

From: [REDACTED] (Regulation 13) (GO-Science)
Sent: 10 June 2013 12:41
To: [REDACTED] cam.ac.uk'; dcb40@cam.ac.uk
Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science)
Subject: GM Science

Dear David

I am writing to ask if we could meet with you in London (when you are passing through for meetings) or speak with you on the telephone to discuss the possibility of a brief written update on the *current status of GM in terms of the science*, which the Council for Science and Technology (CST) would like to commission.

This would be a short note for the CST, which brings up to date the findings on GM science from the Royal Society's report published in 2009 on 'Reaping the benefits: Science and the Sustainable Intensification of Agriculture', perhaps through the original working group or similar working group on behalf of the Food Research Partnership.

The Council for Science and Technology (chaired by the Government Chief Scientific Adviser) advises the Prime Minister on strategic issues that cut across the responsibilities of individual Government Departments. Colleagues in GO-Science provide the Secretariat for CST ([REDACTED] (Regulation 13) and [REDACTED] (Regulation 13) cc'd), and I lead within GO-Science on GM issues (working with [REDACTED] (Regulation 13) in my team).

I look forward to hearing from you with dates that would be convenient for you in the next couple of weeks.

Best regards

[REDACTED] (Regulation 13)

(Regulation 13)

Government Office for Science | 2nd Floor, 1 Victoria Street, London SW1H 0ET | [REDACTED]

(Regulation 13) | [REDACTED] (Regulation 13) @bis.gsi.gov.uk

Stay up to date with how Foresight is influencing UK government policy. Visit www.bis.gov.uk/foresight for the latest news.

You can now follow the Government Office for Science and Government Chief Scientific Adviser on Twitter: @uksciencechief.

From: [REDACTED] (Regulation 13) (GO-Science)
Sent: 13 June 2013 17:11
To: 'David Baulcombe'
Subject: RE: GM Science

Dear David

Thank you very much for the helpful phone call this morning.

We look forward to hearing from you with your ideas on the possible content of the paper on GM science and who might be involved in the Working Group.

As promised, I attach herewith the two pager on the definition of GM that was prepared with support from Jim Dunwell for your information.

Best regards

[REDACTED] (Regulation 13)

[REDACTED] (Regulation 13)
Government Office for Science | 2nd Floor, 1 Victoria Street, London SW1H 0ET |
[REDACTED] (Regulation 13) | [REDACTED] (Regulation 13) @bis.gsi.gov.uk

Stay up to date with how Foresight is influencing UK government policy. Visit www.bis.gov.uk/foresight for the latest news.

You can now follow the Government Office for Science and Government Chief Scientific Adviser on Twitter: [@uksciencechief](https://twitter.com/uksciencechief).

From: [REDACTED] (Regulation 13) (GO-Science)
Sent: 08 July 2013 13:50
To: David Baulcombe
Cc: [REDACTED] (Regulation 13); [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science)
Subject: RE: GM Science

Dear David

Our apologies for the delay in getting back to you, but we have been awaiting the outcome of the recent CST meeting.

We would very much like to go ahead as we discussed, with you preparing a brief paper providing an update on developments in GM science since the Royal Society Report was published in 2009. The CST would use this to inform their letter which will be finalised at the beginning of September.

As we discussed, we would be happy to set up a meeting here in GO-Science with J. Jones, J. Dunwell, J. Pickett and Pere Puigdomenech. Please let me know if you wish us to explore availability direct. Also, we can set up a teleconference facility if this would be most practical for Pere.

The purpose of the first meeting, I assume would be to set out the clear TORs for the task and who will be contributing to the different sections. It may then be helpful to have a review meeting of the text towards the end of August or very early September.

Looking forward to hearing from you with your thoughts.

Best regards

[REDACTED] (Regulation 13)

From: David Baulcombe [mailto:dcb40@cam.ac.uk]
Sent: 14 June 2013 13:31
To: [REDACTED] (Regulation 13) (GO-Science)
Cc: [REDACTED] (Regulation 13)

Subject: Re: GM Science

Dear [REDACTED] (Regulation 13),

I hope there is something useful in the attached. I am now on vacation for a week but you can arrange meetings phone calls via [REDACTED] (Regulation 13). My mobile phone is [REDACTED] (Regulation 13) but I will probably be out of signal for most of the time.

With kind regards

David

From: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED] (Regulation 13) @bis.gsi.gov.uk>
Date: Thursday, 13 June 2013 17:10

To: David Baulcombe <dcb40@cam.ac.uk>

Subject: RE: GM Science

Dear David

Thank you very much for the helpful phone call this morning.

We look forward to hearing from you with your ideas on the possible content of the paper on GM science and who might be involved in the Working Group.

As promised, I attach herewith the two pager on the definition of GM that was prepared with support from Jim Dunwell for your information.

Best regards

██████████ (Regulation 13)

██████████ (Regulation 13)

Government Office for Science | 2nd Floor, 1 Victoria Street, London SW1H 0ET | ██████████

(Regulation 13) | ██████████ (Regulation 13) @bis.gsi.gov.uk

Stay up to date with how Foresight is influencing UK government policy. Visit www.bis.gov.uk/foresight for the latest news.

You can now follow the Government Office for Science and Government Chief Scientific Adviser on Twitter: @uksciencechief.

From: David Baulcombe [<mailto:dcb40@cam.ac.uk>]

Sent: 10 June 2013 15:10

To: ██████████ (Regulation 13) (GO-Science)

Subject: Re: GM Science

Dear ██████████ (Regulation 13)

That is fine.

Please call me on the ██████████ (Regulation 13) number below.

David

Professor Sir David Baulcombe FRS FMedSci

Regius Professor of Botany
Royal Society Research Professor
Head of Department
Department of Plant Sciences,
University of Cambridge, Downing Street, Cambridge CB2 3EA, UK

██████████ (Regulation 13)

dcb40@cam.ac.uk

[@dcb40](https://twitter.com/dcb40) twitter

www.plantsci.cam.ac.uk/research/davidbaulcombe.html

PA ██████████ (Regulation 13)

██████████ (Regulation 13)

- fax

██████████ (Regulation 13) @cam.ac.uk

From: "██████████ (Regulation 13) (GO-Science)" <██████████ (Regulation 13) @bis.gsi.gov.uk>
Date: Monday, 10 June 2013 14:00
To: David Baulcombe <dcb40@cam.ac.uk>
Subject: RE: GM Science

Dear David

Thank you for getting back to me so quickly.
Would 9 - 10 am on Thursday be convenient to talk on the phone.
If so what number should we call you on?

Best regards
██████████ (Regulation 13)

From: David Baulcombe [<mailto:dcb40@cam.ac.uk>]
Sent: 10 June 2013 13:55
To: ██████████ (Regulation 13) (GO-Science)
Subject: Re: GM Science

Dear ██████████ (Regulation 13) ,

I would be interested to talk about this topic. Unfortunately will not have time to talk when I am in London this week but I could talk on the phone before 11 on Thursday.

With kind regards

David

From: [REDACTED] (Regulation 13) (GO-Science)

Sent: 08 July 2013 17:13

To: Jim Dunwell; David Baulcombe; pere.puigdomenech@cragenomica.es; jonathan jones (TSL); john.pickett@rothamsted.ac.uk

Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science); Thomas Sandy (GO-Science)

Subject: RE: Meeting to discuss new GM Science

Dear Jim

Thanks for getting back to me so promptly.
Now waiting on John and Jonathan.

The ACRE report sounds timely, and will provide a useful reference.
Will you be able to share this after this week?

Best regards

[REDACTED] (Regulation 13)

From: David Baulcombe [dcb40@cam.ac.uk]
Sent: 08 July 2013 21:49
To: [REDACTED] (Regulation 13) (UKTI Investment)
Subject: Re: GM Science

Dear [REDACTED] (Regulation 13) ,

This is fine - Pere is currently visiting my lab so he should be able to travel to London from Cambridge if he is in the UK on those dates.

David

From: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED] (Regulation 13) @bis.gsi.gov.uk>
Date: Monday, 8 July 2013 13:49
To: David Baulcombe <dcb40@cam.ac.uk>
Cc: "[REDACTED] (Regulation 13)" <[REDACTED] (Regulation 13) cam.ac.uk>, "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED] (Regulation 13) @bis.gsi.gov.uk>, "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED] (Regulation 13) @bis.gsi.gov.uk>, "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED] (Regulation 13) @bis.gsi.gov.uk>
Subject: RE: GM Science

Dear David

Our apologies for the delay in getting back to you, but we have been awaiting the outcome of the recent CST meeting.

We would very much like to go ahead as we discussed, with you preparing a brief paper providing an update on developments in GM science since the Royal Society Report was published in 2009. The CST would use this to inform their letter which will be finalised at the beginning of September.

As we discussed, we would be happy to set up a meeting here in GO-Science with J. Jones, J. Dunwell, J. Pickett and Pere Puigdomenech. Please let me know if you wish us to explore availability direct. Also, we can set up a teleconference facility if this would be most practical for Pere.

The purpose of the first meeting, I assume would be to set out the clear TORs for the task and who will be contributing to the different sections. It may then be helpful to have a review meeting of the text towards the end of August or very early September.

Looking forward to hearing from you with your thoughts.

Best regards

[REDACTED] (Regulation 13)

From: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED] (Regulation 13) @bis.gsi.gov.uk>
Date: Monday, 10 June 2013 12:41
To: "[REDACTED] (Regulation 13) @cam.ac.uk" <[REDACTED] (Regulation 13) @cam.ac.uk>, David Baulcombe <dcb40@cam.ac.uk>
Cc: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED] (Regulation 13) @bis.gsi.gov.uk>

"██████████ (Regulation 13) (GO-Science)" <██████████ (Regulation 13) @bis.gsi.gov.uk>, "██████████ (Regulation 13) (GO-Science)" <██████████ (Regulation 13)@bis.gsi.gov.uk>

Subject: GM Science

Dear David

I am writing to ask if we could meet with you in London (when you are passing through for meetings) or speak with you on the telephone to discuss the possibility of a brief written update on the *current status of GM in terms of the science*, which the Council for Science and Technology (CST) would like to commission.

This would be a short note for the CST, which brings up to date the findings on GM science from the Royal Society's report published in 2009 on 'Reaping the benefits: Science and the Sustainable Intensification of Agriculture', perhaps through the original working group or similar working group on behalf of the Food Research Partnership.

The Council for Science and Technology (chaired by the Government Chief Scientific Adviser) advises the Prime Minister on strategic issues that cut across the responsibilities of individual Government Departments. Colleagues in GO-Science provide the Secretariat for CST (██████████ (Regulation 13) and ██████████ (Regulation 13) cc'd), and I lead within GO-Science on GM issues (working with ██████████ (Regulation 13) in my team).

I look forward to hearing from you with dates that would be convenient for you in the next couple of weeks.

Best regards

██████████ (Regulation 13)
(Regulation 13)

Government Office for Science | 2nd Floor, 1 Victoria Street, London SW1H 0ET | ██████████
(Regulation 13) ██████████ (Regulation 13) @bis.gsi.gov.uk

Stay up to date with how Foresight is influencing UK government policy. Visit www.bis.gov.uk/foresight for the latest news.

You can now follow the Government Office for Science and Government Chief Scientific Adviser on Twitter: @uksciencechief.

The Business in You campaign highlights support for start-ups and growing businesses, and encourages entrepreneurial spirit. For more information search online for "business in you".

Communications via the GSi may be automatically logged, monitored and/or recorded for legal purposes

From: [REDACTED] (Regulation 13) (GO-Science)

Sent: 08 July 2013 23:57

To: jonathan jones (TSL); Jim Dunwell; David Baulcombe; pere.puigdomenech@cragenomica.es; john pickett (RRes-Roth)

Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science); Thomas Sandy (GO-Science)

Subject: RE: Meeting to discuss new GM Science

Jonathan

Thanks. We will confirm a time on the 23rd.

Regards

[REDACTED] (Regulation 13)

From: [REDACTED] (Regulation 13) (GO-Science)
Sent: 08 July 2013 23:57
To: John Pickett (RRes-Roth)
Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science); Thomas Sandy (GO-Science); Jim Dunwell; David Baulcombe; pere.puigdomenech@cragenomica.es; jonathan jones (TSL)
Subject: RE: Meeting to discuss new GM Science

Dear John

Thanks for getting back to me. A shame that you cannot make it on either of the dates.

It looks as if we should go with the 23rd.

However, we would very much welcome your input and if you can provide your thoughts ahead of the meeting, this will be much appreciated.

Best regards

[REDACTED] (Regulation 13) .

From: John Pickett (RRes-Roth) [mailto:john.pickett@rothamsted.ac.uk]
Sent: 08 July 2013 17:19
To: [REDACTED] (Regulation 13) (GO-Science)
Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science); Thomas Sandy (GO-Science); Jim Dunwell; David Baulcombe; pere.puigdomenech@cragenomica.es; jonathan jones (TSL)
Subject: RE: Meeting to discuss new GM Science

Dear [REDACTED] (Regulation 13)

Unfortunately, I have a long-standing commitment to a Scientific Advisory Board meeting on 17th and will be in Kenya on 23rd July. I would be most keen to help out but my diary is such that more notice is generally required.

With very best wishes

John

From: Pere Puigdomènech Rosell [pere.puigdomenech@cragenomica.es]

Sent: 09 July 2013 14:29

To: [REDACTED] (Regulation 13) (GO-Science); jonathan jones (TSL); Jim Dunwell; David Baulcombe; john pickett (RRes-Roth)

Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science); Thomas Sandy (GO-Science)

Subject: RE: Meeting to discuss new GM Science

Dear [REDACTED] (Regulation 13) ,

Thank you for the invitation. July 23rd is very good for me.

See you in London.

Pere

From: [REDACTED] (Regulation 13) (GO-Science) [REDACTED] (Regulation 13) @bis.gsi.gov.uk]

Sent: Tuesday, July 09, 2013 12:56 AM

To: jonathan jones (TSL); Jim Dunwell; David Baulcombe; Pere Puigdomènech Rosell; john pickett (RRes-Roth)

Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science); Thomas Sandy (GO-Science)

Subject: RE: Meeting to discuss new GM Science

Jonathan

Thanks. We will confirm a time on the 23rd.

Regards

[REDACTED] (Regulation 13)

From: jonathan jones (TSL) [jonathan.jones@sainsbury-laboratory.ac.uk]

Sent: 11 July 2013 13:24

To: [REDACTED] (Regulation 13) (UKTI Investment)

Subject: Re: Meeting to discuss new GM Science

In the diary

Vbw

JJ

From: Jim Dunwell [j.m.dunwell@reading.ac.uk]
Sent: 12 July 2013 09:18
To: jonathan jones (TSL)
Subject: RE: Meeting to discuss new GM Science

Thanks, I look forward to an interesting discussion.

Jim

From: jonathan jones (TSL) [mailto:jonathan.jones@sainsbury-laboratory.ac.uk]
Sent: 11 July 2013 13:55
To: Jim Dunwell; Pere Puigdomenich
Subject: FW: Meeting to discuss new GM Science

Hi both- I have circulated the attached widely but you may be interested; at the risk of being predictable, I plan to try to emphasise the need for a strong public sector GM program when we get together in a couple of weeks

Vbw

JJ

From: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED]@bis.gsi.gov.uk>
Date: Thursday, 11 July 2013 07:18
To: Jonathan Jones <jonathan.jones@sainsbury-laboratory.ac.uk>, Jim Dunwell <j.m.dunwell@reading.ac.uk>, David Baulcombe <dcb40@cam.ac.uk>, Pere Puigdomenich <pere.puigdomenech@cragenomica.es>, "john pickett (RRes-Roth)" <john.pickett@rothamsted.ac.uk>
Cc: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED]@bis.gsi.gov.uk>, "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED]@bis.gsi.gov.uk>, "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED]@bis.gsi.gov.uk>, "Thomas Sandy (GO-Science)" <sandy.thomas@bis.gsi.gov.uk>
Subject: RE: Meeting to discuss new GM Science

Dear All

Just to confirm that the meeting will be held on 23 July from 15:00 - 17:00 hrs at BIS.

We look forward to seeing you then.

Best regards

[REDACTED] (Regulation 13)

From: jonathan jones (TSL) [mailto:jonathan.jones@sainsbury-laboratory.ac.uk]
Sent: 08 July 2013 18:06
To: [REDACTED] (Regulation 13) (GO-Science); Jim Dunwell; David Baulcombe; pere.puigdomenech@cragenomica.es; jonathan jones (TSL); john pickett (RRes-Roth)
Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science); Thomas Sandy (GO-Science)
Subject: Re: Meeting to discuss new GM Science

Dear all

Thanks for the invitation; 23rd is probably better for me, preferably beginning or end of the day

Thanks, Jonathan

From: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED]@bis.gsi.gov.uk>
Date: Monday, 8 July 2013 17:13
To: Jim Dunwell <j.m.dunwell@reading.ac.uk>, David Baulcombe <dcb40@cam.ac.uk>, Pere Puigdomenech <pere.puigdomenech@cragenomica.es>, Jonathan Jones <jonathan.jones@sainsbury-laboratory.ac.uk>, "John Pickett (RRes-Roth)" <john.pickett@rothamsted.ac.uk>
Cc: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED]@bis.gsi.gov.uk>, "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED]@bis.gsi.gov.uk>, "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED]@bis.gsi.gov.uk>, "Thomas Sandy (GO-Science)" <sandy.thomas@bis.gsi.gov.uk>
Subject: RE: Meeting to discuss new GM Science

Dear Jim

Thanks for getting back to me so promptly.
Now waiting on John and Jonathan.

The ACRE report sounds timely, and will provide a useful reference.
Will you be able to share this after this week?

Best regards

[REDACTED] (Regulation 13)

From: Jim Dunwell [mailto:j.m.dunwell@reading.ac.uk]
Sent: 08 July 2013 16:04
To: [REDACTED] (Regulation 13) (GO-Science); David Baulcombe; pere.puigdomenech@cragenomica.es; Jim Dunwell; jonathan jones (TSL); john.pickett@rothamsted.ac.uk
Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science); Thomas Sandy (GO-Science)
Subject: RE: Meeting to discuss new GM Science

Dear [REDACTED] (Regulation 13),

The best for me is Tuesday 23rd. any time.

I have a Defra National Fruit Collections advisory meeting on 17th, but could possibly miss this. Incidentally we are discussing a new summary of breeding techniques at our ACRE meeting this week; this report was prepared by an ACRE subcommittee of which I am a member.

Best regards,

Jim

From: [REDACTED] (Regulation 13) (GO-Science) [mailto:[REDACTED]@bis.gsi.gov.uk]
Sent: 08 July 2013 15:55
To: David Baulcombe; pere.puigdomenech@cragenomica.es; Jim Dunwell; jonathan jones (TSL); john.pickett@rothamsted.ac.uk
Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science); Thomas Sandy (GO-Science)
Subject: Meeting to discuss new GM Science
Dear Jonathan, John and Jim

I would like to invite you to join David Baulcombe and Pere Puigdomenech to discuss the compilation of a brief written update on the developments in GM science which the Council for Science and Technology (CST) would like to commission. This would be a short note for the CST, detailing recent developments in GM science since the Royal Society's report on 'Reaping the benefits: Science and the Sustainable Intensification of Agriculture' was published in 2009. The Council for Science and Technology (chaired by the Government Chief Scientific Adviser) advises the Prime Minister on strategic issues that cut across the responsibilities of individual Government Departments. Colleagues in GO-Science provide the Secretariat for CST. I would be really grateful if you could confirm your availability for the two following options:

- Wednesday 17th July (am till 14:30)
- Tuesday 23rd July (anytime)

Apologies for the short notice and only two date options, but these are the only times in the next two weeks when David is available. The meeting will be held here in GO-Science, 1 Victoria Street and would last approximately two hours. I look forward to hearing from you.

Best regards

██████████ (Regulation 13)

██████████ (Regulation 13)

Government Office for Science | 2nd Floor, 1 Victoria Street, London SW1H 0ET | ██████████

(Regulation 13) | ██████████ (Regulation 13) @bis.gsi.gov.uk

Stay up to date with how Foresight is influencing UK government policy. Visit www.bis.gov.uk/foresight for the latest news.

You can now follow the Government Office for Science and Government Chief Scientific Adviser on Twitter: @uksciencechief.

