hi all,

Please find below the link to the NI RHI Use Case Discovery document, ready for Business review. This document details the use cases which will need to be updated to accommodate the inclusion of the NI RHI in the existing RHI system, and can be found at the following link:

[http://sharepoint/Ops/IT/IT\\_Lib/Apps/MS\\_Server/NI%20RHI/Requirements/02%20Use%20Case%20Discovery/In%20Review/NI%20RHI%20Discovery%20document.docx](http://sharepoint/Ops/IT/IT_Lib/Apps/MS_Server/NI%20RHI/Requirements/02%20Use%20Case%20Discovery/In%20Review/NI%20RHI%20Discovery%20document.docx)

The Review Record Sheet can be found at the following link:

[http://sharepoint/Ops/IT/IT\\_Lib/Apps/MS\\_Server/NI%20RHI/Requirements/02%20Use%20Case%20Discovery/RRS/Ofgem-Review%20Record%20Sheet\\_Discovery%20Business.docx](http://sharepoint/Ops/IT/IT_Lib/Apps/MS_Server/NI%20RHI/Requirements/02%20Use%20Case%20Discovery/RRS/Ofgem-Review%20Record%20Sheet_Discovery%20Business.docx)

I'm happy to provide a walkthrough of the document beforehand, if required.

Please would you review this document and enter your review comments in the Review Record Sheet by **COP Friday 31<sup>st</sup> August**, so I can address your comments before submitting for final Business review and sign-off on **Monday 3<sup>rd</sup> September**.

Kind regards,

Niketa

**Niketa Patel**

Business Analyst

Information Management and Technology

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**To:** Matthew Harnack[Matthew.Harnack@ofgem.gov.uk]; Luis Castro[Luis.Castro@ofgem.gov.uk]; Richard Kayan[Richard.Kayan@ofgem.gov.uk]; Keith Avis[Keith.Avis@ofgem.gov.uk]; Milton James[Milton.James@ofgem.gov.uk]; Andy Luckhurst[Andy.Luckhurst@ofgem.gov.uk]  
**Location:** Bob's room  
**Importance:** Normal  
**Subject:** FW: NI RHI finance  
**Start Date/Time:** 2012-09-03T15:15:00Z  
**End Date/Time:** 2012-09-03T15:45:00Z  
**Recurrence Pattern:** None

-----Original Appointment-----

**From:** Louise Oxley **On Behalf Of** Robert Hull  
**Sent:** 03 September 2012 11:15  
**To:** Robert Hull; Luis Castro; Richard Kayan; Keith Avis; Milton James; Andy Luckhurst  
**Cc:** Lindsay Goater  
**Subject:** NI RHI finance  
**When:** 03 September 2012 16:15-16:45 (GMT) Greenwich Mean Time : Dublin, Edinburgh, Lisbon, London.  
**Where:** Bob's room

Deti are requesting final figures today for budgetary submission.

Milton, can you attend please?

Keith, would you like Rita or Paul H. to attend?

**To:** Keith Avis[Keith.Avis@ofgem.gov.uk]; Luis Castro[Luis.Castro@ofgem.gov.uk]; Richard Kayan[Richard.Kayan@ofgem.gov.uk]; Lindsay Goater[Lindsay.Goater@ofgem.gov.uk]; Marcus Porter[Marcus.Porter@ofgem.gov.uk]  
**Cc:** Rita Chohan[Rita.Chohan@ofgem.gov.uk]; Paul Heigl[Paul.Heigl@ofgem.gov.uk]; Michelle Murdoch[Michelle.Murdoch@ofgem.gov.uk]; Peter Rice[Peter.Rice@ofgem.gov.uk]; Sajith Sasikumar[Sajith.Sasikumar@ofgem.gov.uk]; Milton James[Milton.James@ofgem.gov.uk]  
**From:** Andy Luckhurst  
**Sent:** 2012-09-03T14:41:37Z  
**Importance:** Normal  
**Subject:** RE: RHI IT Solutions Document  
**Received:** 2012-09-03T14:41:39Z

Keith,

To confirm our conversation, please amend section 1.3 so that contingency is explicitly clear.

The wording should be changed from "IT have confirmed that the cost of the release would be £143,000" to "IT have confirmed that the cost of the release would be £143,000 plus contingency (33%) of £47,000, a total of £190,000."

At the end of the same paragraph, please amend the figure of £179,000 in the same way to show £179,000 plus contingency of 33% (£59,070) making a total of £238,070.

Thanks.

Andy

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**From:** Keith Avis

**Sent:** 03 September 2012 15:13

**To:** Luis Castro; Richard Kayan; Andy Luckhurst; Lindsay Goater; Marcus Porter

**Cc:** Rita Chohan; Paul Heigl; Michelle Murdoch; Peter Rice; Sajith Sasikumar

**Subject:** RHI IT Solutions Document

All

Attached is the paper that I intend to take to the meeting with Bob and Matthew at 16:15. Can you please have an urgent look through and let me know if you have any comments by 15:30 please. This will allow me time to update before sending to Bob and Matthew. I am urgently looking to locate peter so that I can secure his agreement before the meeting.

Keith



## Memo

## Northern Ireland Renewable Heat Incentive: Cost of Delivery Solutions

Providing cost details of the Northern Ireland Renewable Heat Incentive Scheme Delivery Solution	From	Keith Avis
	To	Bob Hull, Matthew Harnack, Luis Castro
	cc	Peter Rice, Richard Kayan, Ruth Lancaster, Rita Chohan, Paul Heigl, Sophie Jubb, Andy Luckhurst, Michelle Murdoch
	Date	3 September 2012

- 1.1. Following the laying of NIRHI Regulations in June, the IT team were asked to revisit their delivery solutions and costs against those detailed in the Feasibility Study sent to the Northern Ireland Department of Enterprise, Trade and Investment (DETI) in December 2011.
- 1.2. Having discussed options with IT we would like to suggest the following proposal is put to DETI:
  - IT functionality is delivered in February to tie in with a GB RHI systems release.
  - A manual solution would be provided by the GB RHI operations team up until the IT system go-live in February
- 1.3. IT have confirmed that the cost of the release would be £143 plus contingency (33%) of £47,000, a total of £190,000 – as set in the original Feasibility Study. This is on the strict condition, as per the original feasibility study, that the release contains all required functionality (i.e. Is not staggered or staged releases), and is a joint release with the GB RHI release, and that the release costs of this release are incurred to GB RHI (The NI RHI, as a result, simply 'piggy-backing' on a GB RHI release that would in any case be taking place). If a joint release is not possible, the costs for a separate NI RHI release will be £179k plus contingency of 33% (59,070) making a total of £238,070.
- 1.4. IT agreed to reduce their contingency to 33% (£47,000), normally this would only be offered once the detailed requirements had been signed off. This contingency level assumes that should there be an unforeseen change in the scope of the requirements once those detailed requirements have been specified, this would likely require funding beyond the 33% level.
- 1.5. If the scoped changes following agreement of the detailed IT requirements it would be necessary to undertake an analysis of the scope of the work underpinning IT delivery and take decisions on descoping lower priority features that are not absolutely essential<sup>1</sup> to a functioning scheme.
- 1.6. The manual solution will require:

<sup>1</sup> To avoid any ambiguity in the latter stages of the project, the lower priority, 'nice-to-have' features, totalling 67% of the volume of work will be agreed up-front, prior to detailed requirements starting, so that any descoping decisions that subsequently need to take place can be taken rapidly as required by the Business Owner.

## Northern Ireland Renewable Heat Incentive: Cost of Delivery Solutions

Memo

- Applications would contact NIRHI Ops team via email and receive a 'Word' document by return for completion.
- The completed application would be manually reviewed by the operations team, using a new manual review checklist / form.
- The Ops team would pick up on any queries and points of clarification with the applicant.
- Ops team would store all communications and documentation on CRM, collected in an 'Accreditation Case', as for GB.
- Ops team to assess application against eligibility criteria.
- Ops team to submit application to Ofgem Senior Manager with Delegated Authority (DA – Lindsay Goater) with, as appropriate, recommendation for approval via email on CRM.
- Approval from DA via email, administrator creates and sends a letter from template, Accreditation Case 'resolved'.
- Ops team to complete spreadsheet trackers, enter manual forms key data on e.g. Access database.
- Participants would need to email in all periodic data, e.g. in spreadsheet templates.
- Ops team to administer manual spreadsheet periodic data submissions, but with no detailed review, during the interim period
- (Payments would not commence until the IT system is live, and final periodic data review would be within the IT system).