From: jonathan jones (TSL) [jonathan.jones@tsl.ac.uk]

Sent: 24 July 2013 10:33

To: [REDACTED] (Regulation 13) (UKTI Investment); jonathan jones (TSL); Jim Dunwell; David Baulcombe; pere.puigdomenech@cragenomica.es

Subject: Resistance to an herbivore through engineered cyanogenic glucoside synthesis

Attachments: Science 2001 Tattersall.pdf; CST letter prep; 230713 notes jj.docx

Hi all- I attach a paper I referred to yesterday and also my notes

Vbw

JJ

Tattersall et al. Resistance to an herbivore through engineered cyanogenic glucoside synthesis. Science (2001) vol. 293 (5536) pp. 1826-8

<http://www.sciencemag.org/cgi/content/full/293/5536/1826>

From: jonathan jones (TSL) [jonathan.jones@tsl.ac.uk]

Sent: 11 October 2013 13:21

To: [REDACTED] (Regulation 13) (UKTI Investment)

Subject: Wheat grain yield on saline soils is improved by an ancestral Na⁺ transporter gene

Attachments: Nature biotechnology 2012 Munns.pdf

Hi [REDACTED] (Regulation 13) - working on it now here is the reference you requested in section A4 (again!) cheers JJ

Munns et al. Wheat grain yield on saline soils is improved by an ancestral Na⁺ transporter gene. Nature biotechnology (2012) vol. 30 (4) pp. 360-4

<http://www.nature.com/nbt/journal/v30/n4/full/nbt.2120.html>

From: Jim Dunwell [j.m.dunwell@reading.ac.uk]

Sent: 30 July 2013 10:34

To: [REDACTED] (Regulation 13) (GO-Science); dcb40@cam.ac.uk; j.m.dunwell@reading.ac.uk; pere.puigdomenech@cragenomica.es; jonathan.jones@sainsbury-laboratory.ac.uk; [REDACTED] (Regulation 13)@defra.gsi.gov.uk

Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science); john.pickett@rothamsted.ac.uk; Thomas Sandy (GO-Science)

Subject: RE: Note of GM science meeting 23rd July

Attachments: 2013.01.08_Pipeline_Q1FY13.pdf; GM cereals Dunwell JCS submitted.pdf

Dear [REDACTED] (Regulation 13) ,

As discussed during the meeting, I attach details of the Monsanto product pipeline (Jan 2103) in case it's of interest for future commercial development.

Also I attach the draft of my Journal of Cereal Science Review, again there are some relevant references in it; please note this has been submitted but not yet been reviewed.

Jim

From: [REDACTED] (Regulation 13) (GO-Science)
Sent: 01 August 2013 16:44
To: 'Pere Puigdomènech Rosell'
Cc: [REDACTED] (Regulation 13) (GO-Science)
Subject: RE: Note of GM science meeting 23rd July

Dear Pere

Thank you for your email and enthusiasm at the meeting last week. It would be really helpful to have you at the next meeting on 28th August, however, we would be unable to cover your travel expenses - would Cambridge or your home university be willing to cover this? Alternatively we could dial you in on speaker phone to join the discussion.

Best regards

[REDACTED] **(Regulation 13)**

Government Office for Science | 2nd Floor | 1 Victoria Street, London | Tel: [REDACTED]
(Regulation 13)

From: Pere Puigdomènech Rosell [pere.puigdomenech@cragenomica.es]
Sent: 02 August 2013 09:32
To: [REDACTED] (Regulation 13) (GO-Science)
Subject: RE: Note of GM science meeting 23rd July

Dear [REDACTED] (Regulation 13) ,
To join the discussion on the phone is an excellent idea!
Thank you.
Pere

De: [REDACTED] (Regulation 13) (GO-Science) [mailto:[REDACTED] (Regulation 13) @bis.gsi.gov.uk]
Enviado el: jueves, 01 de agosto de 2013 17:44
Para: Pere Puigdomènech Rosell
CC: [REDACTED] (Regulation 13) (GO-Science)
Asunto: RE: Note of GM science meeting 23rd July

Dear Pere
Thank you for your email and enthusiasm at the meeting last week. It would be really helpful to have you at the next meeting on 28th August, however, we would be unable to cover your travel expenses - would Cambridge or your home university be willing to cover this? Alternatively we could dial you in on speaker phone to join the discussion.

Best regards

[REDACTED] (Regulation 13)

Government Office for Science | 2nd Floor | 1 Victoria Street, London | Tel: [REDACTED]
(Regulation 13)

From: Pere Puigdomènech Rosell [mailto:pere.puigdomenech@cragenomica.es]
Sent: 31 July 2013 16:02
To: [REDACTED] (Regulation 13) (GO-Science)
Subject: RE: Note of GM science meeting 23rd July

Dear [REDACTED] (Regulation 13) ,
It was a pleasure to take part in the meeting with you in London. I am at this moment writing my part of the draft.
I am writing you regarding the meeting in August. On August 28th I will be in Barcelona as next day I am leaving to attend a meeting in Greece. I could attend the meeting in London, fortunately there are plenty of flights both ways Barcelona-London. Do you think it is worth that I plan to attend the meeting flying from Barcelona or the presence of my colleagues is enough and it does not justify the travel and the expense?
Best regards.
Pere Puigdomenech

De: [REDACTED] (Regulation 13) (GO-Science) [mailto:[REDACTED] (Regulation 13) @bis.gsi.gov.uk]
Enviado el: viernes, 15: 26 de julio de 2013 50
Para: dcb40@cam.ac.uk; j.m.dunwell@reading.ac.uk; Pere Puigdomènech Rosell; jonathan.jones@sainsbury-laboratory.ac.uk; [REDACTED] (Regulation 13)@defra.gsi.gov.uk
CC: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science); john.pickett@rothamsted.ac.uk; Thomas Sandy (GO-Science)
Asunto: Note of GM science meeting 23rd July
<<CST GM science annex - Expert group meeting 23rd July.doc>>
Dear all

Thank you for participating in the meeting on Tuesday. Please find attached a summary of what we discussed.

Below is the draft structure of the annex with agreed leads.

Please send input on the sections to the section leaders by 12th August, to allow compilation of a full draft to circulate by **Friday 23rd August**, for discussion at our next meeting.

Section 1: Last five years of commercial activity – experience of growing GM in farmers fields.

Jim to lead on drafting this section

Section 2: New scientific developments over the last 5 years (in the lab)

A. New emerging traits using existing ‘old’ techniques

David and Jonathan to lead on drafting this section

B. New enabling techniques and methods

Pere to lead on this section with input from Jonathan

Section 3: Safety and risk assessment

David to lead on this section with input from Jim and [REDACTED] (Regulation 13)

Conclusion: To agree at next meeting.

I look forward to discussing the draft annex in August. We have a room booked in BIS, 1 Victoria Street **3-5pm for the 28th August.**

Best wishes

[REDACTED] ([Regulation 13](#))

Government Office for Science | 2nd Floor | 1 Victoria Street, London | Tel: [REDACTED]
(Regulation 13)

Communications via the GSi may be automatically logged, monitored and/or recorded for legal purposes

From: [REDACTED] (Regulation 13) (GO-Science)
Sent: 02 August 2013 17:02
To: 'Pere Puigdomènech Rosell'
Subject: RE: Note of GM science meeting 23rd July

Dear Pere

Thank you very much for sending in your section round the group today. It is good to keep momentum going on this due to the relatively tight deadlines.

Glad you are happy to join us via speaker-phone on the 28th. I will double check with internal procedures for dialling internationally but colleagues have done it successfully in the past.

I hope you have a good weekend and break in Barcelona.

Best regards

[REDACTED] (Regulation 13)

From: Pere Puigdomènech Rosell [mailto:pere.puigdomenech@cragenomica.es]
Sent: 02 August 2013 12:33
To: [REDACTED] (Regulation 13) (GO-Science); dcb40@cam.ac.uk; j.m.dunwell@reading.ac.uk; jonathan.jones@sainsbury-laboratory.ac.uk; [REDACTED] (Regulation 13)@defra.gsi.gov.uk
Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science); john.pickett@rothamsted.ac.uk; Thomas Sandy (GO-Science)
Subject: RE: Note of GM science meeting 23rd July

Dear friends,

I am enclosing a first draft of the Section on New enabling technologies. I would appreciate your comments on the content of the text to continue with the text.

Best regards.

Pere Puigdomenech

De: [REDACTED] (Regulation 13) (GO-Science) [mailto:[REDACTED] (Regulation 13) @bis.gsi.gov.uk]
Enviado el: viernes, 26 de julio de 2013 15:50
Para: dcb40@cam.ac.uk; j.m.dunwell@reading.ac.uk; Pere Puigdomènech Rosell; jonathan.jones@sainsbury-laboratory.ac.uk; [REDACTED] (Regulation 13)@defra.gsi.gov.uk
CC: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science); john.pickett@rothamsted.ac.uk; Thomas Sandy (GO-Science)
Asunto: Note of GM science meeting 23rd July

Dear all

Thank you for participating in the meeting on Tuesday. Please find attached a summary of what we discussed.

Below is the draft structure of the annex with agreed leads.

Please send input on the sections to the section leaders by 12th August, to allow compilation of a full draft to circulate by **Friday 23rd August**, for discussion at our next meeting.

Section 1: Last five years of commercial activity – experience of growing GM in farmers fields.

Jim to lead on drafting this section

Section 2: New scientific developments over the last 5 years (in the lab)

A. New emerging traits using existing 'old' techniques

David and Jonathan to lead on drafting this section

B. New enabling techniques and methods

Pere to lead on this section with input from Jonathan

Section 3: Safety and risk assessment

David to lead on this section with input from Jim and [REDACTED] (Regulation 13)

Conclusion: To agree at next meeting.

I look forward to discussing the draft annex in August. We have a room booked in BIS, 1 Victoria Street **3-5pm for the 28th August.**

Best wishes

[REDACTED] **(Regulation 13)**

Government Office for Science | 2nd Floor | 1 Victoria Street, London | Tel: [REDACTED]
(Regulation 13)

From: [REDACTED] (Regulation 13) (RRes-Roth) [REDACTED] (Regulation 13)@rothamsted.ac.uk]
Sent: 16 August 2013 16:48
To: [REDACTED] (Regulation 13) (GO-Science)
Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science); Thomas Sandy (GO-Science); John Pickett (RRes-Roth); dcb40@cam.ac.uk; j.m.dunwell@reading.ac.uk; pere.puigdomenech@cragenomica.es; jonathan.jones@sainsbury-laboratory.ac.uk; [REDACTED] (Regulation 13)@defra.gsi.gov.uk
Subject: Note of GM science meeting 23rd July

Follow Up Flag: Follow up
Flag Status: Orange

Dear [REDACTED] (Regulation 13) ,

John Pickett has asked me to let you know that unfortunately he will also have to miss the meeting scheduled for 28th August in London as he will be travelling back from Australia that day. He would, however, appreciate being kept informed of progress.

With thanks and very best wishes,

[REDACTED] (Regulation 13)

[REDACTED] (Regulation 13)
[REDACTED] (Regulation 13)
Rothamsted Research,
Harpenden,
Herts., AL5 2JQ,
United Kingdom

Tel: [REDACTED] (Regulation 13)
Fax +44 [REDACTED] (Regulation 13)

E-mail: [REDACTED] (Regulation 13)@rothamsted.ac.uk
E-mail: john.pickett@rothamsted.ac.uk
WWW: <http://www.rothamsted.ac.uk/>

Rothamsted Research is a company limited by guarantee, registered in England under the registration number 2393175 and a not for profit charity number 802038.

From: John Pickett (RRes-Roth)
Sent: 26 July 2013 15:35
To: [REDACTED] (Regulation 13) (GO-Science); dcb40@cam.ac.uk; j.m.dunwell@reading.ac.uk; pere.puigdomenech@cragenomica.es; jonathan.jones@sainsbury-laboratory.ac.uk; [REDACTED] (Regulation 13)@defra.gsi.gov.uk
Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science); Thomas Sandy (GO-Science); [REDACTED] (Regulation 13) (RRes-Roth)
Subject: RE: Note of GM science meeting 23rd July

Dear [REDACTED] (Regulation 13)

I was disappointed not to be able to be involved in this meeting because of prior commitments. However, although in my absence I was not assigned any primary writing, I would be most happy to

contribute and to attend any later meetings although my travel arrangements, largely in connection with this subject, are extremely demanding.

Very best wishes,

John

From: Jim Dunwell [j.m.dunwell@reading.ac.uk]
Sent: 16 August 2013 17:32
To: [REDACTED] (Regulation 13) (GO-Science); dcb40@cam.ac.uk; j.m.dunwell@reading.ac.uk; pere.puigdomenech@cragenomica.es; jonathan.jones@sainsbury-laboratory.ac.uk; [REDACTED] (Regulation 13)@defra.gsi.gov.uk
Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science); john.pickett@rothamsted.ac.uk; Thomas Sandy (GO-Science)
Subject: RE: Note of GM science meeting 23rd July
Follow Up Flag: Follow up
Flag Status: Orange
Attachments: GM Crops summary.docx

Please see attached a brief summary of the present status of GM crops with some comments on those in the pipeline.

This could easily be expanded.

Regards

Jim

From: [REDACTED] (Regulation 13) (GO-Science)
Sent: 23 August 2013 12:42
To: 'David Baulcombe'
Cc: [REDACTED] (Regulation 13) (GO-Science)
Subject: GM science update

Dear David

I hope you had a good vacation. I am emailing to request your contribution to the GM science update, for our next meeting on Wednesday 28th.

You agreed to draft: Section 2A. New emerging traits using existing 'old' techniques - with Jonathan and Section 3: Safety and risk assessment - with input from Jim and [REDACTED] (Regulation 13)

If you could circulate what you have before Tuesday we can bring printed copies of the to the meeting. I will be out of the office on Tuesday so please **include [REDACTED] (Regulation 13) on your emails.**

Best regards
[REDACTED] (Regulation 13)

[REDACTED] ([Regulation 13](#))

Government Office for Science | 2nd Floor | 1 Victoria Street, London | Tel: [REDACTED] (Regulation 13)

From: David Baulcombe [mailto:dcb40@cam.ac.uk]
Sent: 28 July 2013 22:22
To: [REDACTED] (Regulation 13) (GO-Science); j.m.dunwell@reading.ac.uk; pere.puigdomenech@cragenomica.es; jonathan.jones@sainsbury-laboratory.ac.uk; [REDACTED] (Regulation 13)@defra.gsi.gov.uk
Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science); john.pickett@rothamsted.ac.uk; Thomas Sandy (GO-Science)
Subject: Re: Note of GM science meeting 23rd July

Dear [REDACTED] (Regulation 13) ,

Thanks for this note. It all looks good but I will have a problem meeting the deadline as I will be on vacation until 12th and then have a three day meeting when it will be difficult to deal with this. I will hope to have something before 16th.

David

From: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED]@bis.gsi.gov.uk>
Date: Friday, 26 July 2013 14:49
To: David Baulcombe <dcb40@cam.ac.uk>, <j.m.dunwell@reading.ac.uk>, Pere Puigdomènech Rosell <pere.puigdomenech@cragenomica.es>, <jonathan.jones@sainsbury-laboratory.ac.uk>, <[REDACTED]@defra.gsi.gov.uk>
Cc: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED]@bis.gsi.gov.uk>, "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED]@bis.gsi.gov.uk>, "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED]@bis.gsi.gov.uk>, <john.pickett@rothamsted.ac.uk>, "Thomas Sandy (GO-Science)" <sandy.thomas@bis.gsi.gov.uk>
Subject: Note of GM science meeting 23rd July

<<CST GM science annex - Expert group meeting 23rd July.doc>>

Dear all

Thank you for participating in the meeting on Tuesday. Please find attached a summary of what we discussed.

Below is the draft structure of the annex with agreed leads.

Please send input on the sections to the section leaders by 12th August, to allow compilation of a full draft to circulate by **Friday 23rd August**, for discussion at our next meeting.

Section 1: Last five years of commercial activity – experience of growing GM in farmers fields.

Jim to lead on drafting this section

Section 2: New scientific developments over the last 5 years (in the lab)

A. New emerging traits using existing ‘old’ techniques

David and Jonathan to lead on drafting this section

B. New enabling techniques and methods

Pere to lead on this section with input from Jonathan

Section 3: Safety and risk assessment

David to lead on this section with input from Jim and [REDACTED] (Regulation 13)

Conclusion: To agree at next meeting.

I look forward to discussing the draft annex in August. We have a room booked in BIS, 1 Victoria Street **3-5pm for the 28th August.**

Best wishes

[REDACTED] ([Regulation 13](#))

Government Office for Science | 2nd Floor | 1 Victoria Street, London | Tel: [REDACTED] (Regulation 13)

Communications via the GSi may be automatically logged, monitored and/or recorded for legal purposes

This email was received from the INTERNET.

Communications via the GSi may be automatically logged, monitored and/or recorded for legal purposes.

From: David Baulcombe [dcb40@cam.ac.uk]
Sent: 23 August 2013 12:57
To: [REDACTED] (Regulation 13) (GO-Science)
Subject: Re: GM science update
Will do.

David

From: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED]@bis.gsi.gov.uk>
Date: Friday, 23 August 2013 12:41
To: David Baulcombe <dcb40@cam.ac.uk>
Cc: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED]@bis.gsi.gov.uk>
Subject: GM science update

Dear David

I hope you had a good vacation. I am emailing to request your contribution to the GM science update, for our next meeting on Wednesday 28th.

You agreed to draft: Section 2A. New emerging traits using existing Id² techniques - with Jonathan and Section 3: Safety and risk assessment - with input from Jim and [REDACTED] (Regulation 13)

If you could circulate what you have before Tuesday we can bring printed copies of the to the meeting. I will be out of the office on Tuesday so please **include [REDACTED] (Regulation 13) on your emails.**

Best regards

[REDACTED] (Regulation 13)

[REDACTED] ([Regulation 13](#))

Government Office for Science | 2nd Floor | 1 Victoria Street, London | Tel: [REDACTED] (Regulation 13)

From: Pere Puigdomènech Rosell [pere.puigdomenech@cragenomica.es]

Sent: 26 August 2013 10:37

To: Jim Dunwell; [REDACTED] (Regulation 13) (GO-Science); dcb40@cam.ac.uk;
jonathan.jones@sainsbury-laboratory.ac.uk; [REDACTED] (Regulation 13)@defra.gsi.gov.uk

Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science); [REDACTED]
(Regulation 13) (GO-Science); john.pickett@rothamsted.ac.uk; Thomas Sandy (GO-Science)

Subject: RE: Note of GM science meeting 23rd July

Follow Up Flag: Follow up

Flag Status: Orange

Attachments: Recent developments in GMOs.docx

Dear [REDACTED] (Regulation 13),

I am attaching a more detailed version of the section on New Technologies for the document on GMO with some suggestions for the conclusions.. If more details are needed and selected references I am prepared to add them.

Next Wednesday I will be in my lab in Barcelona from 14.00 to 17.00 London time and I could be reached by telephone: ([REDACTED] (Regulation 13)) or to my cellphone ([REDACTED] (Regulation 13)).

Best regards.

Pere

From: Jim Dunwell [j.m.dunwell@reading.ac.uk]
Sent: 28 August 2013 15:34
To: David Baulcombe; [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science); 'j.m.dunwell@reading.ac.uk'; 'pere.puigdomenech@cragenomica.es'; 'jonathan.jones@sainsbury-laboratory.ac.uk'; [REDACTED] (Regulation 13)@defra.gsi.gov.uk'
Cc: [REDACTED] (Regulation 13) (GO-Science); 'john.pickett@rothamsted.ac.uk'; Thomas Sandy (GO-Science)
Subject: ACRE details

Follow Up Flag: Follow up
Flag Status: Orange

These are the links to the ACRE workpackages:-

are <http://www.defra.gov.uk/acre/files/Report-1.pdf>,
<http://www.defra.gov.uk/acre/files/Report-2.pdf> and
<http://www.defra.gov.uk/acre/files/Report-3.pdf>

Jim

From: David Baulcombe [mailto:dcb40@cam.ac.uk]
Sent: 28 August 2013 14:49
To: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science); 'j.m.dunwell@reading.ac.uk'; 'pere.puigdomenech@cragenomica.es'; 'jonathan.jones@sainsbury-laboratory.ac.uk'; [REDACTED] (Regulation 13)@defra.gsi.gov.uk'
Cc: [REDACTED] (Regulation 13) (GO-Science); 'john.pickett@rothamsted.ac.uk'; Thomas Sandy (GO-Science)
Subject: Re: URGENT - GM science meeting - Wednesday 28 August - 3-5 pm

Please find attached the text from [REDACTED] (Regulation 13) with additions from Jonathan Jones and myself. For discussion in a few minutes time.