1.7. The cost of the manual solution is £18,692 and is scoped out as part of the 2012/13 operational costs at **Annex A**.

1.8. The full delivery cost for NI RHI for 2012/13 is detailed as follows:

		Delivery Component	Cost (£)
<b>Development</b>		New Scheme Development delivery team	£96,000
		Band C Operational Manager – recruitment process	£2,000
		Stakeholder Consultation	£700
		Internal Ofgem legal costs	£97,211
		IT delivery costs	£190,000 (£143,000 + £47,000 =33% contingency)
		Independent risk assessment	£10,000 (excluding £10,000 deferred from feasibility study)
		Overheads	£75,000
<b>Operations</b>		Operational costs (incl £18,692 manual solution from November to February – <b>Annex A</b> )	£118,466
		Additional operation cost (IT business application support costs; IT infrastructure costs;	£56,732

## Northern Ireland Renewable Heat Incentive: Cost of Delivery Solutions

Memo

Internal legal costs	
<b>Total Including Contingency:</b>	<b>£646,109</b>

Original Feasibility Study Cost	Cost (£)
Development Cost (386,000 + £47,000 33% IT contingency)	£433,000
2012/12 Operational cost	£135,660
<b>Total</b>	<b>£568,660</b>
Funding Needed (£646,109) minus Feasibility Study Cost (£568,660)	£77,449 (extra funding required)

- 1.9. Legal costs included in the chart have been reduced from recent internal estimates but do carry a caveat from the legal team that it is notoriously difficult to predict projected levels of legal costs with any certainty - for the simple reason that the number of legal issues arising may turn out to be greater than anticipated - as may their complexity. Moreover, in the event that it proved necessary to obtain outside legal assistance that would inevitably impact substantially on the cost levels. Details of the Legal costs are included and **Annex B**.

Keith Avis



Memo

**Annex A**  
**NI RHI Operational Costs**

**ASSUMES RHI OPERATIONS IS 30 "STEADY STATE" FTEs**

**1st 3.5 months - MANUAL PROCESS**

									FTEs
approx steady state GB Ops staff****	20.7	to deliver RHI Operations - exc audits, periodic & payments							minus payments 2
approx annual GB apps	1500								minus periodic 2
apps per FTE per year	72.46	proxy only - FTEs are also doing other Ops work							minus audits 3

**2nd months - IT system**

approx steady state GB Ops staff****	24.3	to deliver all parts of RHI Operations - exc audits							minus audits 3
approx annual GB apps	1500								
apps per FTE per year	61.73	proxy only - FTEs are also doing other Ops work							

**manually processed NI RHI apps 70**

			pm cost	pa cost	cost during period	period / months	period fraction / year	/ of heads during period
FTE years for apps	0.966	*						
FTE years at 33% inc as manual process**	1.3	<b>B FTE years</b>	£4,083	£48,996	£63,105.27	3.5	0.3	4.4
Manager - 3.5 months	0.3	<b>C FTE years</b>	£5,250	£63,000	£18,375.00	3.5	0.3	1.0
Total FTE years	1.6	<b>FTE years</b>						

**over 3.5 months**

**normal processed apps 33**

FTE years for apps	0.5	<b>B FTE years</b>	£4,083	£48,996	£26,193.26	1.5	0.1	4.3
Backload FTE 1 months***	0.1	<b>A FTE years</b>	£2,917	£35,004	£2,917.00	1.0	0.1	1.0
Manager - 1.5 months	0.1	<b>C FTE years</b>	£5,250	£63,000	£7,875.00	1.5	0.1	1.0
Total FTE years	0.7	<b>FTE years</b>						