David

From: Jim Dunwell [j.m.dunwell@reading.ac.uk]

Sent: 28 August 2013 15:54

To: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science); 'dcb40@cam.ac.uk'; 'j.m.dunwell@reading.ac.uk'; 'pere.puigdomenech@cragenomica.es'; 'jonathan.jones@sainsbury-laboratory.ac.uk'; [REDACTED] (Regulation 13)@defra.gsi.gov.uk'

Cc: [REDACTED] (Regulation 13) (GO-Science); 'john.pickett@rothamsted.ac.uk'; Thomas Sandy (GO-Science)

Subject: RE: URGENT - GM science meeting - Wednesday 28 August - 3-5 pm

Attachments: Aphis advice.pdf

[This is the Nature summary of USDA advice.](#)

Jim

From: Jim Dunwell [j.m.dunwell@reading.ac.uk]

Sent: 28 August 2013 16:07

To: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science); 'dcb40@cam.ac.uk'; 'j.m.dunwell@reading.ac.uk'; 'pere.puigdomenech@cragenomica.es'; 'jonathan.jones@sainsbury-laboratory.ac.uk'; [REDACTED] (Regulation 13)@defra.gsi.gov.uk'

Cc: [REDACTED] (Regulation 13) (GO-Science); 'john.pickett@rothamsted.ac.uk'; Thomas Sandy (GO-Science)

Subject: RE: URGENT - GM science meeting - Wednesday 28 August - 3-5 pm

Attachments: Agricultural Biotechnology Annual_Paris_EU-27_7-12-2013.pdf

[This is the USDA GAIN report.](#)

Jim

From: Pere Puigdomènech Rosell [pere.puigdomenech@cragenomica.es]
Sent: 28 August 2013 16:22
To: Jim Dunwell; David Baulcombe; [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science); 'jonathan.jones@sainsbury-laboratory.ac.uk'; [REDACTED] (Regulation 13)@defra.gsi.gov.uk'
Cc: [REDACTED] (Regulation 13) (GO-Science); 'john.pickett@rothamsted.ac.uk'; Thomas Sandy (GO-Science)
Subject: RE: ACRE details

Jim,

This is the risk assessment of the Brazilian bean. You may notice that this is a RNAi modification:

<http://www.ctnbio.gov.br/index.php/content/view/17813.html>

Pere

De: Jim Dunwell [mailto:j.m.dunwell@reading.ac.uk]
Enviado el: miércoles, 28 de agosto de 2013 16:34
Para: David Baulcombe; [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science); 'j.m.dunwell@reading.ac.uk'; Pere Puigdomènech Rosell; 'jonathan.jones@sainsbury-laboratory.ac.uk'; [REDACTED] (Regulation 13)@defra.gsi.gov.uk'
CC: [REDACTED] (Regulation 13) (GO-Science); 'john.pickett@rothamsted.ac.uk'; Thomas Sandy (GO-Science)
Asunto: ACRE details

These are the links to the ACRE workpackages:-

are <http://www.defra.gov.uk/acre/files/Report-1.pdf>,

<http://www.defra.gov.uk/acre/files/Report-2.pdf> and

<http://www.defra.gov.uk/acre/files/Report-3.pdf>

Jim

From: Jim Dunwell [j.m.dunwell@reading.ac.uk]

Sent: 28 August 2013 16:56

To: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science); 'dcb40@cam.ac.uk'; 'j.m.dunwell@reading.ac.uk'; 'pere.puigdomenech@cragenomica.es'; 'jonathan.jones@sainsbury-laboratory.ac.uk'; [REDACTED] (Regulation 13)@defra.gsi.gov.uk'

Cc: [REDACTED] (Regulation 13) (GO-Science); 'john.pickett@rothamsted.ac.uk'; Thomas Sandy (GO-Science)

Subject: RE: URGENT - GM science meeting - Wednesday 28 August - 3-5 pm

Attachments: Plant Biotechnology Product Pipeline.pdf

Jonathan,

This may be of use in your section on future developments.

Jim

From: Pere Puigdomènech Rosell [pere.puigdomenech@cragenomica.es]
Sent: 28 August 2013 20:25
To: [REDACTED] (Regulation 13) (UKTI Investment)
Subject: RE: URGENT - GM science meeting - Wednesday 28 August - 3-5 pm

Dear [REDACTED] (Regulation 13) ,
Could you send me the last text with all the contributions? I have lost it somewhere.
Thank you.
Pere

From: [REDACTED] (Regulation 13) (GO-Science) [REDACTED] (Regulation 13) @bis.gsi.gov.uk]
Sent: Wednesday, August 28, 2013 6:16 PM
To: Jim Dunwell; jonathan jones (TSL); 'dcb40@cam.ac.uk'; Pere Puigdomènech Rosell; [REDACTED] (Regulation 13) (Defra); 'john.pickett@rothamsted.ac.uk'
Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science)
Subject: RE: URGENT - GM science meeting - Wednesday 28 August - 3-5 pm

All

Please find the recent DFID Nature article.

Best regards

[REDACTED] (Regulation 13)

From: jonathan jones (TSL) [jonathan.jones@sainsbury-laboratory.ac.uk]

Sent: 28 August 2013 20:30

To: [REDACTED] (Regulation 13) (UKTI Investment)

Subject: Re: URGENT - GM science meeting - Wednesday 28 August - 3-5 pm

Hi [REDACTED] (Regulation 13) , you were going to cut-and-paste me some text re Golden Rice? Thanks! JJ

From: jonathan jones (TSL) [jonathan.jones@sainsbury-laboratory.ac.uk]
Sent: 29 August 2013 14:18
To: REDACTED (Regulation 13) (UKTI Investment)
Subject: FW: Jonathan Jones shared "CST annex" with you

From: David Baulcombe <dcb40@cam.ac.uk>
Date: Thursday, 29 August 2013 14:08
To: Jonathan Jones <jonathan.jones@sainsbury-laboratory.ac.uk>
Subject: Re: Jonathan Jones shared "CST annex" with you

It works for me.

DCB

From: Jonathan via Dropbox <no-reply@dropbox.com>
Reply-To: <jonathan.jones@tsl.ac.uk>
Date: Thursday, 29 August 2013 14:07
To: David Baulcombe <dcb40@cam.ac.uk>
Subject: Jonathan Jones shared "CST annex" with you



From Jonathan:

"doing a little experiment here to see if this is the easiest way to share PDFs re the references we are using; please confirm and I'll invite the rest of the team"

REDACTED - regulation 12(5)(c)

(Jonathan shared these files using Dropbox. Enjoy!)

© 2013 Dropbox

This email was received from the INTERNET.

Communications via the GSI may be automatically logged, monitored and/or recorded for legal purposes.

From: [REDACTED] (Regulation 13) (GO-Science)
Sent: 29 August 2013 15:29
To: 'David Baulcombe'; 'jonathan.jones@sainsbury-laboratory.ac.uk';
'j.m.dunwell@reading.ac.uk'; 'Pere Puigdomènech Rosell'
Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-
Science); 'john.pickett@rothamsted.ac.uk'; [REDACTED] (Regulation
13)@defra.gsi.gov.uk'
Subject: Note and actions from GM science meeting 28th August
Attachments: GM Science update meeting 28th August - Action Note.doc

Dear All

Thank you for the good discussion on the CST GM Science Annex yesterday.
Please find attached the summary note with actions highlighted.
Please circulate references/ redrafted sections by COP 2nd September so that David
can draw the second draft of the annex together.

Speak to you **Friday 6th at 16:30 BST**, same dialling details as before:
[REDACTED] (Regulation 13)

Best wishes

[REDACTED] (Regulation 13)

[REDACTED] ([Regulation 13](#))

Government Office for Science | 2nd Floor | 1 Victoria Street, London | Tel: [REDACTED] (Regulation
13)

From: jonathan jones (TSL) [jonathan.jones@sainsbury-laboratory.ac.uk]

Sent: 29 August 2013 16:00

To: [REDACTED] (Regulation 13) (GO-Science); Jim Dunwell; jonathan jones (TSL); 'dcb40@cam.ac.uk'; 'pere.puigdomenech@cragenomica.es'; [REDACTED] (Regulation 13) (Defra); john pickett (RRes-Roth)

Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science)

Subject: Re: URGENT - GM science meeting - Wednesday 28 August - 3-5 pm

Attachments: Section 2.2.docx

My updated section- surprisingly ahead of schedule.

References in "CST Annex" dropbox (if any are missing let me know)

Cheers JJ

From: jonathan jones (TSL) [jonathan.jones@sainsbury-laboratory.ac.uk]
Sent: 29 August 2013 17:24
To: [REDACTED] (Regulation 13) (UKTI Investment); john pickett (RRes-Roth)
Cc: 'dcb40@cam.ac.uk'
Subject: Re: URGENT - GM science meeting - Wednesday 28 August - 3-5 pm
Hi John- I realize I should have added something about aphid deterrence!
JJ

From: John Pickett (RRes-Roth) [john.pickett@rothamsted.ac.uk]

Sent: 29 August 2013 17:35

To: jonathan jones (TSL); [REDACTED] (Regulation 13) (UKTI Investment)

Cc: 'dcb40@cam.ac.uk'; [REDACTED] (Regulation 13) (RRes-Roth)

Subject: Re: URGENT - GM science meeting - Wednesday 28 August - 3-5 pm

Dear Jonathan

I'm back now from Australia though with a broken ankle and will add this but probably not until Monday if still in the deadline.

Very best wishes,

John

Sent from my HTC

From: Jim Dunwell [j.m.dunwell@reading.ac.uk]

Sent: 30 August 2013 09:49

To: [REDACTED] (Regulation 13) (GO-Science); David Baulcombe; jonathan.jones@sainsbury-laboratory.ac.uk; j.m.dunwell@reading.ac.uk; Pere Puigdomènech Rosell

Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science); john.pickett@rothamsted.ac.uk; [REDACTED] (Regulation 13)@defra.gsi.gov.uk

Subject: RE: Note and actions from GM science meeting 28th August - future product pipelines

Attachments: Monsanto_2013.01.08_Pipeline_Q1FY13.pdf; Corn_pipeline_AGW-1568CcOR.ppt; Soybean_Biotech_PipelineCharts.pdf

Dear Jonathan,

I've found some more useful summaries of commercial products in the pipeline.

Monsanto pipeline is attached.

An interactive summary of soybean and corn is at:- http://www.agweb.com/article/in_the_pipeline/

Other version as single slides for soya and corn are also attached.

Hope these might help.

Jim

From: Jim Dunwell [j.m.dunwell@reading.ac.uk]
Sent: 01 September 2013 16:55
To: Pere Puigdomènech Rosell; [REDACTED] (Regulation 13) (GO-Science); David Baulcombe; jonathan.jones@sainsbury-laboratory.ac.uk
Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science); john.pickett@rothamsted.ac.uk; [REDACTED] (Regulation 13)@defra.gsi.gov.uk
Subject: RE: Note and actions from GM science meeting 28th August

Attachments:

Please see attached a modified version with additional material as requested.

Jim

From: Pere Puigdomènech Rosell [mailto:pere.puigdomenech@cragenomica.es]
Sent: 01 September 2013 14:38
To: Jim Dunwell; [REDACTED] (Regulation 13) (GO-Science); David Baulcombe; jonathan.jones@sainsbury-laboratory.ac.uk
Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science); john.pickett@rothamsted.ac.uk; [REDACTED] (Regulation 13)@defra.gsi.gov.uk
Subject: RE: Note and actions from GM science meeting 28th August -futureproduct pipelines

Dear friends,

I attach a revised version of my part of the according to the comments of the last day.

I am putting at the end a suggestion for wording of point 5.

Best regards.

Pere

From: Jim Dunwell [j.m.dunwell@reading.ac.uk]
Sent: Friday, August 30, 2013 10:48 AM
To: [REDACTED] (Regulation 13) (GO-Science); David Baulcombe; jonathan.jones@sainsbury-laboratory.ac.uk; j.m.dunwell@reading.ac.uk; Pere Puigdomènech Rosell
Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science); john.pickett@rothamsted.ac.uk; [REDACTED] (Regulation 13)@defra.gsi.gov.uk
Subject: RE: Note and actions from GM science meeting 28th August - futureproduct pipelines

Dear Jonathan,

I've found some more useful summaries of commercial products in the pipeline.

Monsanto pipeline is attached.

An interactive summary of soybean and corn is at:- http://www.agweb.com/article/in_the_pipeline/

Other version as single slides for soya and corn are also attached.

Hope these might help.

Jim

From: [REDACTED] (Regulation 13) (Defra) [REDACTED] (Regulation 13)@DEFRA.GSI.GOV.UK]
Sent: 02 September 2013 12:57
To: Jim Dunwell; Pere Puigdomènech Rosell; [REDACTED] (Regulation 13) (GO-Science); David Baulcombe; jonathan.jones@sainsbury-laboratory.ac.uk
Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science); john.pickett@rothamsted.ac.uk
Subject: RE: Note and actions from GM science meeting 28th August
Follow Up Flag: Follow up
Flag Status: Blue
Attachments:

Dear all

The suggestions for conclusions on the final page are sketched out roughly and as such, my take on them maybe neurotic. My comments in the text reflect my concerns about the emphasis on unintended effects.

In the last couple of years, the EU has focussed a lot more on addressing the potential for unintended changes resulting from GM to cause harm. This is the main basis for increased evidence requirements in applications. The problem is that there's always something more to measure and to compare but if you don't know what you are looking for and why this becomes an endless pursuit. Advances in technology will make this worse if we are not careful. Using scientific knowledge more intelligently in risk assessments is something ACRE is arguing for in its reports (rather than more analysis). It is also worth noting that a lot of data are collected when it comes to applications to cultivate GM crops e.g. phenotypic, agronomic, compositional information and it's reasonable to expect that if unwanted unintended effects aren't picked up in the breeding process they are likely to be in these datasets, not to mention any widespread commercial cultivation.

The other (more minor) issue I had was with sections B2 and B3. I appreciate that you do not want to differentiate between plants that are captured by the GMO legislation and those that are not, but it is confusing when the text refers to GM plants produced by certain new techniques when their status as GMOs has not been established (or in some cases a decision has been made that they aren't). It's a minor editing job to sort this out.

Hope this is useful. Please let me know if you'd like me to help in any way.

Regards,

[REDACTED] (Regulation 13)

[REDACTED] (Regulation 13)

GMO Team
Defra
Area 3B, Nobel House
17, Smith Square
Westminster
London SW1P 3JR.
UK

Tel: [REDACTED] (Regulation 13)

From: [REDACTED] (Regulation 13) (GO-Science)
Sent: 04 September 2013 13:02
To: 'dcb40@cam.ac.uk'
Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science)
Subject: FW: Moving forwards on GM crops (final).docx
Importance: High
Attachments: [REDACTED] – Regulation 12 (4) d Moving forwards on GM crops (final).docx
[David](#)

[As discussed.](#)

[Best regards](#)

[REDACTED] ([Regulation 13](#))

From: [REDACTED] (Regulation 13) (GO-Science)
Sent: 03 September 2013 17:03
To: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science)
Subject: Moving forwards on GM crops (final).docx
Importance: High

[REDACTED] (Regulation 13)

Please find latest version supplied just now by BBSRC.
Ignore earlier version.

BBSRC still caveat that this needs updating to make sure it is current as it was drafted in March.

[Best regards](#)

[REDACTED] (Regulation 13)

From: [REDACTED] (Regulation 13) (GO-Science)
Sent: 04 September 2013 15:02
To: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science); 'dcb40@cam.ac.uk'
Subject: Additional Text for GM Science Paper

Follow Up Flag: Follow up
Flag Status: Orange

Attachments: Microsoft Office PowerPoint Slide; Microsoft Office PowerPoint Slide

[REDACTED] (Regulation 13) / [REDACTED] (Regulation 13) / David

Please find below some additional text to consider in the latest version of the GM paper where and if appropriate using track changes. It is literally a download from recent briefings and other documents which may be relevant, so we need to be selective.

- UK is well placed, through its scientific research, to capitalise on GM benefits if regulatory and market acceptance barriers can be overcome.
- GM is not to be confused with genomics which identifies naturally occurring variants of species with desirable traits (such as drought resistance). Both will be needed.
- GM research underway in the UK today (with perhaps the exception of blight resistant potatoes a £3.5 billion global problem) would need five years before resulting in crops able to be submitted to Europe for approval (a ten year process).
- GM offers opportunities to develop crops with better resilience to extremes of weather for people in developing countries, and for UK farmers. Global population growth from six to nine billion by 2050 will require increased production and attention to reduce food losses in the food supply chain.
- GM represents only 15 per cent of BBSRC's spend on agri-tech research (£12.5/£83.3 million in 2011/12) and a smaller percentage of the £446 million spent across Whitehall on food and agri-tech research in 2011/12. Other lines of research (genomics i.e. non-GM) are being pursued (international wheat initiative). Need all of the tools at our disposal.
- The International Rice Research Institute released golden rice varieties to Asian farmers, which produce β -carotene in their grain, giving the golden colour and needed by the body to produce vitamin A. These will help alleviate incidence of blindness - 250,000 to 500,000 children a year - in poor rice-based societies, with vitamin A deficient diets.

Findings from EASAC Policy Report 21, Planting the future: Opportunities and Challenges for using Crop Genetic Improvement Technologies for Sustainable Agriculture, June 2013

"When used appropriately and properly integrated within well-managed agronomic systems, GM crops can be economically, environmentally and socially beneficial. There is no validated evidence that GM has greater adverse impact on health and the environment than any other technology used in plant breeding. EU GM legislation was formulated when there was not yet sufficient data to substantiate these conclusions, but now there is. Given the experience gained, the legislation, data requirements and level of scrutiny need to be revisited and recalibrated."

In previous work, the European Academies Science Advisory Council (EASAC) has described the opportunities and challenges in using plant genetic resources in improved breeding approaches, for example by using marker-assisted selection of desired traits. In the present report, EASAC explores some of the issues associated with the genetic modification of crops, where the EU has fallen behind in its adoption of the technology, compared with many other regions of the world. Concerns have been expressed that a time consuming and expensive regulatory framework in the EU, compounded by politicisation of decision-making by Member States and coupled with other policy inconsistencies, has tended to act as an impediment to agricultural innovation. Controversies about the impact of genetically modified (GM) crops have too often been based on contested science or have confounded effects of the technology with the impact of agriculture *per se* or changes in agronomic practice. It is vital to address the policy disconnects because there is a wide range of opportunities in prospect for improving agricultural productivity and efficiency, environmental quality and human health, by using all available technologies where appropriate.

From the site <http://www.easac.eu/home/reports-and-statements/detail-view/article/planting-the.html>

GM and Nitrogen Fixation

BBSRC and NSF will soon be announcing funding following an Ideas Lab in 2012:
<http://www.bbsrc.ac.uk/news/food-security/2012/120709-pr-uk-us-collaboration-to-rethink-fertilisers.aspx>

The funding is for research towards crops capable of fixing nitrogen from the atmosphere themselves, or with improved nitrogen use efficiency.

Probably worth following up on developments for this in the table.

██████████ – Regulation 12 (4)d.

Will continue looking for appropriate text on Golden Rice and other examples.

Best regards

██████████ (Regulation 13)

██████████ (Regulation 13)

Government Office for Science | 2nd Floor, 1 Victoria Street, London SW1H 0ET | ██████████
(Regulation 13) | ██████████ [\(Regulation 13\) @bis.gsi.gov.uk](mailto:██████████@bis.gsi.gov.uk)

Stay up to date with how Foresight is influencing UK government policy. Visit www.bis.gov.uk/foresight for the latest news.

You can now follow the Government Office for Science and Government Chief Scientific Adviser on Twitter: @uksciencechief.

From: [REDACTED] (Regulation 13) (GO-Science)
Sent: 04 September 2013 18:00
To: 'dcb40@cam.ac.uk'
Cc: [REDACTED] (Regulation 13) (GO-Science)
Subject: FW: GM science update

Attachments:

Dear David

I understand [REDACTED] (Regulation 13) spoke to you earlier and you said you were working on the safety section today and will look at the annex as a whole tomorrow.

Here is the current version with the table inserted. It would be helpful if you could send what you have done for the safety section to us so we can work with Defra to finalise it before Friday. I had started to add notes/ paragraphs text into the safety section yesterday but its still notes form.

Best regards

[REDACTED] (Regulation 13)

From: [REDACTED] (Regulation 13) (GO-Science)
Sent: 02 September 2013 17:57
To: 'David Baulcombe'
Cc: [REDACTED] (Regulation 13) (GO-Science)
Subject: GM science update

Hi David

Thanks for letting me know about the FRP meeting.

On GM:

Here is a new version including the sections Jim and Pere sent over the weekend in one document. I am still waiting for gov contributions for the GO science actions on Jonathan's section (yellow highlights) but wanted to send to you so that you can start to edit it for flow/ repetition. A new intern [REDACTED] (Regulation 13) joined our team today and in reading it she noted that section 2.2.2 was rather bitty so has started to pull that information in to a summary table.

The safety section needs the most work. I am reading the ACRE docs Jim sent round to so see what we can use/ reference from there. Ideally we will have a near final draft for discussion on Friday.

Best regards

[REDACTED] (Regulation 13)

From: Jim Dunwell [j.m.dunwell@reading.ac.uk]

Sent: 05 September 2013 18:54

To: David Baulcombe; [REDACTED] (Regulation 13) (GO-Science); Jim Dunwell; jonathan jones (TSL); 'pere.puigdomenech@cragenomica.es'; [REDACTED] (Regulation 13) (Defra); 'john.pickett@rothamsted.ac.uk'

Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science)

Subject: RE: section 3 risks

Follow Up Flag: Follow up

Flag Status: Yellow

Attachments:

Please see attached with some additional comments and references.

Jim

From: [REDACTED] (Regulation 13) (GO-Science)
Sent: 06 September 2013 13:49
To: [REDACTED] (Regulation 13) (Defra); 'dcb40@cam.ac.uk'; 'jonathan.jones@sainsbury-laboratory.ac.uk'; 'j.m.dunwell@reading.ac.uk'
Cc: 'john.pickett@rothamsted.ac.uk'; [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science)
Subject: :GM Science update section 3

Attachments: section 3 biosfaety .docx

Dear all

Thank you for your comments on this. Please find attached the safety section with all comments included in to one document, for discussion this afternoon.

Kind regards

[REDACTED] (Regulation 13)

From: [REDACTED] (Regulation 13) (Defra) [mailto:[REDACTED] (Regulation 13)@DEFRA.GSI.GOV.UK]
Sent: 06 September 2013 09:25
To: Pere Puigdomènech Rosell; Jim Dunwell; David Baulcombe; [REDACTED] (Regulation 13) (GO-Science); jonathan jones (TSL); john.pickett@rothamsted.ac.uk
Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science)
Subject: RE: section 3 risks

For your consideration:

I have added text on the regulatory process (added to the top of DB's draft – please find attached). I've also tried to separate (i) what should be regulated (plants with novel traits that have the potential to cause harm rather than plants made by particular techniques) and (ii) how plants with novel traits should be regulated/ assessed (assessment should be proportionate otherwise there will be a block on plants with novel traits with the potential to cause harm). As Pere points out, a change to the regulatory framework would take many years, therefore, it is very important that we implement the current system more effectively. The current framework is risk-based (not hazard-based), it is flexible (case by case) and scientific – so it could operate a lot better (point 2).

I'll dial-in this afternoon.

Regards,

[REDACTED] (Regulation 13)

[REDACTED] (Regulation 13)

GMO Team
Defra
Area 3B, Nobel House
17, Smith Square
Westminster
London SW1P 3JR.
UK

Tel: [REDACTED] (Regulation 13)

From: Pere Puigdomènech Rosell [mailto:pere.puigdomenech@cragenomica.es]
Sent: 06 September 2013 06:45
To: Jim Dunwell; David Baulcombe; [REDACTED] (Regulation 13) (GO-Science); jonathan jones (TSL); [REDACTED] (Regulation 13) (Defra); 'john.pickett@rothamsted.ac.uk'
Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science)
Subject: RE: section 3 risks

I have some comments on the risks text:

Two possible added arguments:

- The high cost of the regulations make impossible the use of genetic modification for crops that are important for human diet, such as fruits and vegetables, but that their global economic value is relatively low. The investment needed due to regulations is too high in these cases in relation to the possible benefits.
- In many cases, for instance when the final product is starch, flour or oils, the composition is strictly identical in the genetically modified product. In most cases there are no means to distinguish the modified from the non-modified product and when it is possible, the most sensitive DNA techniques (PCR) have to be used.

For the conclusions I think that for the Government it may be of interest to consider two types of scenarios.

1. Those that imply the reform of existing Directives. Many of the conclusions of the report imply that reforms in the existing Directives are needed. For instance, the definition of GMO based in technology and not in the product. This is an important goal but, necessarily a long-term and complex goal. The EU-US discussion on trade may be an opportunity to open such a debate.

2. Those that imply changes in the procedures used within present regulations: Some suggestions for the UK Government:

- To facilitate field experiments in the UK avoiding interferences from activists groups
- To avoid the use of general and strict rules for GMO evaluation instead of a case-by-case analysis
- To allow each member State to allow cultivation of varieties approved by scientific committees

I am attaching some publications from Spanish monitoring, coexistence and use of transcriptome analysis.

I call this afternoon.

Pere

From: Jim Dunwell [j.m.dunwell@reading.ac.uk]
Sent: Thursday, September 05, 2013 7:53 PM
To: David Baulcombe; [REDACTED] (Regulation 13) (GO-Science); Jim Dunwell; jonathan

jones (TSL); Pere Puigdomènech Rosell; [REDACTED] (Regulation 13) (Defra);
'john.pickett@rothamsted.ac.uk'
Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science)
Subject: RE: section 3 risks

Please see attached with some additional comments and references.

Jim

From: David Baulcombe [<mailto:dcb40@cam.ac.uk>]
Sent: 05 September 2013 12:26
To: [REDACTED] (Regulation 13) (GO-Science); Jim Dunwell; jonathan jones (TSL);
'pere.puigdomenech@cragenomica.es'; [REDACTED] (Regulation 13) (Defra);
'john.pickett@rothamsted.ac.uk'
Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science)
Subject: section 3 risks

Please find attached - send edits to [REDACTED] (Regulation 13).

David

From: "[REDACTED] (Regulation 13) (GO-Science)" <[\[REDACTED\]@bis.gsi.gov.uk](mailto:[REDACTED]@bis.gsi.gov.uk)>
Date: Wednesday, 28 August 2013 17:16
To: Jim Dunwell <j.m.dunwell@reading.ac.uk>, "jonathan jones (TSL)"
<jonathan.jones@sainsbury-laboratory.ac.uk>, David Baulcombe <dcb40@cam.ac.uk>, Pere
Puigdomènech Rosell <pere.puigdomenech@cragenomica.es>, "[REDACTED] (Regulation 13)
(Defra)" <[\[REDACTED\]@DEFRA.GSI.GOV.UK](mailto:[REDACTED]@DEFRA.GSI.GOV.UK)>,
"john.pickett@rothamsted.ac.uk" <john.pickett@rothamsted.ac.uk>
Cc: "[REDACTED] (Regulation 13) (GO-Science)" <[\[REDACTED\]@bis.gsi.gov.uk](mailto:[REDACTED]@bis.gsi.gov.uk)>,
"[REDACTED] (Regulation 13) (GO-Science)" <[\[REDACTED\]@bis.gsi.gov.uk](mailto:[REDACTED]@bis.gsi.gov.uk)>
Subject: RE: URGENT - GM science meeting - Wednesday 28 August - 3-5 pm

All

Please find the recent DFID Nature article.

Best regards

[REDACTED] (Regulation 13)

From: Jim Dunwell [<mailto:j.m.dunwell@reading.ac.uk>]
Sent: 28 August 2013 17:05
To: jonathan jones (TSL); Jim Dunwell
Cc: [REDACTED] (Regulation 13) (GO-Science)
Subject: RE: URGENT - GM science meeting - Wednesday 28 August - 3-5 pm

It's from CropLife

<http://www.croplife.org/Resources>

Jim

From: jonathan jones (TSL) [<mailto:jonathan.jones@sainsbury-laboratory.ac.uk>]
Sent: 28 August 2013 17:02
To: Jim Dunwell
Cc: [REDACTED \(Regulation 13\) @bis.gsi.gov.uk](mailto:REDACTED (Regulation 13) @bis.gsi.gov.uk)
Subject: Re: URGENT - GM science meeting - Wednesday 28 August - 3-5 pm

This is great- how best to cite it?
Thanks JJ

From: Jim Dunwell <j.m.dunwell@reading.ac.uk>
Date: Wednesday, 28 August 2013 16:55
To: "REDACTED (Regulation 13) (GO-Science)" <[REDACTED \(Regulation 13\) @bis.gsi.gov.uk](mailto:REDACTED (Regulation 13) @bis.gsi.gov.uk)>, "REDACTED (Regulation 13) (GO-Science)" <[REDACTED \(Regulation 13\) @bis.gsi.gov.uk](mailto:REDACTED (Regulation 13) @bis.gsi.gov.uk)>, "dcb40@cam.ac.uk" <dcb40@cam.ac.uk>, Jim Dunwell <j.m.dunwell@reading.ac.uk>, Pere Puigdomenich <pere.puigdomenech@cragenomica.es>, Jonathan Jones <jonathan.jones@sainsbury-laboratory.ac.uk>, "[REDACTED \(Regulation 13\)@defra.gsi.gov.uk](mailto:REDACTED (Regulation 13)@defra.gsi.gov.uk)" <[REDACTED \(Regulation 13\)@defra.gsi.gov.uk](mailto:REDACTED (Regulation 13)@defra.gsi.gov.uk)>
Cc: "REDACTED (Regulation 13) (GO-Science)" <[REDACTED \(Regulation 13\) @bis.gsi.gov.uk](mailto:REDACTED (Regulation 13) @bis.gsi.gov.uk)>, "john pickett (RRes-Roth)" <john.pickett@rothamsted.ac.uk>, "Thomas Sandy (GO-Science)" <sandy.thomas@bis.gsi.gov.uk>
Subject: RE: URGENT - GM science meeting - Wednesday 28 August - 3-5 pm

Jonathan,

This may be of use in your section on future developments.

Jim

From: REDACTED (Regulation 13) (GO-Science) [[mailto:REDACTED \(Regulation 13\) @bis.gsi.gov.uk](mailto:REDACTED (Regulation 13) @bis.gsi.gov.uk)]
Sent: 28 August 2013 11:02
To: REDACTED (Regulation 13) (GO-Science); REDACTED (Regulation 13) (GO-Science); 'dcb40@cam.ac.uk'; 'j.m.dunwell@reading.ac.uk'; 'pere.puigdomenech@cragenomica.es'; 'jonathan.jones@sainsbury-laboratory.ac.uk'; '[REDACTED \(Regulation 13\)@defra.gsi.gov.uk](mailto:REDACTED (Regulation 13)@defra.gsi.gov.uk)'
Cc: REDACTED (Regulation 13) (GO-Science); 'john.pickett@rothamsted.ac.uk'; Thomas Sandy (GO-Science)
Subject: RE: URGENT - GM science meeting - Wednesday 28 August - 3-5 pm

Dear All

Please find attached the draft content that we have received so far, with some suggested conclusions for consideration during the teleconference this afternoon.

Best regards
REDACTED (Regulation 13)

From: [REDACTED] (Regulation 13) (GO-Science)
Sent: 27 August 2013 13:20
To: [REDACTED] (Regulation 13) (GO-Science); 'dcb40@cam.ac.uk'; 'j.m.dunwell@reading.ac.uk'; 'pere.puigdomenech@cragenomica.es'; 'jonathan.jones@sainsbury-laboratory.ac.uk'; [REDACTED] (Regulation 13)@defra.gsi.gov.uk'
Cc: [REDACTED] (Regulation 13) (GO-Science); 'john.pickett@rothamsted.ac.uk'; Thomas Sandy (GO-Science)
Subject: URGENT - GM science meeting - Wednesday 28 August - 3-5 pm
Importance: High

Dear All

Please note that as we are still awaiting two sections for the draft Annex from Jonathan and David, we have decided to arrange this meeting as a teleconference to save on travel time, and allow more writing time.

Teleconference details are as follows:

[REDACTED] (Regulation 13)

Draft Agenda

- Draft content so far (strengths, weaknesses, and gaps);
- Draft conclusions and likely top five issues;
- Next steps: further work and resources needed;
- Reference to Annex in CST Letter; and
- Input to concept of Agri-Tech Strategy Innovation Centres.

We will share with you the draft structure and content that we have so far later today / early tomorrow morning, and any further drafting available from Jonathan and David ahead of the meeting if feasible.

The draft reference on this work for the CST letter, agreed with Sir Mark, but yet to be reviewed by CST is currently as follows. 'We' refers to the CST. It will be helpful to consider this at the teleconference and agree additional succinct input or revised wording (it has to be kept short) as appropriate to reflect the findings of the Annex that the CST may wish to consider.

We have worked with a team of experts led by Professor Sir David Baulcombe (who chaired the 2009 Royal Society report "Reaping the Benefits") to develop an up to date assessment of the scientific evidence concerning the sustainable intensification of food production. The original Royal Society report remains the authoritative statement of the evidence. Indeed, subsequent research simply strengthens its conclusions.

We have noted this subsequent work in a technical annex, attached here, which the authors intend to publish shortly. The Council for Science and Technology endorses the original report's findings, and recommends it as a sound basis of evidence for debates on GM in food.

I sincerely hope that the change of arrangements does not cause any inconvenience. If you have already made travel plans and will be in

London anyway, then you are welcome to join the teleconference from BIS.

If there are any queries, then please do not hesitate to get back to me. I look forward to talking with you tomorrow.

Best regards

██████████ (Regulation 13)

██████████ (Regulation 13)

Government Office for Science | 2nd Floor, 1 Victoria Street, London SW1H 0ET
| ██████████ (Regulation 13) | ██████████ (Regulation 13) @bis.gsi.gov.uk

Stay up to date with how Foresight is influencing UK government policy. Visit www.bis.gov.uk/foresight for the latest news.

You can now follow the Government Office for Science and Government Chief Scientific Adviser on Twitter: @uksciencechief.

From: ██████████ (Regulation 13) (GO-Science)
Sent: 26 July 2013 14:50
To: 'dcb40@cam.ac.uk'; 'j.m.dunwell@reading.ac.uk'; 'pere.puigdomenech@cragenomica.es';
'jonathan.jones@sainsbury-laboratory.ac.uk'; ██████████ (Regulation 13)@defra.gsi.gov.uk'
Cc: ██████████ (Regulation 13) (GO-Science); ██████████ (Regulation 13) (GO-Science); ██████████
(Regulation 13) (GO-Science); 'john.pickett@rothamsted.ac.uk'; Thomas Sandy (GO-Science)
Subject: Note of GM science meeting 23rd July

<< File: CST GM science annex - Expert group meeting 23rd July.doc
>>

Dear all

Thank you for participating in the meeting on Tuesday. Please find attached a summary of what we discussed.

Below is the draft structure of the annex with agreed leads. Please send input on the sections to the section leaders by 12th August, to allow compilation of a full draft to circulate by **Friday 23rd August**, for discussion at our next meeting.

Section 1: Last five years of commercial activity – experience of growing GM in farmers fields.

Jim to lead on drafting this section

Section 2: New scientific developments over the last 5 years (in the lab)

A. New emerging traits using existing 'old' techniques

David and Jonathan to lead on drafting this section

B. New enabling techniques and methods

Pere to lead on this section with input from Jonathan

Section 3: Safety and risk assessment

David to lead on this section with input from Jim and ██████████ (Regulation 13)

Conclusion: To agree at next meeting.

I look forward to discussing the draft annex in August. We have a room booked in BIS, 1 Victoria Street **3-5pm for the 28th August.**

Best wishes

██████████ **(Regulation 13)**

Government Office for Science | 2nd Floor | 1 Victoria Street, London | Tel:

██████████ (Regulation 13)

From: [REDACTED] (Regulation 13) (GO-Science)
Sent: 06 September 2013 16:28
To: 'David Baulcombe'; 'jonathan.jones@sainsbury-laboratory.ac.uk';
'j.m.dunwell@reading.ac.uk'; [REDACTED] (Regulation 13) (Defra)
Subject: Sections 1-2 Second draft

Attachments:

Dear All

Please see the GM annex section 1-2 so far pulling together re drafting by members over the weekend.

Kind regards

[REDACTED] ([Regulation 13](#))
Government Office for Science | 2nd Floor | 1 Victoria Street, London | Tel: [REDACTED] (Regulation 13)

From: jonathan jones (TSL) [jonathan.jones@sainsbury-laboratory.ac.uk]
Sent: 06 September 2013 16:47
To: David Baulcombe; [REDACTED] (Regulation 13) (UKTI Investment)
Subject: EASAC p16/17

Attachments:

From: John Pickett (RRes-Roth) [john.pickett@rothamsted.ac.uk]
Sent: 06 September 2013 17:27
To: jonathan jones (TSL); [REDACTED] (Regulation 13) (UKTI Investment)
Cc: 'dcb40@cam.ac.uk'; [REDACTED] (Regulation 13) (RRes-Roth)
Subject: RE: URGENT - GM science meeting - Wednesday 28 August - 3-5 pm

Dear Jonathan

I don't have [REDACTED] (Regulation 13) 's last summaries of today and can't get thro' to her please can you send ASAP.

Mobile [REDACTED] (Regulation 13)
John Pickett

From: [REDACTED] (Regulation 13) (RRes-Roth) [REDACTED] (Regulation 13)@rothamsted.ac.uk]
Sent: 06 September 2013 17:32
To: [REDACTED] (Regulation 13) (GO-Science)
Cc: John Pickett (RRes-Roth); jonathan.jones@sainsbury-laboratory.ac.uk
Subject: VERY URGENT!

Importance: High

From John Pickett:

Dear [REDACTED] (Regulation 13) ,

When I checked the documents you sent, I only have Section 3. Please could you send the latest so that I can, as David required, accept all track changes and track in my own brief addition along the lines of the discussion today.

I am leaving imminently for the United States, so please copy in my PA, [REDACTED] (Regulation 13).

With very best wishes,

John

sent via

[REDACTED] (Regulation 13)

[REDACTED] (Regulation 13)

Rothamsted Research,
Harpenden,
Herts., AL5 2JQ,
United Kingdom

Tel: [REDACTED] (Regulation 13)
Fax [REDACTED] (Regulation 13)
E-mail: [REDACTED] (Regulation 13)@rothamsted.ac.uk
E-mail: john.pickett@rothamsted.ac.uk
WWW: <http://www.rothamsted.ac.uk/>

Rothamsted Research is a company limited by guarantee, registered in England under the registration number 2393175 and a not for profit charity number 802038.

From: jonathan jones (TSL) [jonathan.jones@sainsbury-laboratory.ac.uk]
Sent: 06 September 2013 18:01
To: [REDACTED] (Regulation 13) (RRes-Roth); [REDACTED] (Regulation 13) (GO-Science)
Cc: john pickett (RRes-Roth); jonathan jones (TSL)
Subject: Re: VERY URGENT!

Importance: High
They should all be visible on dropbox

I will invite [REDACTED] (Regulation 13) too

JJ

From: "[REDACTED] (Regulation 13) (RRes-Roth)" <[REDACTED]@rothamsted.ac.uk>
Date: Friday, 6 September 2013 17:31
To: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED]@bis.gsi.gov.uk>
Cc: "john pickett (RRes-Roth)" <john.pickett@rothamsted.ac.uk>, Jonathan Jones <jonathan.jones@sainsbury-laboratory.ac.uk>
Subject: VERY URGENT!

From John Pickett:

Dear [REDACTED] (Regulation 13),
When I checked the documents you sent, I only have Section 3. Please could you send the latest so that I can, as David required, accept all track changes and track in my own brief addition along the lines of the discussion today.
I am leaving imminently for the United States, so please copy in my PA, [REDACTED] (Regulation 13).

With very best wishes,

John

sent via

[REDACTED] (Regulation 13)

[REDACTED] (Regulation 13) Rothamsted Research,
Harpenden,
Herts., AL5 2JQ,
United Kingdom

Tel: + [REDACTED] (Regulation 13)
Fax +44 [REDACTED] (Regulation 13)
E-mail: [REDACTED]@rothamsted.ac.uk
E-mail: john.pickett@rothamsted.ac.uk
WWW: <http://www.rothamsted.ac.uk/>

Rothamsted Research is a company limited by guarantee, registered in England under the registration number 2393175 and a not for profit charity number 802038.

From: [REDACTED] (Regulation 13) (Defra) [[mailto:\[REDACTED\]
\(Regulation 13\)@DEFRA.GSI.GOV.UK](mailto:[REDACTED](Regulation 13)@DEFRA.GSI.GOV.UK)]
Sent: 08 September 2013 19:16
To: Pere Puigdomènech Rosell; Jim Dunwell; David Baulcombe;
[REDACTED] (Regulation 13) (GO-Science); jonathan jones (TSL);
john.pickett@rothamsted.ac.uk
Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED]
(Regulation 13) (GO-Science)
Subject: RE: section 3 risks

I'm working on this version! (i.e. fleshing out the sections I'd highlighted in the text as these were the issues you discussed on Friday; also, I'll include something on the dramatic decrease in field trials in the UK to fit with Pere's recommendation about facilitating field trials). I'll put it in Drop Box tomorrow afternoon.

[REDACTED] (Regulation 13)

From: [REDACTED] (Regulation 13) (GO-Science)

Sent: 09 September 2013 09:33

To: 'jonathan jones (TSL)'

Subject: sending section 1-2 - thank you

Dear Jonathan

Thank you for directing John to drop box. I wasn't expecting him to join the call so didn't copy him in to the email with sections 1-2.

Hope you had a good weekend.

[REDACTED] (Regulation 13)

From: [REDACTED] (Regulation 13) (GO-Science)
Sent: 09 September 2013 10:52
To: jonathan jones (TSL); Jim Dunwell; [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (Defra); dcb40@cam.ac.uk
Cc: john pickett (RRes-Roth); [REDACTED] (Regulation 13) (GO-Science)
Subject: RE: :GM review

Attachments:
Jonathan

This is looking good. I have made a few additional suggestions using a recent biofuel review which Foresight commissioned and which is now in the public domain. We will provide the web-link - I am working off-line at the moment so unable to do so.

I will now work on the section for research and development for your views.

Best regards
[REDACTED] (Regulation 13)

From: jonathan jones (TSL) [mailto:jonathan.jones@sainsbury-laboratory.ac.uk]
Sent: 08 September 2013 20:30
To: Jim Dunwell; [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (Defra); dcb40@cam.ac.uk; jonathan jones (TSL)
Cc: john pickett (RRes-Roth); [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science)
Subject: Re: :GM review

Hi all- I stole some text from Jim's review on cereals and supplied some of my own to come up with the following on GM for biomass and biofuel crops.
Comments welcome
Cheers JJ

From: Jim Dunwell <j.m.dunwell@reading.ac.uk>
Date: Friday, 6 September 2013 15:10
To: "[REDACTED] (Regulation 13) (GO-Science)" <[\[REDACTED\]@bis.gsi.gov.uk](mailto:[REDACTED]@bis.gsi.gov.uk)>, "[REDACTED] (Regulation 13) (Defra)" <[\[REDACTED\]@DEFRA.GSI.GOV.UK](mailto:[REDACTED]@DEFRA.GSI.GOV.UK)>, "dcb40@cam.ac.uk" <dcb40@cam.ac.uk>, Jonathan Jones <jonathan.jones@sainsbury-laboratory.ac.uk>, Jim Dunwell <j.m.dunwell@reading.ac.uk>
Cc: "john pickett (RRes-Roth)" <john.pickett@rothamsted.ac.uk>, "[REDACTED] (Regulation 13) (GO-Science)" <[\[REDACTED\]@bis.gsi.gov.uk](mailto:[REDACTED]@bis.gsi.gov.uk)>, "[REDACTED] (Regulation 13) (GO-Science)" <[\[REDACTED\]@bis.gsi.gov.uk](mailto:[REDACTED]@bis.gsi.gov.uk)>
Subject: RE: :GM review

This is a recent review that describes many of the Science and Regulatory issues that we are addressing.
Jim

From: [REDACTED] (Regulation 13) (GO-Science)
Sent: 09 September 2013 17:04
To: 'David Baulcombe'
Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science)
Subject: GM Science annex phone call tomorrow 8am

Dear David

[REDACTED] (Regulation 13) Just emailing to confirm that the number for tomorrow's call at 8am will be the same as last time [REDACTED] (Regulation 13)

[REDACTED] (Regulation 13) and I will dial in from home and [REDACTED] (Regulation 13) will forward any new versions we receive tonight.