**over 1.5 months**

<b>TOTAL COST</b>	<b>£118,465.53</b>	
<b>INCREASE OWING TO MANUAL PROCESS</b>	<b>£15,775.13</b>	33% increase on staff for 3.5 months = 0.7 B FTE yrs = 2.4 heads
	<b>£2,917.00</b>	backloading for 1 month
	<b>£18,692.13</b>	<b>TOTAL</b>

\*so this is FTEs if we processed 70 applications, and delivered all associated RHI Ops activities for 70 apps, over the period of a whole year

\*\*limited data capture & reporting to constrain manual process overhead at 33%

\*\*\*assumes can be done in ca 1hr per app, plus time for periodic, resolving issues

\*\*\*\*assuming 10% efficiency improvement by November

efficiency improvement = **10%**



Northern Ireland Renewable Heat Incentive: Cost of  
Delivery Solutions

**Memo**



# Memo

## Annex B

### Northern Ireland RHI Legal Costs

Task	Stage	Working days				
		Secondment	HL	Band D	Band E	SCS
Guidance	1st review	7		10		
	2nd review	7		10	0.5	
Regulations		5		5		
Administrative Arrangement	1st review	10		10		
	2nd review	5		5	1	
	3rd review	5		5	0.5	
Contract revision - 2 contracts & 2 reviews		5	7	5		
	<b>Subtotal</b>	<b>44</b>	<b>7</b>	<b>50</b>	<b>2</b>	
	<b>Cost (£) subtotal</b>	<b>51,163</b>	<b>16,905</b>	<b>14,991</b>	<b>768</b>	
Application process & documentation		6		6		
General		88			1	0.3
Papers		2		2	2	
	<b>Total hours</b>	<b>8</b>	<b>0</b>	<b>8</b>	<b>4</b>	<b>0.3</b>
	<b>Cost (£)</b>	<b>9,302</b>	<b>0</b>	<b>2,399</b>	<b>1,536</b>	<b>147</b>

Subtotal 1	£127,433
Subtotal 2	£13,384
<b>Total costs:</b>	<b>£97,211</b>

**To:** Keith Avis[Keith.Avis@ofgem.gov.uk]  
**From:** Matthew Harnack  
**Sent:** 2012-09-03T14:58:29Z  
**Importance:** Normal  
**Subject:** RE: NI RHI Funding Solutions: 16:15 Meeting  
**Received:** 2012-09-03T14:58:32Z

Keith,

For the meeting can you please bring along a table showing development costs separate from operating costs – i.e. total development cost (and breakdown) now vs feasibility, and then total operating cost (and breakdown between base cost and additional cost of delaying the IT release) now vs feasibility. DETI are looking at the two separately so we should too.

thanks

**Matthew Harnack**  
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New Scheme Development  
9 Millbank  
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Tel: 020 7901 7218  
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**From:** Keith Avis  
**Sent:** 03 September 2012 15:54  
**To:** Robert Hull; Matthew Harnack; Luis Castro; Milton James; Richard Kayan; Peter Rice  
**Cc:** Lindsay Goater; Andy Luckhurst; Paul Heigl; Ruth Lancaster; Marcus Porter; Paul Heigl; Rita Chohan  
**Subject:** NI RHI Funding Solutions: 16:15 Meeting

All

Please find attached a copy of the document that I will talk through at the 16:15 meeting. The figures have been cleared through legal, IT and Peter Rice. I will print out copies and bring them along to the meeting.

Regards

Keith Avis

**Keith Avis**  
Senior Manager  
New Scheme Development  
9 Millbank  
London  
SW1P 3GE  
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**To:** Keith Avis[Keith.Avis@ofgem.gov.uk]  
**From:** Matthew Harnack  
**Sent:** 2012-09-03T14:59:09Z  
**Importance:** Normal  
**Subject:** RE: NI RHI Funding Solutions: 16:15 Meeting  
**Received:** 2012-09-03T14:59:10Z

Please also bring along several hardcopies of your paper.  
thanks

**Matthew Harnack**

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**Sent:** 03 September 2012 15:54  
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Keith Avis

**Keith Avis**

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