Kind regards

[REDACTED] (Regulation 13)

From: [REDACTED] (Regulation 13) (GO-Science)
Sent: 06 September 2013 15:53
To: 'David Baulcombe'
Cc: [REDACTED] (Regulation 13) (GO-Science)
Subject: RE: :GM Science update section 3

Dear David

Yes that's correct. 16:30 [REDACTED] (Regulation 13)

Will you be circulating an updated version of sections 1-2 to go through? I will need to print this before 16:30 as we will be in a room away from the open plan office.

[REDACTED] (Regulation 13)

From: David Baulcombe [mailto:dcb40@cam.ac.uk]
Sent: 06 September 2013 15:49
To: [REDACTED] (Regulation 13) (GO-Science)
Subject: Re: :GM Science update section 3

Dear [REDACTED] (Regulation 13),

Please confirm that the call is at 4-30 and that the access details are as for last week?

David

From: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED]@bis.gsi.gov.uk>
Date: Friday, 6 September 2013 13:48
To: "[REDACTED] (Regulation 13) (Defra)" <[REDACTED]@DEFRA.GSI.GOV.UK>, David Baulcombe <dcb40@cam.ac.uk>, <jonathan.jones@sainsbury-laboratory.ac.uk>, <j.m.dunwell@reading.ac.uk>
Cc: <john.pickett@rothamsted.ac.uk>, "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED]@bis.gsi.gov.uk>, "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED]@bis.gsi.gov.uk>
Subject: :GM Science update section 3

Dear all

Thank you for your comments on this. Please find attached the safety section with all comments included in to one document, for discussion this afternoon.

Kind regards

 (Regulation 13)

From: David Baulcombe [dcb40@cam.ac.uk]
Sent: 09 September 2013 17:11
To: [REDACTED] (Regulation 13) (GO-Science)
Subject: Re: GM Science annex phone call tomorrow 8am

Thanks – I will call in as agreed. I am sorry that it is not at a very convenient time.

David

From: [REDACTED] (Regulation 13) (Defra) [[mailto:\[REDACTED\]
\(Regulation 13\)@DEFRA.GSI.GOV.UK](mailto:[REDACTED](Regulation 13)@DEFRA.GSI.GOV.UK)]
Sent: 09 September 2013 23:12
To: Pere Puigdomènech Rosell; Jim Dunwell; David Baulcombe;
[REDACTED] (Regulation 13) (GO-Science); jonathan jones (TSL);
john.pickett@rothamsted.ac.uk
Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED]
(Regulation 13) (GO-Science)
Subject: RE: section 3 risks

Sorry. I'm having problems saving documents in Word. The version of section 3 I sent earlier was not the latest one. The latest version is attached to this email. However, because I had to recover it - it's lost tracked changes, including deleted text. I've highlighted the sections that have been edited in red. You'll need to open the version I sent earlier if you want to find out what has been deleted (altho this should be evident from comments in the margins).

[REDACTED] (Regulation 13)

From: [REDACTED] (Regulation 13) (GO-Science)
Sent: 10 September 2013 08:49
To: [REDACTED] (Regulation 13) (Defra); Pere Puigdomènech
Rosell; Jim Dunwell; David Baulcombe; jonathan jones (TSL);
john.pickett@rothamsted.ac.uk
Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation
13) (GO-Science)
Subject: References for CST Annex

All

Please can you put a list of all the references you have used
for the document in the drop box folders assigned for
references (Jonathan sent the invite on 28/08 14:18).

[REDACTED] (Regulation 13) will be collating these today and
tomorrow and cross-checking the document.

I will be sending out the latest version of the whole document
later today when we have put it together and added GO-Science
input to the gaps. I would be grateful if you can look at this
tomorrow (Wednesday), and feedback any comments direct to
David (cc'd to me and [REDACTED] (Regulation 13)) by cop
tomorrow.

David will review the whole document on Thursday, so that we
can finalise it by Friday to send to Sir Mark Walport, and
Defra to review before it goes to the CST next week.

Best regards

[REDACTED] (Regulation 13)

[REDACTED] (Regulation 13)

>Government Office for Science | 2nd Floor, 1 Victoria Street,
London

>SW1H 0ET | [REDACTED] (Regulation 13) |

> [REDACTED] (Regulation 13) @bis.gsi.gov.uk

>

Stay up to date with how Foresight is influencing UK
government policy. Visit www.bis.gov.uk/foresight for the
latest news.

You can now follow the Government Office for Science and
Government Chief Scientific Adviser on Twitter:
@uksciencechief.

From: [REDACTED] (Regulation 13) (Defra) [REDACTED] (Regulation 13)@DEFRA.GSI.GOV.UK]
Sent: 10 September 2013 11:39
To: Pere Puigdomènech Rosell; David Baulcombe; [REDACTED] (Regulation 13) (GO-Science); jonathan jones (TSL); john.pickett@rothamsted.ac.uk; Jim Dunwell
Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science)
Subject: RE: section 3 risks
Follow Up Flag: Follow up
Flag Status: Blue

Thanks Pere

Please see comments - particularly the last on!

[REDACTED] (Regulation 13)

-----Original Message-----

From: Pere Puigdomènech Rosell [<mailto:pere.puigdomenech@cragenomica.es>]
Sent: 10 September 2013 10:25
To: [REDACTED] (Regulation 13) (Defra); Jim Dunwell; David Baulcombe; [REDACTED] (Regulation 13) (GO-Science); jonathan jones (TSL); john.pickett@rothamsted.ac.uk
Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science)
Subject: RE: section 3 risks

Dear [REDACTED] (Regulation 13),

Thank you for the text. A number of points:

- EFSA has approved a number of GMOs for cultivation and the approval has been stopped at Commission of Agriculture Committees level. Even this year the Panel have approved new recommendations for cultivation. The block is essentially political.

I tried to make the point that the blockage was in the decision-making part of the process. But I can include the number of EFSA risk assessments that have been completed on cultivation dossiers. There have been 5, I think; but will check. You referred to a table showing how long applications have been in the system - **could someone send this to me, please.**

- May be the worst case of delays has been Bt11. It was presented by Syngenta in 1996 (!) with the 1990 Directive, it was represented afterwards with the new directive, there have been several favourable opinions of the Panel and still it is not approved by the Commission.

There are 2 applications for GM maize events that have been in the system for a v. long time- Bt11 and 1507. Pioneer has taken the Commission to court over the latter - we are awaiting the judgement (and have been for some time) - noting that Commission didn't contest the case made against it. Again, it would be useful to highlight these in the table - but I'll include them as extreme examples in the text, as you suggest.

- There have been publications on the monitoring of pollen flow in maize under field conditions in Spain. I have sended one in a previous mail. The experience in Spain is that this is a completely irrelevant question.

I agree with the Spanish conclusion that it is the consequence of gene flow not the phenomenon itself that is relevant. I'm not sure that this comes across in the annex. In general this section is a bit weak. I didn't have time to do much with it. Could you look at it?

Best regards.

Pere

From: [REDACTED] (Regulation 13) (RRes-Roth) [REDACTED] (Regulation 13)@rothamsted.ac.uk]
Sent: 10 September 2013 15:51
To: dcb40@cam.ac.uk
Cc: [REDACTED] (Regulation 13) (GO-Science); John Pickett (RRes-Roth)
Subject: FW: URGENT - GM science meeting - Wednesday 28 August - 3-5 pm

Attachments:

[REDACTED] (Regulation 13)

Dear David,

I am very pleased with the document and have concentrated on making some very minor additions along the lines of suggestions made to me by Jonathan Jones (please see attached in track changes).

However, on page 13, under Section B2 "Other commercialized horticultural products", I notice that some genera are given in full and some are abbreviated.

On page 15, first sentence of final paragraph of C Forestry, it should read "Table 2" and not "Table 1".

On page 20, I strongly recommend that a peer-reviewed reference is provided for the statement "Remarkably, the recent introgression of an ancestral form of the HKT1;5 gene from the more Na⁺-tolerant wheat relative *Triticum monococcum* into susceptible commercial durum wheat (*Triticum turgidum* ssp *durum*) increased grain yields on saline soil by 25%."

On page 23, I have made two insertions of text, with a reference (Beale et al 2006), and another insert on page 24.

On page 27, I have added a section in Table 3 under "Wheat", citing the same reference as above.

If you have any queries, please let me know.

With very best wishes,

John

(sent via)

[REDACTED] (Regulation 13)
[REDACTED] (Regulation 13)

[REDACTED] (Regulation 13)

Rothamsted Research,
Harpenden,
Herts., AL5 2JQ,
United Kingdom

Tel: + [REDACTED] (Regulation 13)
Fax +44 [REDACTED] (Regulation 13)

E-mail: [REDACTED] (Regulation 13)@rothamsted.ac.
E-mail: john.pickett@rothamsted.ac.uk

WWW: <http://www.rothamsted.ac.uk/>

Rothamsted Research is a company limited by guarantee, registered in England under the registration number 2393175 and a not for profit charity number 802038.

From: David Baulcombe [<mailto:dcb40@cam.ac.uk>]
Sent: 06 September 2013 17:52
To: John Pickett (RRes-Roth)
Subject: Re: URGENT - GM science meeting - Wednesday 28 August - 3-5 pm

You've probably got them several times.

D

From: "John Pickett (RRes-Roth)" <john.pickett@rothamsted.ac.uk>
Date: Friday, 6 September 2013 17:27
To: "jonathan jones (TSL)" <jonathan.jones@sainsbury-laboratory.ac.uk>, "██████████" (Regulation 13) (GO-Science)" <██████████ ([@bis.gsi.gov.uk](mailto:Regulation 13))>
Cc: David Baulcombe <dcb40@cam.ac.uk>, "██████████" (Regulation 13) (RRes-Roth)" <██████████ ([@rothamsted.ac.uk](mailto:Regulation 13))>
Subject: RE: URGENT - GM science meeting - Wednesday 28 August - 3-5 pm

Dear Jonathan

I don't have ██████████ (Regulation 13) 's last summaries of today and can't get thro' to her please can you send ASAP.

Mobile ██████████ (Regulation 13)

.

John Pickett

From: jonathan jones (TSL) [<mailto:jonathan.jones@sainsbury-laboratory.ac.uk>]
Sent: 29 August 2013 17:37
To: John Pickett (RRes-Roth); jonathan jones (TSL); ██████████ (Regulation 13) (GO-Science)
Cc: 'dcb40@cam.ac.uk'; ██████████ (Regulation 13) (RRes-Roth)
Subject: Re: URGENT - GM science meeting - Wednesday 28 August - 3-5 pm

JJ

From: "John Pickett (RRes-Roth)" <john.pickett@rothamsted.ac.uk>
Date: Thursday, 29 August 2013 17:34
To: Jonathan Jones <jonathan.jones@sainsbury-laboratory.ac.uk>, "██████████" (Regulation 13) (GO-Science)" <██████████ ([@bis.gsi.gov.uk](mailto:Regulation 13))>
Cc: "dcb40@cam.ac.uk" <dcb40@cam.ac.uk>, "██████████" (Regulation 13) (RRes-Roth)" <██████████ ([@rothamsted.ac.uk](mailto:Regulation 13))>
Subject: Re: URGENT - GM science meeting - Wednesday 28 August - 3-5 pm

Dear Jonathan

██████████ (Regulation 13) add this but probably not until Monday if still in the deadline.

Very best wishes,

John

Sent from my HTC

----- Reply message -----

From: "Jonathan Jones (TSL)" <jonathan.jones@sainsbury-laboratory.ac.uk>
To: "[REDACTED] (Regulation 13) (GO-Science)" <[\[REDACTED\] \(Regulation 13\) @bis.gsi.gov.uk](mailto:[REDACTED](Regulation 13)@bis.gsi.gov.uk)>, "John Pickett (RRes-Roth)" <john.pickett@rothamsted.ac.uk>
Cc: "''dcb40@cam.ac.uk''" <dcb40@cam.ac.uk>
Subject: URGENT - GM science meeting - Wednesday 28 August - 3-5 pm
Date: Thu, Aug 29, 2013 5:24 pm

Hi John- I realize I should have added something about aphid deterrence!
JJ

From: Jonathan Jones <jonathan.jones@sainsbury-laboratory.ac.uk>
Date: Thursday, 29 August 2013 15:59
To: "[REDACTED] (Regulation 13) (GO-Science)" <[\[REDACTED\] \(Regulation 13\) @bis.gsi.gov.uk](mailto:[REDACTED](Regulation 13)@bis.gsi.gov.uk)>, Jim Dunwell <j.m.dunwell@reading.ac.uk>, Jonathan Jones <jonathan.jones@sainsbury-laboratory.ac.uk>, "dcb40@cam.ac.uk" <dcb40@cam.ac.uk>, Pere Puigdomenich <pere.puigdomenech@cragenomica.es>, "[REDACTED] (Regulation 13) (Defra)" <[\[REDACTED\] \(Regulation 13\) @DEFRA.GSI.GOV.UK](mailto:[REDACTED](Regulation 13)@DEFRA.GSI.GOV.UK)>, "John Pickett (RRes-Roth)" <john.pickett@rothamsted.ac.uk>
Cc: "[REDACTED] (Regulation 13) (GO-Science)" <[\[REDACTED\] \(Regulation 13\) @bis.gsi.gov.uk](mailto:[REDACTED](Regulation 13)@bis.gsi.gov.uk)>, "[REDACTED] (Regulation 13) (GO-Science)" <[\[REDACTED\] \(Regulation 13\) @bis.gsi.gov.uk](mailto:[REDACTED](Regulation 13)@bis.gsi.gov.uk)>
Subject: Re: URGENT - GM science meeting - Wednesday 28 August - 3-5 pm

My updated section- surprisingly ahead of schedule.
References in "CST Annex" dropbox (if any are missing let me know)
Cheers JJ

-----Original Message-----

From: [REDACTED] (Regulation 13) (GO-Science)
Sent: 11 September 2013 00:34
To: [REDACTED] (Regulation 13) (Defra); Pere Puigdomènech Rosell; Jim Dunwell; David Baulcombe; jonathan jones (TSL); john.pickett@rothamsted.ac.uk
Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science)
Subject: GM Science Update - Complete Draft for Comment

Hi

Please find the complete document now formatted and the contents list updated. This has taken longer than expected amalgamating different sections. This does not include [REDACTED] (Regulation 13)'s recent edits (circulated this evening) which we will add in tomorrow.

The two conclusion sections for Section 1 and Section 2 need to added. I will circulate these as soon as drafts are available for comment.

Grateful if you can send your comments to me and [REDACTED] (Regulation 13) by cop tomorrow Wednesday in track changes on a clean version of this document. I have left the track changes for you to see where amendments have been made.

Best regards

[REDACTED] (Regulation 13)

-----Original Message-----

From: [REDACTED] (Regulation 13) (Defra) [[mailto:\[REDACTED\]@DEFRA.GSI.GOV.UK](mailto:[REDACTED]@DEFRA.GSI.GOV.UK)]
Sent: 10 September 2013 20:53
To: Pere Puigdomènech Rosell; Jim Dunwell; David Baulcombe; [REDACTED] (Regulation 13) (GO-Science); jonathan jones (TSL); john.pickett@rothamsted.ac.uk
Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science)
Subject: RE: section 3 risks

Hi Pere

I've added your suggestions apart from info on the number of EFSA opinions. There are relatively few for cultivation applications. The delays are the result of either (i) the applicant not producing the requested additional information or (ii) the application is for a 'stacked event', which means that the assessment doesn't start until the individual events have been assessed.

Regards,

██████████ (Regulation 13)

██████████ (Regulation 13)

GMO Team

Defra

Area 3B, Nobel House

17, Smith Square

Westminster

London SW1P 3JR.

UK

Tel: ██████████ (Regulation 13)

-----Original Message-----

From: Pere Puigdomènech Rosell

[<mailto:pere.puigdomenech@cragenomica.es>]

Sent: 10 September 2013 10:25

To: ██████████ (Regulation 13) (Defra); Jim Dunwell; David Baulcombe; ██████████ (Regulation 13) (GO-Science); jonathan jones (TSL); john.pickett@rothamsted.ac.uk

Cc: ██████████ (Regulation 13) (GO-Science); ██████████

(Regulation 13) (GO-Science)

Subject: RE: section 3 risks

Dear ██████████ (Regulation 13),

Thank you for the text. A number of points:

- EFSA has approved a number of GMOs for cultivation and the approval has been stopped at Commission of Agriculture Committees level. Even this year the Panel have approved new recommendations for cultivation. The block is essentially political.

- May be the worst case of delays has been Bt11. It was presented by Syngenta in 1996 (!) with the 1990 Directive, it was represented afterwards with the new directive, there have been several favourable opinions of the Panel and still it is not approved by the Commission.

- There have been publications on the monitoring of pollen flow in maize under field conditions in Spain. I have sended one in a previous mail. The experience in Spain is that this is a completely irrelevant question.

Best regards.

Pere

From: ██████████ (Regulation 13) (Defra) [██████████ (Regulation 13)@DEFRA.GSI.GOV.UK]

Sent: Tuesday, September 10, 2013 12:11 AM

To: Pere Puigdomènech Rosell; Jim Dunwell; David Baulcombe;
[REDACTED] (Regulation 13) (GO-Science); jonathan jones (TSL);
john.pickett@rothamsted.ac.uk
Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED]
(Regulation 13) (GO-Science)
Subject: RE: section 3 risks

Sorry. I'm having problems saving documents in Word. The version of section 3 I sent earlier was not the latest one. The latest version is attached to this email. However, because I had to recover it - it's lost tracked changes, including deleted text. I've highlighted the sections that have been edited in red. You'll need to open the version I sent earlier if you want to find out what has been deleted (altho this should be evident from comments in the margins).

[REDACTED] (Regulation 13)

-----Original Message-----

From: [REDACTED] (Regulation 13) (Defra)
Sent: 09 September 2013 22:39
To: 'Pere Puigdomènech Rosell'; Jim Dunwell; David Baulcombe;
[REDACTED] (Regulation 13) (GO-Science); jonathan jones (TSL);
john.pickett@rothamsted.ac.uk
Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED]
(Regulation 13) (GO-Science)
Subject: RE: section 3 risks

Dear all

I've edited section 3 to take on-board comments made in the margins of the last version and points made at last Friday's meeting. The only exception (hopefully) is to add a schematic showing the length of time applications for cultivation have been stuck in the regulatory system (or how long all types of GM crop applications take to process). I wasn't sure which of the 2 you were referring to but it sounds like you had a figure in mind.

The sections on human/animal health and environmental issues need a little tlc and refs.

Cheers,

[REDACTED] (Regulation 13)

[REDACTED] (Regulation 13)
GMO Team
Defra
Area 3B, Nobel House
17, Smith Square
Westminster
London SW1P 3JR.
UK
Tel: [REDACTED] (Regulation 13)

-----Original Message-----

From: Pere Puigdomènech Rosell
[<mailto:pere.puigdomenech@cragenomica.es>]
Sent: 08 September 2013 14:55
To: [REDACTED] (Regulation 13) (Defra); Jim Dunwell; David Baulcombe; [REDACTED] (Regulation 13) (GO-Science); jonathan jones (TSL); john.pickett@rothamsted.ac.uk
Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science)
Subject: RE: section 3 risks

Deal [REDACTED] (Regulation 13) ,
Is it a last synthesis version?
I have not received any new text since Friday.
Thank you.
Pere

From: [REDACTED] (Regulation 13) (Defra) [REDACTED] (Regulation 13)@DEFRA.GSI.GOV.UK]
Sent: Friday, September 06, 2013 10:24 AM
To: Pere Puigdomènech Rosell; Jim Dunwell; David Baulcombe; [REDACTED] (Regulation 13) (GO-Science); jonathan jones (TSL); john.pickett@rothamsted.ac.uk
Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science)
Subject: RE: section 3 risks

For your consideration:

I have added text on the regulatory process (added to the top of DB's draft - please find attached). I've also tried to separate (i) what should be regulated (plants with novel traits that have the potential to cause harm rather than plants made by particular techniques) and (ii) how plants with novel traits should be regulated/ assessed (assessment should be proportionate otherwise there will be a block on plants with novel traits with the potential to cause harm). As Pere points out, a change to the regulatory framework would take

many years, therefore, it is very important that we implement the current system more effectively. The current framework is risk-based (not hazard-based), it is flexible (case by case) and scientific - so it could operate a lot better (point 2).

I'll dial-in this afternoon.

Regards,

██████████ (Regulation 13)

██████████ (Regulation 13)

GMO Team

Defra

Area 3B, Nobel House

17, Smith Square

Westminster

London SW1P 3JR.

UK

Tel: ██████████ (Regulation 13)

From: Pere Puigdomènech Rosell
[<mailto:pere.puigdomenech@cragenomica.es>]
Sent: 11 September 2013 09:25
To: [REDACTED] (Regulation 13) (Defra); Jim Dunwell; David Baulcombe; [REDACTED] (Regulation 13) (GO-Science); jonathan jones (TSL); john.pickett@rothamsted.ac.uk
Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science)
Subject: RE: section 3 risks

Hi [REDACTED] (Regulation 13),
The GMO Panel has been approving some (a few) GMOs for cultivation. The last one was in March 2013, it is maize 59122 from Pioneer
(<http://www.efsa.europa.eu/en/efsajournal/pub/3135.htm>). You may find the opinions in the publications of the EFSA GMO Panel.
Regards.
Pere

From: [REDACTED] (Regulation 13) (Defra) [REDACTED] (Regulation 13)@DEFRA.GSI.GOV.UK]
Sent: Tuesday, September 10, 2013 9:53 PM
To: Pere Puigdomènech Rosell; Jim Dunwell; David Baulcombe; [REDACTED] (Regulation 13) (GO-Science); jonathan jones (TSL); john.pickett@rothamsted.ac.uk
Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science)
Subject: RE: section 3 risks

Hi Pere
I've added your suggestions apart from info on the number of EFSA opinions. There are relatively few for cultivation applications. The delays are the result of either (i) the applicant not producing the requested additional information or (ii) the application is for a 'stacked event', which means that the assessment doesn't start until the individual events have been assessed.

Regards,

[REDACTED] (Regulation 13)

[REDACTED] (Regulation 13)

GMO Team
Defra
Area 3B, Nobel House
17, Smith Square
Westminster
London SW1P 3JR.
UK

Tel: [REDACTED] (Regulation 13)

From: [REDACTED] (Regulation 13) (GO-Science)
Sent: 11 September 2013 11:27
To: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (Defra); Pere Puigdomènech Rosell; Jim Dunwell; David Baulcombe; jonathan.jones (TSL); john.pickett@rothamsted.ac.uk
Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science)
Subject: RE: GM Science Update - Conclusions for Sections 1 & 2 R&D + Golden Rice

Hi

Additional text for consideration:

Golden Rice

Vitamin A deficiency is the leading cause of irreversible blindness in children. The World Health Organisation estimates that this results in up to 500,000 children going blind a year – 250,000 of whom will lose their lives within a year. The problem is particularly severe in South East Asia.

None of the existing varieties of rice contain vitamin A. The International Rice Research Institute has been working with Asian farmers to develop locally adapted Golden Rice varieties, which produce β -carotene in their grain, giving the golden colour and needed by the body to produce vitamin A. Golden Rice was only possible as a result of genetic engineering developed in the late 1990s by German professors Potrykus and Beyer and a not-for-profit independent research institute, but 15 years later Golden Rice is still not commercialised.

Potential Boxes for Review

Box 6.2 Advancing Wheat Research

Wheat is the most internationally traded food crop and the single largest food import in low-income countries. A public-private partnership between Syngenta and the International Maize and Wheat Improvement Center (CIMMYT) in Mexico will focus on the development and advancement of technology in wheat through joint research and development in the areas of native and GM traits, hybrid wheat and the combination of seeds and crop protection to accelerate plant yield performance.

The partnership will leverage Syngenta's genetic marker technology, advanced traits platform and wheat breeding for low-income countries, along with CIMMYT's access to wheat genetic diversity, global partnership network, and wheat breeding programme targeted at low-income countries.

Box 6.5 Water efficient maize for Africa (WEMA) Maize is the most widely grown staple crop in Africa. More than 300 million Africans depend on maize as their main food source and it is severely affected by drought.

The African Agricultural Technology Fund is leading a five year (2008-2013) public-private partnership to develop drought-tolerant African maize using conventional breeding, marker-assisted breeding, and biotechnology. Funding partners are the Bill and Melinda Gates Foundation and the Howard G. Buffett Foundation.

The International Maize and Wheat Improvement Center (CIMMYT) will provide high-yielding maize varieties that are adapted to African conditions and expertise in conventional breeding and testing for drought tolerance. Monsanto will provide proprietary germplasm, advanced breeding tools and expertise, and drought-tolerance transgenes developed in collaboration with BASF. The varieties developed through the project will be distributed to African seed companies through AATF without royalty and made available to smallholder farmers as part of their seed business. The national agricultural research systems, farmers' groups, and seed companies participating in the project will contribute their expertise in field testing, seed multiplication, and distribution. The benefits and safety of the maize varieties will be assessed by national authorities according to the regulatory requirements in the partner countries: Kenya, Mozambique, South Africa, Tanzania and Uganda.

Section 1 - Conclusions

Since 1996 there has been a 100-fold increase in the global use of GM. Last year, GM crops were grown by 17.3 million farmers in 28 countries on 170 million hectares. That's 12 per cent of all arable land - an area around 7 times the size of the United Kingdom.

Farmers wouldn't grow these crops if they didn't benefit from doing so. Governments wouldn't licence these technologies if they didn't recognise the economic, environmental and public benefits. Consumers wouldn't buy these products if they didn't think they were safe and cost effective.

At the moment Europe is missing out. Less than 0.1% of global GM cultivation occurred in the EU. While the rest of the world is ploughing ahead and reaping the benefits of new technologies, Europe risks being left behind. We cannot afford to let that happen. The use of GM could be as transformative as the original agricultural revolution. The UK should be at the forefront of that, now, as it was then.

The current range of GM crops was designed to offer farmers easier, quicker and cheaper control over pests or weeds. Evidence demonstrates that they have delivered on this, providing economic benefits for farmers and consumers alike.

Europe benefits hugely from the GM crops grown in the rest of the world.

The EU is the world's biggest net importer of agricultural goods and we rely on shipments of key commodities to support our livestock system. According to the European Feed Manufacturers Association,

about 85 per cent of the EU's compound livestock feed production is now labelled to indicate that it contains GM or GM-derived material.

[Note: taken from Patterson speech. Needs re-wording but gives possible direction of section]

Section 2 - Conclusions

Used properly, the advanced plant-breeding technique of GM promises effective ways to protect or increase crop yields. It can also combat the damaging effects of unpredictable weather and disease on crops. It has the potential to reduce fertiliser and chemical use, improve the efficiency of agricultural production and reduce post-harvest losses. Even more excitingly, if we use cultivated land more efficiently, we could free up space for biodiversity, nature and wilderness. Research undertaken by a team at Rockefeller University has found that over the course of the next 50 years new technology, combined with improved agricultural practices across the world, could release an area 2.5 times the size of France from cultivation.

Plant breeding targets are becoming more demanding in the face of global challenges of food security against increasing population, economic growth, predictions of faster climate warming, biodiversity action plans and farming and environmental regulations.

The UK has world leading basic research in plant genomics (both GM and non-GM), but this is not currently being exploited to its best advantage to enable the commercial crop breeding sector to benefit from new technologies to respond to these challenges. A well-functioning R&D pipeline is essential for the translation of genomic research through the pre-breeding stage into the development of crop varieties for the marketplace. However, the current pipeline in UK crop improvement has a serious bottleneck inhibiting much needed innovation in crop breeding which requires investment in new technologies at the translational R&D stage, and will need public sector support in R&D. There are 3 interlinked R&D pillars for achieving these objectives:

There are 3 interlinked R&D pillars needed to strengthen the pipeline in UK crop improvement:

Developing and testing crop prototypes - The production of new varieties needs to utilize a far wider range of genetic diversity than currently used in order to increase yield and environmental resilience. Genomics methods dramatically increase the scale and precision of molecular breeding approaches. In the UK, relevant research activities in wheat are aligned with breeding objectives of industry, but there is a final gap in the pipeline- the assessment of prototype germplasm prior to incorporation in commercial breeding stocks. Without this, the potential of public sector pre-breeding will not be realized. This could include: a North Western European Winter Wheat Hub - a centre for intensive assessment of germplasm and derivatives of world germplasm (produced for much shorter seasons on lower yield potential environments) to identify traits of value to UK conditions.

Public Enterprise GM - Academics are continually discovering genes for promising crop traits, often using experimental species. Assessing the commercial potential of these is beyond the reach of standard academic laboratories; the regulatory costs are high, and the likelihood of commercial reward too low at early stages to gain commercial backing. New approaches are needed to realize the value of the backlog of innovations from public and private sector scientists, and assess these traits in UK varieties and environments within a standardized framework on GM trial plots for possible commercialization. PubGM would engage with private sector testing "company traits" via contract research, and could make DNA constructs and multiple transgenic events that are screened, tested, selected for deregulation, assessed by DEFRA and FSA, and then returned to the private sector in return for a suitable license fee. Particularly desirable events might be auctioned, resulting in revenues that could defray costs of the programme. This approach also has the benefit of demonstrating the utility of GM approaches to consumers and helping to streamline the regulatory process.

Small network of next-generation farm scale crop evaluation platforms - The growing environment can strongly and adversely influence crop productivity through multiple factors, including pests and diseases. New ways need to be found to understand these factors and their influence on diverse crop genotypes to guide science and inform breeding decisions. This knowledge directly underpins sustainable production and links breeders, growers and farmers with R&D in new productive ways. The small network of high precision, high throughput farm-scale crop assessment centres in the UK would develop a key new interface between academia, plant breeders, producers and farmers to provide a platform for integrating multiple R&D activities. These include high precision remote sensing of the growing environment and crop growth, high-throughput and high precision assessment of new crop varieties produced by advanced breeding and GM methods, disease and epidemiology, soil science, different agronomy practices (e.g. organic/low input approaches), environment and biodiversity monitoring. Food, forage, and bioenergy crops, together with crops making novel biomaterials can all be assessed according to their different output traits.

The recently 'Agri-Tech' Strategy looks at how the UK can capitalise on its world class science base by turning new ideas into practical applications. Crop improvement (and the role of GM) should be an integral component of the new Agricultural Innovation Centres proposed under Action 1.

Suggest change Biomass Crops to 'Bio-economy' with the following introductory paragraph.

GM is an essential tool for a successful bioeconomy. GM technologies provide both new market opportunities and new routes to more sustainable products and processes, in particular through advanced manufacturing. U.S..revenues in 2010 from industrial biotechnology—

fuels, materials, chemicals, and industrial enzymes derived from GMO systems—were approximately \$100 billion. The US Department for Agriculture has estimated that its revenue from GM crops in 2010 was \$76 billion: The UK grows none, yet GM crops might be used as factories for more rapid production of renewable industrial compounds, in particular second and third generation biofuels.

Best regards

██████████ (Regulation 13)

██████████ (Regulation 13)

>Government Office for Science | 2nd Floor, 1 Victoria Street,
London

>SW1H 0ET | ██████████ (Regulation 13) |

>██████████ (Regulation 13) @bis.gsi.gov.uk

>

Stay up to date with how Foresight is influencing UK government policy. Visit www.bis.gov.uk/foresight for the latest news.

You can now follow the Government Office for Science and Government Chief Scientific Adviser on Twitter: @uksciencechief.

-----Original Message-----

From: ██████████ (Regulation 13) (GO-Science)

Sent: 11 September 2013 00:32

To: '██████████ (Regulation 13) (Defra)'; Pere Puigdomènech Rosell;
Jim Dunwell; David Baulcombe; jonathan jones (TSL);
john.pickett@rothamsted.ac.uk

Cc: ██████████ (Regulation 13) (GO-Science); ██████████ (Regulation 13)
(GO-Science)

Subject: GM Science Update - Complete Draft for Comment

Hi

Please find the complete document now formatted and the contents list updated. This has taken longer than expected amalgamating different sections. This does not include ██████████ (Regulation 13)'s recent edits (circulated this evening) which we will add in tomorrow.

The two conclusion sections for Section 1 and Section 2 need to added. I will circulate these as soon as drafts are available for comment.

Grateful if you can send your comments to me and ██████████ (Regulation 13) by cop tomorrow Wednesday in track changes on a clean version of this document. I have left the track changes for you to see where amendments have been made.

Best regards

██████████ (Regulation 13)

From: jonathan jones (TSL) [<mailto:jonathan.jones@sainsbury-laboratory.ac.uk>]
Sent: 11 September 2013 12:56
To: [REDACTED] (Regulation 13) (GO-Science)
Cc: [REDACTED] (Regulation 13) (GO-Science); dcb40@cam.ac.uk
Subject: Re: GM Science Update - Conclusions for Sections 1 & 2 R&D + Golden Rice

Hi [REDACTED] (Regulation 13) et al- I attach edits on what you sent last night

I was hoping you would also be able to provide text on DHA EHA omega fatty acid health benefits? Thanks, JJ

I worked in Goldenrice text, and will now work on your suggested conclusions below

From: [REDACTED] (Regulation 13) (UKTI Investment)

Sent: 11 September 2013 22:26

To: jonathan jones (TSL)

Subject: RE: conclusions edits

Dear Jonathan

Thank you very much for checking this text today.

Much appreciated.

Best regards

[REDACTED] (Regulation 13)

From: jonathan jones (TSL) [mailto:jonathan.jones@sainsbury-laboratory.ac.uk]

Sent: 11 September 2013 20:20

To: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science);
dcb40@cam.ac.uk

Subject: conclusions edits

Vbw JJ

This email was received from the INTERNET.

Communications via the GSi may be automatically logged, monitored and/or recorded for legal purposes.

From: David Baulcombe [dcb40@cam.ac.uk]

Sent: 12 September 2013 08:52

To: [REDACTED] (Regulation 13) (UKTI Investment)

Subject: Re: GM Science Update - Complete Draft for Comment

Dear [REDACTED] (Regulation 13),

Thanks - I have a clear morning so this is my task - I see that some of the work that I had planned to do has been done already - thank you.

Rather than shorten the text will write in a readers guide to indicate parts that should be read for an overview of the content.

All the best

David

From: [REDACTED] (Regulation 13) (UKTI Investment)
Sent: 12 September 2013 09:18
To: 'David Baulcombe'
Cc: [REDACTED] (Regulation 13) (GO-Science)
Subject: RE: GM Science Update - Complete Draft for
Comment

David

Thanks for your message. Please can you send through the latest draft when you have finished today so that we can look at it overnight before our teleconference tomorrow.

Thanks

[REDACTED] (Regulation 13)

From: [REDACTED] (Regulation 13) (UKTI Investment)
Sent: 12 September 2013 15:05
To: [REDACTED] (Regulation 13) (RRes-Roth)'
Cc: 'John Pickett (RRes-Roth)'; 'john.pickett@rothamsted.ac.uk'
Subject: RE: GM Science Update - Complete Draft for Comment

Dear [REDACTED] (Regulation 13)

As [REDACTED] (Regulation 13) is on leave, please can you forward on his comments to me so that we have a record of these.

Thanks

[REDACTED] (Regulation 13)

From: [REDACTED] (Regulation 13) (RRes-Roth) [mailto:[REDACTED] (Regulation 13)@rothamsted.ac.uk]
Sent: 12 September 2013 15:01
To: [REDACTED] (Regulation 13) (GO-Science)
Cc: John Pickett (RRes-Roth)
Subject: FW: GM Science Update - Complete Draft for Comment

Dear [REDACTED] (Regulation 13) ,

Professor John Pickett is currently lecturing in the US, but has asked me to let you know that he has sent his own contribution directly to David Baulcombe, copied to [REDACTED] (Regulation 13) , and so we assume that David will be incorporating John's comments with his review.

With very best wishes,

[REDACTED] (Regulation 13)

[REDACTED] (Regulation 13)

[REDACTED] (Regulation 13)

[REDACTED] (Regulation 13)

Rothamsted Research,
Harpenden,
Herts., AL5 2JQ,
United Kingdom

Tel: +44 ([REDACTED] (Regulation 13)

Fax +44 ([REDACTED] (Regulation 13)

E-mail: [REDACTED] (Regulation 13)@rothamsted.ac.uk

E-mail: john.pickett@rothamsted.ac.uk

WWW: <http://www.rothamsted.ac.uk/>

Rothamsted Research is a company limited by guarantee, registered in England under the registration number 2393175 and a not for profit charity number 802038.

----- Forwarded message -----

From: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED] (Regulation 13)@bis.gsi.gov.uk>
To: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED] (Regulation 13)@bis.gsi.gov.uk>, "[REDACTED] (Regulation 13) (Defra)" <[REDACTED] (Regulation 13)@DEFRA.GSI.GOV.UK>, "Pere Puigdomènech Rosell" <pere.puigdomenech@cragenomica.es>, "Jim Dunwell" <j.m.dunwell@reading.ac.uk>, "David Baulcombe" <dcb40@cam.ac.uk>, "jonathan jones (TSL)" <jonathan.jones@sainsbury-laboratory.ac.uk>, "John Pickett (RRes-Roth)" <john.pickett@rothamsted.ac.uk>
Cc: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED] (Regulation 13)@bis.gsi.gov.uk>, "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED] (Regulation 13)@bis.gsi.gov.uk>
Subject: GM Science Update - Complete Draft for Comment
Date: Wed, Sep 11, 2013 6:37 pm

David

Please find the latest version of the document for your review tomorrow Thursday.

This includes all comments received from Jonathan today, and those from [REDACTED] (Regulation 13) provided yesterday. Also, the conclusion sections have been added (with Jonathan's amendments), and some more formatting included.

Further to comments from Jonathan, there is still a decision to be taken on where the conclusions for the separate sections should be: either at the end of each section, or within an overall concluding section (i.e. Section 4).

We are still missing text on DHA EHA omega fatty acid health benefits. I will look into this.

This is much longer than originally planned so we need to take stock on how it may be shortened without losing the core content, and whether this is appropriate.

We look forward to discussing further on Friday. In the interim [REDACTED] (Regulation 13) will be working on the references and updating the reference list.

Best regards

[REDACTED] (Regulation 13)

[REDACTED] (Regulation 13)

>Government Office for Science | 2nd Floor, 1 Victoria Street, London SW1H 0ET | [REDACTED]
(Regulation 13) | [REDACTED] (Regulation 13)@bis.gsi.gov.uk

>

Stay up to date with how Foresight is influencing UK government policy. Visit www.bis.gov.uk/foresight for the latest news.

You can now follow the Government Office for Science and Government Chief Scientific Adviser on Twitter: @uksciencechief.

From: [REDACTED] (Regulation 13) (Defra) [REDACTED] (Regulation 13)@DEFRA.GSI.GOV.UK]
Sent: 12 September 2013 15:44
To: [REDACTED] (Regulation 13) (GO-Science); Pere Puigdomènech Rosell; Jim Dunwell; David Baulcombe; jonathan jones (TSL); john.pickett@rothamsted.ac.uk
Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science)
Subject: Health claims

Follow Up Flag: Follow up
Flag Status: Blue

Attachments:

<<FSANZ list of GM health claims.docx>> Fyi - list of claims that GM crops are harmful and response from Food Standards Australia / NZ - if you need more refs.

[REDACTED] (Regulation 13)

-----Original Message-----

From: [REDACTED] (Regulation 13) (GO-Science) [mailto:[REDACTED] (Regulation 13)@bis.gsi.gov.uk]
Sent: 11 September 2013 23:37
To: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (Defra); Pere Puigdomènech Rosell; Jim Dunwell; David Baulcombe; jonathan jones (TSL); john.pickett@rothamsted.ac.uk
Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science)
Subject: RE: GM Science Update - Complete Draft for Comment

David

Please find the latest version of the document for your review tomorrow Thursday.

This includes all comments received from Jonathan today, and those from [REDACTED] (Regulation 13) provided yesterday. Also, the conclusion sections have been added (with Jonathan's amendments), and some more formatting included.

Further to comments from Jonathan, there is still a decision to be taken on where the conclusions for the separate sections should be: either at the end of each section, or within an overall concluding section (i.e. Section 4).

We are still missing text on DHA EHA omega fatty acid health benefits. I will look into this.

This is much longer than originally planned so we need to take stock on how it may be shortened without losing the core content, and whether this is appropriate.

We look forward to discussing further on Friday. In the interim [REDACTED] (Regulation 13) will be working on the references and updating the reference list.

Best regards

[REDACTED] (Regulation 13)

[REDACTED] (Regulation 13)

>Government Office for Science | 2nd Floor, 1 Victoria Street, London

>SW1H 0ET | [REDACTED] (Regulation 13)|

> [REDACTED] (Regulation 13) @bis.gsi.gov.uk

>

Stay up to date with how Foresight is influencing UK government policy. Visit www.bis.gov.uk/foresight for the latest news.

You can now follow the Government Office for Science and Government Chief Scientific Adviser on Twitter: @uksciencechief.

From: jonathan jones (TSL) [jonathan.jones@sainsbury-laboratory.ac.uk]
Sent: 12 September 2013 17:36
To: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (Defra); Pere Puigdomènech Rosell; Jim Dunwell; David Baulcombe; jonathan jones (TSL); john pickett (RRes-Roth)
Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science)
Subject: Re: GM Science Update - Complete Draft for Comment

Attachments:

Hi all- worked on the section 3 on the plane- some suggested editings here

Regards from koeln

JJ

> [REDACTED] (Regulation 13)
>>Government Office for Science | 2nd Floor, 1 Victoria Street, London
>>SW1H 0ET | [REDACTED] (Regulation 13)|
>> [REDACTED] (Regulation 13) @bis.gsi.gov.uk
>>
>Stay up to date with how Foresight is influencing UK government policy.
>Visit www.bis.gov.uk/foresight for the latest news.
>
>You can now follow the Government Office for Science and Government
>Chief Scientific Adviser on Twitter: @uksciencechief.
>
>
> -----
>Communications via the GSi may be automatically logged, monitored
>and/or recorded for legal purposes
> -----

This email was received from the INTERNET.

Communications via the GSi may be automatically logged, monitored and/or recorded for legal purposes.

From: David Baulcombe [dcb40@cam.ac.uk]
Sent: 12 September 2013 17:47
To: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science);
[REDACTED] (Regulation 13) (Defra); [REDACTED] (Regulation 13) (GO-Science)
Subject: Re: GM Science Update - Complete Draft for Comment

Attachments:

Dear [REDACTED] (Regulation 13) ,

I am afraid this has taken me all day.

I have included a summary for each chapter and then compiled them all into an executive summary at the start. The exec summary in the text from yesterday was more like additional points.

It did not work to have a separate conclusions statement at the end of each chapter so I took the conclusions from section 3, rejigged them into a final section 4 conclusions and recommendations.

I edited out some sections that did not seem particularly relevant and have not had a chance to work on JJ latest submission. I think we should tell everyone to stop working on the text.

[REDACTED] (Regulation 13) - just received your email - I hope it is not too difficult to transfer from your version to this one.

David

On 11/09/2013 23:36, "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED] (Regulation 13) @bis.gsi.gov.uk> wrote:

>David

>

>Please find the latest version of the document for your review tomorrow

>Thursday.

>

>This includes all comments received from Jonathan today, and those from

> [REDACTED] (Regulation 13) provided yesterday. Also, the conclusion sections have been added (with Jonathan's amendments), and some more formatting included.

>

>Further to comments from Jonathan, there is still a decision to be

>taken on where the conclusions for the separate sections should be:

>either at the end of each section, or within an overall concluding section (i.e.

>Section 4).

>

>We are still missing text on DHA EHA omega fatty acid health benefits.

>I will look into this.

>

>This is much longer than originally planned so we need to take stock on
>how it may be shortened without losing the core content, and whether
>this is appropriate.
>
>We look forward to discussing further on Friday. In the interim [REDACTED] (Regulation
13)
>will be working on the references and updating the reference list.
>
>Best regards
> [REDACTED] (Regulation 13)
>
> [REDACTED] (Regulation 13)
>>Government Office for Science | 2nd Floor, 1 Victoria Street, London
>>SW1H 0ET | [REDACTED] (Regulation 13)|
>> [REDACTED] (Regulation 13) @bis.gsi.gov.uk
>>
>Stay up to date with how Foresight is influencing UK government policy.
>Visit www.bis.gov.uk/foresight for the latest news.
>
>You can now follow the Government Office for Science and Government
>Chief Scientific Adviser on Twitter: @uksciencechief.
>
>
> -----
>Communications via the GSi may be automatically logged, monitored
>and/or recorded for legal purposes
> -----

From: [REDACTED] (Regulation 13) (UKTI Investment)
Sent: 13 September 2013 13:31
To: 'David Baulcombe'
Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13)
Subject: GM Science Update v3 jjlbewdcb 130913.docx
Importance: High

David / [REDACTED] (Regulation 13)

Finally, the latest version formatted with cover page etc. This is ready to add the references, and becomes the master copy for all edits.

David you were going to provide one additional sentence on the research.

I will send in separate e-mail so as not to confuse versions, the comments from John Pickett and how I have addressed these.

Best regards

[REDACTED] (Regulation 13)

[REDACTED] (Regulation 13)

Government Office for Science | 2nd Floor, 1 Victoria Street, London SW1H 0ET |
[REDACTED] (Regulation 13) | [REDACTED] [@bis.gsi.gov.uk](mailto:[REDACTED]@bis.gsi.gov.uk)

Stay up to date with how Foresight is influencing UK government policy. Visit www.bis.gov.uk/foresight for the latest news.

You can now follow the Government Office for Science and Government Chief Scientific Adviser on Twitter: [@uksciencechief](https://twitter.com/uksciencechief)

From: David Baulcombe [dcb40@cam.ac.uk]
Sent: 13 September 2013 16:31
To: [REDACTED] (Regulation 13) (UKTI Investment)
Subject: a couple of comments added

Importance: High

Attachments:

David

From: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED] (Regulation 13) @bis.gsi.gov.uk>
Date: Friday, 13 September 2013 13:40
To: David Baulcombe <dcb40@cam.ac.uk>
Cc: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED] (Regulation 13)@bis.gsi.gov.uk>
Subject: FW: URGENT - GM science meeting - Wednesday 28 August - 3-5 pm

David

These are John's comments, with mine below.

Grateful if you can check p23 and 24 an whether you are content that these are no longer relevant with the amendments you made.

Best regards

[REDACTED] (Regulation 13)

From: jonathan jones (TSL) [jonathan.jones@sainsbury-laboratory.ac.uk]
Sent: 14 September 2013 08:30
To: [REDACTED] (Regulation 13) (RRes-Roth); dcb40@cam.ac.uk
Cc: [REDACTED] (Regulation 13) (GO-Science); john pickett (RRes-Roth)
Subject: Re: URGENT - GM science meeting - Wednesday 28 August - 3-5 pm
Ref 28 in nature 2013 schroeder et al in my dropbox cst annex folder

Munns, R. et al. Wheat grain yield on saline soils is improved by an ancestral Na¹ transporter gene. *Nature Biotechnol.* 30, 360–364 (2012).
A class 1 HKT transporter gene that prevents sodium accumulation in leaves was transferred from a wheat ancestor into modern durum wheat, with a resulting 25% increase in grain yield on saline soils.

From: David Baulcombe [dcb40@hermes.cam.ac.uk]
Sent: 16 September 2013 23:30
To: [REDACTED] (Regulation 13) (UKTI Investment)
Subject: Re: Please can you call me – Thanks

Dear [REDACTED] (Regulation 13)

I have been offline all day but will call first thing in the morning.

David

iPhone

On 16 Sep 2013, at 13:14, "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED]
(Regulation 13) @bis.gsi.gov.uk> wrote:

Hi David

Please can you call me when you are free?

Best regards

[REDACTED] (Regulation 13)

[REDACTED] (Regulation 13)

Government Office for Science | 2nd Floor, 1 Victoria Street, London SW1H 0ET | [REDACTED]
(Regulation 13) | [REDACTED] (Regulation 13) @bis.gsi.gov.uk

Stay up to date with how Foresight is influencing UK government policy. Visit www.bis.gov.uk/foresight for the latest news.

You can now follow the Government Office for Science and Government Chief Scientific Adviser on Twitter: @uksciencechief.

From: [REDACTED] (Regulation 13) (UKTI Investment)
Sent: 18 September 2013 15:57
To: David Baulcombe
Subject: RE: report
David

Thank you for this. I will continue working on the summary sections and then we can slot in your Executive Summary before it goes out to the members of the group later tomorrow with a request for comments back by cop Monday.

Best regards
[REDACTED] (Regulation 13)

From: David Baulcombe [mailto:dcb40@cam.ac.uk]
Sent: 18 September 2013 15:20
To: [REDACTED] (Regulation 13) (GO-Science)
Subject: report

Dear [REDACTED] (Regulation 13) ,

I am still working through the exec summary but this is what I have now. I have to leave now for the station but will work at it on the train and hope to get something to you by the end of today/first thing tomorrow.

David

This email was received from the INTERNET.

Communications via the GSi may be automatically logged, monitored and/or recorded for legal purposes.

From: [REDACTED] (Regulation 13) (UKTI Investment)
Sent: 19 September 2013 23:34
To: David Baulcombe; Pere Puigdomènech Rosell; john.pickett@rothamsted.ac.uk;
Jim Dunwell; jonathan jones (TSL)
Cc: [REDACTED] (Regulation 13) (GO-Science)
Subject: GM Science Update v3 jjlbewdcb 180913 dcb.docx

Attachments:

Dear All

Please find the latest version of the GM Science Update, with track changes to show new text and amendments.

We would be really grateful for identification of any factual errors by close of play on Monday 23 October.

Also, please let us have any missing references.

Thanks and looking forward to hearing from you.

Best regards

[REDACTED] (Regulation 13)

[REDACTED] (Regulation 13)

Government Office for Science | 2nd Floor, 1 Victoria Street, London SW1H 0ET | [REDACTED]
(Regulation 13) | [REDACTED] [@bis.gsi.gov.uk](mailto:[REDACTED]@bis.gsi.gov.uk)

Stay up to date with how Foresight is influencing UK government policy. Visit www.bis.gov.uk/foresight for the latest news.

You can now follow the Government Office for Science and Government Chief Scientific Adviser on Twitter: @uksciencechief.

From: jonathan jones (TSL) [jonathan.jones@sainsbury-laboratory.ac.uk]

Sent: 20 September 2013 10:28

To: [REDACTED] (Regulation 13) (UKTI Investment)

Cc: dcb40@cam.ac.uk

Subject: Re: GM Science Update v3 jjlbewdcb 180913 dcb.docx

Attachments: Nature biotechnology 2012 Munns.pdf; Front Plant Sci 2012 Burton.pdf; Pest Manag Sci 2003 Sayyed.pdf; Science (New York NY) 2010 Hutchison.pdf; 1-s2.0-S0168952502026641-main.pdf
Here some requested references. I will separately send some editings

From: jonathan jones (TSL) [jonathan.jones@sainsbury-laboratory.ac.uk]

Sent: 20 September 2013 10:29

To: [REDACTED] (Regulation 13) (UKTI Investment)

Cc: dcb40@cam.ac.uk

Subject: Re: GM Science Update v3 jjlbewdcb 180913 dcb.docx

Attachments:

Edited version attached; I changes-saved your version from yesterday so my changes and suggestions are easy to see

JJ

From: David Baulcombe [dcb40@cam.ac.uk]
Sent: 20 September 2013 16:22
To: [REDACTED] (Regulation 13) (UKTI Investment)
Subject: Re: GM Science Update v3 jjlbewdcb 180913 dcb.docx

Attachments:

Dear [REDACTED] (Regulation 13) ,

I will be in the US next week but can talk if we arrange a time.

David

PS I notice that the file sent round yesterday was based on the penultimate version that I had sent to you. The last version differed in the end of the exec summary and in the final section.

All the best

David

From: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED] (Regulation 13) @bis.gsi.gov.uk>
Date: Thursday, 19 September 2013 23:35
To: David Baulcombe <dcb40@cam.ac.uk>, Pere Puigdomènech Rosell <pere.puigdomenech@cragenomica.es>, "john.pickett@rothamsted.ac.uk" <john.pickett@rothamsted.ac.uk>, Jim Dunwell <j.m.dunwell@reading.ac.uk>, "jonathan jones (TSL)" <jonathan.jones@sainsbury-laboratory.ac.uk>
Cc: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED] (Regulation 13) @bis.gsi.gov.uk>
Subject: GM Science Update v3 jjlbewdcb 180913 dcb.docx

Dear All

Please find the latest version of the GM Science Update, with track changes to show new text and amendments.

We would be really grateful for identification of any factual errors by close of play on Monday 23 October.

Also, please let us have any missing references.

Thanks and looking forward to hearing from you.

Best regards

[REDACTED] (Regulation 13)

[REDACTED] (Regulation 13)

Government Office for Science | 2nd Floor, 1 Victoria Street, London SW1H 0ET | [REDACTED]
(Regulation 13) | [REDACTED] (Regulation 13) @bis.gsi.gov.uk

Stay up to date with how Foresight is influencing UK government policy. Visit www.bis.gov.uk/foresight for the latest news.

You can now follow the Government Office for Science and Government Chief Scientific Adviser on Twitter: @uksciencechief.

From: [REDACTED] (Regulation 13) (UKTI Investment)
Sent: 23 September 2013 11:33
To: David Baulcombe
Subject: RE: GM Science Update v3 jjlbewdcb 180913 dcb.docx
Dear David

Thank you for this. I will work through this now and incorporate Jonathan's comments into this version.

When is the best time to speak to you this week?

Best regards

[REDACTED] (Regulation 13)

From: Pere Puigdomènech Rosell [pere.puigdomenech@cragenomica.es]

Sent: 24 September 2013 15:20

To: [REDACTED] (Regulation 13) (UKTI Investment); Jim Dunwell; David Baulcombe; john.pickett@rothamsted.ac.uk; jonathan jones (TSL)

Cc: [REDACTED] (Regulation 13) (GO-Science)

Subject: RE: GM Science Update v3 jjlbewdcb 180913 dcb.docx

Dear [REDACTED] (Regulation 13) ,

A couple more.

The second paragraph of the summary recommendations is difficult to understand: "...two new components.." I suppose the two is wrong.

No need of the reference on cisgenesis, this aspect was not essential and it has been deleted.

The is a nice review on metabolic engineering of plants. It is of interest for the synthesis of complex pharmaceuticals:

Lange BM, Ahkami A. (2013) [Metabolic engineering of plant monoterpenes, sesquiterpenes and diterpenes--current status and future opportunities](#). Plant Biotechnol J. 11:169-96.

I hope this is useful.

Best regards.

Pere

From: [REDACTED] (Regulation 13) (GO-Science) [REDACTED] (Regulation 13) @bis.gsi.gov.uk]

Sent: Tuesday, September 24, 2013 2:43 PM

To: Pere Puigdomènech Rosell; Jim Dunwell; David Baulcombe; john.pickett@rothamsted.ac.uk; jonathan jones (TSL)

Cc: [REDACTED] (Regulation 13) (GO-Science)

Subject: RE: GM Science Update v3 jjlbewdcb 180913 dcb.docx

Dear Pere

Thank you for these helpful comments, much appreciated.

Best regards

[REDACTED] (Regulation 13)

From: [REDACTED] (Regulation 13) (UKTI Investment)
Sent: 24 September 2013 17:26
To: jonathan.jones (TSL)
Subject: RE: GM Science Update v3 jjlbewdcb 180913 dcb.docx
Jonathan

Thanks for your comments which we have taken onboard. Still trying to amalgamate everything and work through text to ensure succinct and an easy read.

Best regards
[REDACTED] (Regulation 13)

From: [REDACTED] (Regulation 13) (GO-Science) [REDACTED] (Regulation 13) @bis.gsi.gov.uk]
Sent: 24 September 2013 20:05
To: jonathan jones (TSL)
Subject: RE: GM Science Update v3 jjlbewdcb 180913 dcb.docx
Jonathan

Thanks for your comments which we have taken onboard. Still trying to amalgamate everything and work through text to ensure succinct and an easy read.

Best regards
[REDACTED] (Regulation 13)

From: jonathan jones (TSL) [mailto:jonathan.jones@sainsbury-laboratory.ac.uk]
Sent: 24 September 2013 15:37
To: [REDACTED] (Regulation 13) (GO-Science)
Subject: Re: GM Science Update v3 jjlbewdcb 180913 dcb.docx

Hi [REDACTED] (Regulation 13) , hope my comments sent end of last week were useful

Is the resounding reelection of Merkel encouraging for prospects for decision making on GM to go to member states?

Vbw

JJ

From: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED] (Regulation 13) @bis.gsi.gov.uk>
Date: Tuesday, 24 September 2013 13:43
To: Pere Puigdomenich <pere.puigdomenech@cragenomica.es>, Jim Dunwell <j.m.dunwell@reading.ac.uk>, David Baulcombe <dcb40@cam.ac.uk>, "john pickett (RRes-Roth)" <john.pickett@rothamsted.ac.uk>, Jonathan Jones <jonathan.jones@sainsbury-laboratory.ac.uk>
Cc: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED] (Regulation 13) @bis.gsi.gov.uk>
Subject: RE: GM Science Update v3 jjlbewdcb 180913 dcb.docx

Dear Pere

Thank you for these helpful comments, much appreciated.

Best regards
[REDACTED] (Regulation 13)

From: Pere Puigdomènec Rosell [mailto:pere.puigdomenech@cragenomica.es]
Sent: 24 September 2013 10:18
To: Jim Dunwell; [REDACTED] (Regulation 13) (GO-Science); David Baulcombe; john.pickett@rothamsted.ac.uk; jonathan jones (TSL)
Cc: [REDACTED] (Regulation 13) (GO-Science)
Subject: RE: GM Science Update v3 jjlbewdcb 180913 dcb.docx

Just two small corrections for the Executive Summary:

1. It is not the European Parliament that blocks the process. It is a Committee formed by member

States (Standing Committee on the Food Chain) that never reaches an agreement. I would put "European Committees" or something like that.

2. The last sentence on decisions by each country I would add:

"which European assessment is carried out by the European Food Standards Agency as at present but that, if a consensus is not reached, individual nations decide whether to accept the EFSA recommendation." In any case a consensus is never reached!

Regards.

Pere

From: Jim Dunwell [j.m.dunwell@reading.ac.uk]

Sent: Monday, September 23, 2013 3:13 PM

To: [REDACTED] (Regulation 13) (GO-Science); David Baulcombe; Pere Puigdomènech Rosell; john.pickett@rothamsted.ac.uk; Jim Dunwell; jonathan jones (TSL)

Cc: [REDACTED] (Regulation 13) (GO-Science)

Subject: RE: GM Science Update v3 jllbewdcb 180913 dcb.docx

This is looking good.

Please see attached with some minor edits.

Important issues include the comments about the apparent success of refugia.

I have modified some formatting in the refs, but these need more work, to add the missing ones as required.

Best regards

Jim

From: [REDACTED] (Regulation 13) (GO-Science) [[mailto:\[REDACTED\]@bis.gsi.gov.uk](mailto:[REDACTED]@bis.gsi.gov.uk)] ([Regulation 13](#))

Sent: 19 September 2013 23:36

To: David Baulcombe; Pere Puigdomènech Rosell; john.pickett@rothamsted.ac.uk; Jim Dunwell; jonathan jones (TSL)

Cc: [REDACTED] (Regulation 13) (GO-Science)

Subject: GM Science Update v3 jllbewdcb 180913 dcb.docx

Dear All

Please find the latest version of the GM Science Update, with track changes to show new text and amendments.

We would be really grateful for identification of any factual errors by close of play on Monday 23 October.

Also, please let us have any missing references.

Thanks and looking forward to hearing from you.

Best regards

[REDACTED] (Regulation 13)

[REDACTED] (Regulation 13)
Government Office for Science | 2nd Floor, 1 Victoria Street, London SW1H 0ET | [REDACTED]
(Regulation 13) | [REDACTED] [@bis.gsi.gov.uk](https://www.bis.gov.uk)

Stay up to date with how Foresight is influencing UK government policy. Visit www.bis.gov.uk/foresight for the latest news.

You can now follow the Government Office for Science and Government Chief Scientific Adviser on Twitter: [@uksciencechief](https://twitter.com/uksciencechief).

From: [REDACTED] (Regulation 13) (GO-Science)
Sent: 01 October 2013 11:57
To: David Baulcombe
Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science)
Subject: GM Science Update v3 jjlbewdcb 180913 dcb6.docx

Attachments:

David

I hope that you had a good trip to the U.S.A.

Please find attached the latest version of the Executive Summary. I have worked through it to make it more accessible and to address some of the comments that we have received internally. Please note that I have put in some costs related to plant breeding. These were provided to us by the BSPB, so we will need to reference these, if you are content with these being included.

I will continue looking at the remainder of the document in light of the changes to the Executive Summary. This I hope to complete in the next day as we need to get the document finalised. There are still some gaps in the introductions to horticulture and forestry. I know where to source some information on horticulture, but if you have anything on forestry this would be helpful.

Best regards

[REDACTED] (Regulation 13)

[REDACTED] (Regulation 13)

Government Office for Science | 2nd Floor, 1 Victoria Street, London SW1H 0ET | [REDACTED]
(Regulation 13) | [REDACTED] [\[REDACTED\]@bis.gsi.gov.uk](mailto:[REDACTED]@bis.gsi.gov.uk)

Stay up to date with how Foresight is influencing UK government policy. Visit www.bis.gov.uk/foresight for the latest news.

You can now follow the Government Office for Science and Government Chief Scientific Adviser on Twitter: @uksciencechief.

From: jonathan jones (TSL) [jonathan.jones@sainsbury-laboratory.ac.uk]

Sent: 06 October 2013 20:30

To: [REDACTED] (Regulation 13) (UKTI Investment)

Subject: Re: GM Science Update v3 jjlbewdcb 180913 dcb.docx

Hi [REDACTED] (Regulation 13) , I'm guessing it has gone now but should be able to manage another read through and tweaking if that would still be helpful

Best wishes

Jonathan

From: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED] ([Regulation 13](mailto:[REDACTED]@bis.gsi.gov.uk)) @bis.gsi.gov.uk>

Date: Tuesday, 24 September 2013 20:04

To: Jonathan Jones <jonathan.jones@sainsbury-laboratory.ac.uk>

Subject: RE: GM Science Update v3 jjlbewdcb 180913 dcb.docx

Jonathan

Thanks for your comments which we have taken onboard. Still trying to amalgamate everything and work through text to ensure succinct and an easy read.

Best regards

[REDACTED] (Regulation 13)

From: jonathan jones (TSL) [jonathan.jones@sainsbury-laboratory.ac.uk]
Sent: 07 October 2013 09:22
To: Pere Puigdomenich; dcb40@cam.ac.uk; [REDACTED] (Regulation 13) (UKTI Investment); Jim Dunwell
Subject: FW: fyi - "Exploring the first 50 sequenced plant genomes"

Attachments: The first 50 plant genomes.pdf

A useful reference for the genomes section if the letter hasn't already been despatched

Vbw

JJ

From: <[REDACTED] (Regulation 13)>, "[REDACTED] (Regulation 13) (NRD)" <[REDACTED] (Regulation 13)@fao.org>
Date: Monday, 7 October 2013 08:32
To: "[REDACTED] (Regulation 13)" <[REDACTED] (Regulation 13)@state.gov>, "[REDACTED] (Regulation 13)@state.gov" <[REDACTED] (Regulation 13)@state.gov>, "[REDACTED] (Regulation 13)@affrc.go.jp" <[REDACTED] (Regulation 13)@affrc.go.jp>, Jonathan Jones <jonathan.jones@sainsbury-laboratory.ac.uk>, "[REDACTED] (Regulation 13)" <[REDACTED] (Regulation 13)@acpfg.com.au> <[REDACTED] (Regulation 13)@acpfg.com.au>
Cc: "[REDACTED] (Regulation 13)@nodai.ac.jp" <[REDACTED] (Regulation 13)@nodai.ac.jp>, "[REDACTED] (Regulation 13) (NRD)" <[REDACTED] (Regulation 13)@fao.org>
Subject: FW: fyi - "Exploring the first 50 sequenced plant genomes"

FYI

From: [REDACTED] (Regulation 13) [mailto:[REDACTED] (Regulation 13)z@gmail.com]
Sent: 04 October 2013 22:10
Subject: Fwd: fyi - "Exploring the first 50 sequenced plant genomes"

Exploring the first 50 sequenced plant genomes

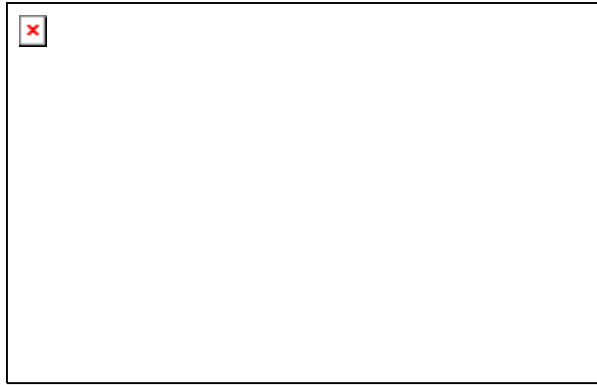
This story is adapted from "[The First 50 Plant Genomes](#)," which appeared in the July-Aug. 2013 issue of [The Plant Genome](#). **September 11, 2013** -- Since 1995, nearly 200 organisms have had their full complement of hereditary information, including all of their genes, sequenced. The full set of genetic instructions—coded in DNA—for making a person, or a pathogen, or a pineapple plant is known as the genome.

Although efforts to sequence the genomes of humans have most often made the news, the genomes of nearly 50 plants have also been published now and the rate at which plant genomes are being decoded is steadily increasing. Just 10 plant genomes were sequenced between the years 2000 and 2008, while 13 new plant genomes were published in 2012 alone, and another 12 have been reported so far in 2013.

Read on to learn which plants genomes have been sequenced to date, what these first 50 genomes are like, and what plant geneticists and crop scientists hope to accomplish through these sequencing efforts.

First, a bit more on genome sequencing

Each plant cell contains the genome: a linear string of DNA base pairs (bp), which ultimately dictates that a corn seed will grow to become a corn plant, for instance, and not a banana or soybean plant. Determining the order of the DNA bases, or sequencing, allows researchers to decode the first layer of genome features such as protein-coding genes, repetitive areas called "repeats," and the elements that regulate how genes are expressed in cells. Together, all of these features provide the genetic instructions that make each plant species unique.



Arabidopsis thaliana, a wild member of the mustard family widely used in plant genetics studies, was the first plant to have its genome sequenced. Photo: Dean Morley on flickr.com.

What was the first plant to have its genome sequenced?

The first plant to be sequenced was *Arabidopsis thaliana*, a wild member of the mustard family. Known as the lab rat of the plant world, *Arabidopsis* is considered *the* species for investigating plant genetics. This “model” plant is popular among researchers because it’s easily grown in the lab, completes its entire life cycle in about six weeks, and has a small genome of 125 megabase pairs (Mb), or 125 million base pairs (a megabase is 1 million base pairs). The genome of *Arabidopsis* was published in the journal *Nature* in the year 2000.

What other plant genomes have been sequenced since then?

Nearly three quarters of the sequenced plant genomes are from crop species, which isn’t too surprising given the importance of these plants to people. They include staple grain crops, such as maize (corn), rice, soybean, and wheat; fiber crops like cotton, hemp, and flax; fruits and vegetables including apple, watermelon, tomato, strawberry, potato, cucumber, grape, and Chinese cabbage; and crops that are primarily important in developing countries such as the pigeon pea.

Ninety four percent of the plants that have been sequenced are also flowering plants, or what are known scientifically as “angiosperms.” In addition, one “gymnosperm”—plants like pines, firs, and *Ginkgo* that produce seeds but not flowers—has been sequenced: the Norway spruce. Plus, two seedless plants that reproduce strictly via spores have had their genomes sequenced for research purposes: the “model” moss species, *Physcomitrella patens*, and the club moss, *Selaginella*.

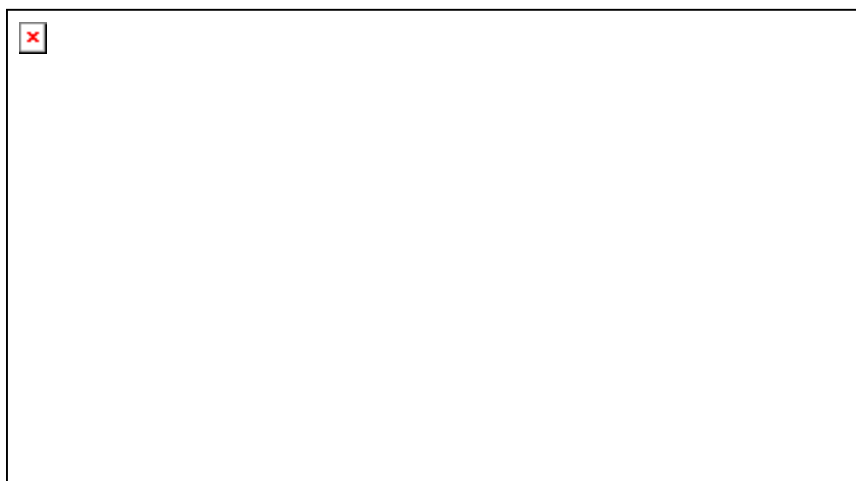
How big are plant genomes?

The genomes of plants vary greatly in size (see the figure). The smallest known plant genome is that of the carnivorous corkscrew plant, *Genlisea aurea*, at 63 Mb; the largest is that of the rare Japanese plant, *Paris japonica*, at 148,000 Mb. Of those plant genomes that have been published, the smallest so far belongs to a close relative of the corkscrew plant: the bladderwort, *Utricularia gibba*. A carnivorous denizen of nutrient-poor bogs that gets nutrition from feeding on insects, the bladderwort has a genome of 77 Mb in size. Contrast this with the largest plant genome sequenced to date—that of the Norway spruce at 19,600 Mb.

For comparison, the genome of the bacterium *E. coli* is about 4.6 Mb, while the human genome is 3,200 Mb—some 6 times smaller than the spruce genome.

Despite this great variation in genome size, plants tend to have roughly the same number of genes at about 32,000.

Bladderwort, for example, retains a standard number of genes at 28,500, even though its overall gene is small.



Plant genome size represented by word size. This word cloud (<http://www.wordle.net>) was generated using the published plant genomes size in megabases (Mb). Image courtesy of Todd Michael.

So, if plants all have roughly the same number of genes, why do their genomes vary so much in size?

What scientists know from analyzing the sequenced plant genomes is that this broad range in genome size range appears to be driven by the proliferation of what are called “copy-and-paste long terminal repeat (LTR) retrotransposons.”

Retrotransposons are DNA sequences that can copy themselves to RNA and then back into DNA. The copied DNA may then integrate back to the genome, increasing its size. Retrotransposons are found in people and other animals, but they are especially abundant in plants. The corn genome, for example, is bloated with 75% LTRs. Bladderwort’s genome, on the other hand, is only 3% LTRs.

There’s another reason for this great size range. While people and most other animals are “diploid” meaning they contain 2 sets of chromosomes—one inherited from the mother and one from the father—many plants species, like wheat, are tetraploid (have 4 sets of chromosomes) or even hexaploid (carry 6 sets of chromosomes). The huge genome of wheat, in particular, makes it very hard to investigate (see below).

Why sequence the genomes of plants?

One of the biggest goals of plant genome sequencing is to make it easier and quicker for plant breeders to develop new crop varieties that better meet our growing needs for food, fiber, and fuel. Let’s look at a couple of examples.

In 2010, researchers published the genome of *Brachypodium distachyon*, a wild, annual grass, native to the Mediterranean and Middle East, with little agricultural importance. So, why sequence it? The reason is that *Brachypodium* is a close relative of other grasses, such as wheat, which are critical to world nutrition, but whose massive and complex genomes make them extremely hard to work with.

Brachypodium, on the other hand, has one of the smallest known genomes among grasses, is easy to grow in the lab and manipulate genetically, and has a short life cycle. Thus, by working with *Brachypodium* instead, scientists can more quickly make advances that can then be used to improve vital cereal crops, such as wheat and oats.

It’s a similar story with the Chinese cabbage, a close relative of oilseed rape. Used for cooking and industrial applications, oilseed rape is the second most important vegetable oil in the world and its production has doubled in the last 15 years. But it’s an unusual hybrid that contains the entire genomes of two other plants: *Brassica rapa* and a closely related species called *Brassica oleracea*. Again, this makes the genome of oilseed rape difficult to study.

But by sequencing Chinese cabbage—a variety of *Brassica rapa*—researchers now have ready access to half of oilseed rape’s genes, without having to wrestle with oilseed rape’s genome itself. And because all the *Brassica* relatives—including broccoli, turnip, Brussels sprouts and cabbage—are closely related, the insights scientists gain by from sequencing Chinese cabbage are expected to improve the breeding efficiency of a range of crops essential to global food security.

<https://www.crops.org/story/2013/sep/wed/exploring-the-first-50-sequenced-plant-genomes>

Table 1.

Published plant genomes.†

	Scientific name	Common name	Year	Type	Division or monocot/dicot	Chr (#)	Size	Assembled	Assem	Gene (#)	Repeat	scaffold N50	contig N50	Sequencer types	Journal	PMID
							Mb		%		%		kb			
1	<i>Arabidopsis thaliana</i>	arabidopsis	2000	model	dicot	5	125	115	92	25,498	14	NA	NA	Sa	Nature	11130711
2	<i>Oryza sativa</i>	rice	2002	crop	monocot	12	430	362	84	59,855	26	12	7	Sa	Science	11935017
3	<i>Oryza sativa</i>	rice	2002	crop	monocot	12	420	389	93	61,668	NA	NA	NA	Sa	Science	11935018
4	<i>Oryza sativa</i>	rice	2005	crop	monocot	12	389	371	95	37,544	26	NA	NA	Sa	Nature	16100779
5	<i>Populus trichocarpa</i>	black cottonwood	2006	crop	dicot	19	485	410	84	45,555	NA	3100	126	Sa	Science	16973872
6	<i>Vitis vinifera</i>	grape	2007	crop	dicot	19	475	487	103	30,434	41	2065	66	Sa	Nature	17721507
7	<i>Physcomitrella patens</i>	moss	2008	model	bryophyta	27	510	480	94	35,938	16	1320	292	Sa	Science	18079367
8	<i>Vitis vinifera</i>	grape	2007	crop	dicot	19	505	477	95	29,585	27	1330	18	Sa,4	PlosOne	18094749
9	<i>Carica papaya</i>	papaya	2008	crop	dicot	9	372	370	99	28,629	43	1000	11	Sa	Nature	18432245
10	<i>Lotus japonicus</i>	lotus	2008	model	dicot	6	472	315	67	30,799	56	NA	NA	Sa	DNA Research	18511435
11	<i>Sorghum bicolor</i>	sorghum	2009	crop	monocot	10	818	739	90	34,496	62	62,400	195	Sa	Nature	19189423
12	<i>Cucumis sativus</i>	cucumber	2009	crop	dicot	7	367	244	66	26,682	24	1140	20	Sa,I	Nature Genetics	19881527
13	<i>Zea mays</i>	maize	2009	crop	monocot	10	2300	2048	89	32,540	85	76	40	Sa	Science	19965430

	Scientific name	Common name	Year	Type	Division or monocot/dicot	Chr (#)	Size	Assembled	Assem	Gene (#)	Repeat	scaffold N50	contig N50	Sequencer types	Journal	PMID
14	<i>Glycine max</i>	soybean	2010	crop	dicot	20	1115	973	87	46,430	57	47,800	189	Sa	Nature	20075913
15	<i>Brachypodium distachyon</i>	brachypodium	2010	model	monocot	5	272	272	100	25,532	21	59,300	348	Sa	Nature	20148030
16	<i>Ricinus communis</i>	castor bean	2010	crop	dicot	10	320	326	102	31,237	50	561	21	Sa	Nature Biotechnology	20729833
17	<i>Malus x domestica</i>	apple	2010	crop	dicot	17	742	604	81	57,386	67	1542	13	Sa,4	Nature Genetics	20802477
18	<i>Jatropha curcas</i>	jatropha	2010	crop	dicot	NA	380	286	75	40,929	37	NA	4	Sa,	DNA Research	21149391
19	<i>Theobroma cacao</i>	cocoa	2011	crop	dicot	10	430	327	76	28,798	24	473	20	Sa,4,I	Nature Genetics	21186351
20	<i>Fragaria vesca</i>	strawberry	2011	crop	dicot	7	240	210	87	34,809	23	1361	NA	4,S,I	Nature Genetics	21186353
21	<i>Arabidopsis lyrata</i>	lyrata	2011	model	dicot	8	207	207	100	32,670	30	24,500	227	Sa	Nature Genetics	21478890
22	<i>Selaginella moellendorffii</i>	spikemoss	2011	non-model	lycopod	NA	110	213	193	22,285	38	1700	120	Sa	Science	21551031
23	<i>Phoenix dactylifera</i>	date palm	2011	crop	monocot	18	658	381	58	28,890	40	30	6	I	Nature Biotechnology	21623354
24	<i>Solanum tuberosum</i>	potato	2011	crop	dicot	12	844	727	86	39,031	62	1318	31	Sa,4,I	Nature	21743474
25	<i>Thellungiella parvula</i>	thellungiella	2011	model	dicot	7	140	137	98	30,419	8	5290	NA	4,I	Nature Genetics	21822265
26	<i>Cucumis sativus</i>	cucumber	2011	crop	dicot	7	367	323	88	26,587	NA	319	323	Sa,4	PlosOne	21829493

	Scientific name	Common name	Year	Type	Division or monocot/dicot	Chr (#)	Size	Assembled	Assem	Gene (#)	Repeat	scaffold N50	contig N50	Sequencer types	Journal	PMID
27	<i>Brassica rapa</i>	chinese cabbage	2011	crop	dicot	10	485	284	59	41,174	40	1971	27	I	Nature Genetics	21873998
28	<i>Cannabis sativa</i>	hemp	2011	crop	dicot	?	820	787	96	30,074	NA	16	2	4,I	Genome Biology	22014239
29	<i>Cajanus cajan</i>	pigeon pea	2011	crop	dicot	11	833	605	72	48,680	52	516	22	Sa,I	Nature Biotechnology	22057054
30	<i>Medicago truncatula</i>	medicago	2011	model	dicot	8	454	262	58	62,388	31	1270	NA	Sa,4,I	Nature	22089132
31	<i>Setaria italica</i>	setaria	2012	model	monocot	9	490	423	86	38,801	46	1007	25	I	Nature Biotechnology	22580950
32	<i>Setaria italica</i>	setaria	2012	model	monocot	9	510	397	80	35,471	40	47,300	126	Sa	Nature Biotechnology	22580951
33	<i>Solanum lycopersicum</i>	tomato	2012	crop	dicot	12	900	760	84	34,727	63	16,467	87	Sa,4,S,I	Nature	22660326
34	<i>Cucumis melo</i>	melon	2012	crop	dicot	12	450	375	83	27,427	NA	4680	18	Sa,4,I	PNAS	22753475
35	<i>Linum usitatissimum</i>	flax	2012	crop	dicot	15	373	318	85	43,484	24	132	20	I	Plant Journal	22757964
36	<i>Musa acuminata malaccensis</i>	banana	2012	crop	monocot	11	523	472	90	36,542	44	1311	43	Sa,4,I	Nature	22801500
37	<i>Gossypium raimondii</i>	cotton D	2012	crop	dicot	13	880	775	88	40,976	60	2284	45	I	Nature Genetics	22922876
38	<i>Azadirachta indica</i>	neem	2012	crop	dicot	NA	364	NA	NA	20,169	13	452	1	4,I	BMC Genomics	22958331
39	<i>Hordeum</i>	barely	2012	crop	monocot	7	5100	4980	98	30,400	84	NA	NA	NA	Nature	23075845

	Scientific name	Common name	Year	Type	Division or monocot/dicot	Chr (#)	Size	Assembled	Assem	Gene (#)	Repeat	scaffold N50	contig N50	Sequencer types	Journal	PMID
	<i>vulgare</i>															
40	<i>Pyrus bretschneideri</i>	pear	2013	crop	dicot	17	527	512	97	42,812	53	541	36	I	Genome Research	23149293
41	<i>Citrullus lanatus</i>	watermelon	2012	crop	dicot	11	425	354	83	23,440	45	2380	26	I	Nature Genetics	23179023
42	<i>Triticum aestivum</i>	wheat	2012	crop	monocot	21	17,000	3800	22	94,000	80	NA	1	4	Nature	23192148
43	<i>Gossypium raimondii</i>	cotton D	2012	crop	dicot	13	880	738	84	37,505	61	18,800	136	Sa,4,I	Nature	23257886
44	<i>Prunus mume</i>	chinese plum	2012	crop	dicot	8	280	237	85	31,390	45	578	32	I	Nature Communications	23271652
45	<i>Cicer arietinum</i>	chickpea	2013	crop	dicot	8	738	532	72	28,269	49	39,990	24	Sa,I	Nature Biotechnology	23354103
46	<i>Hevea brasiliensis</i>	rubber tree	2013	crop	dicot	18	2150	1119	52	68,955	72	3	NA	4,S,I	BMC Genomics	23375136
47	<i>Phyllostachys heterocycla</i>	moso bamboo	2013	non-model	monocot	24	2075	2051	99	31,987	59	329	12	I	Nature Genetics	23435089
48	<i>Oryza brachyantha</i>	rice relative	2013	non-model	monocot	12	300	263	88	32,038	29	1013	20	I	Nature Communications	23481403
49	<i>Prunus persica</i>	peach	2013	crop	dicot	8	265	227	86	27,852	37	27,400	214	Sa	Nature Genetics	23525075
50	<i>Aegilops tauschii</i>	wheat DD	2013	crop	monocot	7	4360	4244	97	43,150	66	58	5	4,I	Nature	23535592
51	<i>Triticum urartu</i>	wheat AA	2013	crop	monocot	7	4940	4660	94	34,879	67	64	3	I	Nature	23535596

	Scientific name	Common name	Year	Type	Division or monocot/dicot	Chr (#)	Size	Assembled	Assem	Gene (#)	Repeat	scaffold N50	contig N50	Sequencer types	Journal	PMID
52	<i>Nelumbo nucifera</i>	ancient lotus	2013	non-model	dicot	8	929	804	87	26,685	57	3400	39	I	Genome Biology	23663246
53	<i>Utricularia gibba</i>	bladderwort	2013	non-model	dicot	16	77	82	106	28,500	3	95	26	4,I	Nature	23665961
54	<i>Picea abies</i>	norway spruce	2013	crop	gymnosperm	12	19,600	12,000	61	28,354	NA	NA	NA		Nature	23698360
55	<i>Capsella rubella</i>	capsella	2013	non-model	dicot	8	219	135	62	26,521	NA	15,100	134	Sa	Nature Genetics	23749190

†Abbreviations: Sa, Sanger; 4, Roche/454; S, SOLiD; I, Illumina; NA, not reported in primary publication; kb, kilobases; Mb, megabases; Chr, chromosome; PMID, PubMed ID

[see attached file: The first 50 plant genomes.pdf]

This email was received from the INTERNET.

Communications via the GSi may be automatically logged, monitored and/or recorded for legal purposes.

From: [REDACTED] (Regulation 13) (UKTI Investment)
Sent: 08 October 2013 09:01
To: jonathan.jones (TSL)
Subject: RE: GM Science Update v3 jjlbewdcb 180913 dcb.docx
Hi Jonathan

I am still working on it so that it can go to Mark the end of this week.

I have been editing it so that it has a consistent style and making sure that it is easily understood. This is taken time.

Best regards

[REDACTED] (Regulation 13)

From: [REDACTED] (Regulation 13) (GO-Science)
Sent: 11 October 2013 11:48
To: David Baulcombe; jonathan jones (TSL); john.pickett@rothamsted.ac.uk; Pere Puigdomènech Rosell; Jim Dunwell
Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science)
Subject: GM Science Update v3 jjlbewdcb 111013 ejw.docx

Attachments:

Dear David et al.

Please find the latest version of the paper which I have thoroughly edited to reduce the length to 40 pages, while retaining the content, and ensuring that it met the style requested internally here. I have left it in track changes so that you can see the edits. You will also note that we have been successful in securing the original figures from ISAAA thanks to [REDACTED] (Regulation 13).

I really apologise for the delay in getting back to you but it took longer than anticipated. I would be grateful if you can take a look at this and comment on any factual inaccuracies which may have crept in. We will be putting this to [REDACTED] (Regulation 13) early on Monday, when he has some time to consider the content before another overseas visit. There are some references missing which we need to complete. Grateful if you can address these so that [REDACTED] (Regulation 13) can complete.

I would be grateful for any response by cop on Monday and look forward to hearing from you.

Happy to discuss any queries by phone if you would like to contact me on either of the numbers below.

Best regards
[REDACTED] (Regulation 13)

[REDACTED] ([Regulation 13](#))

Government Office for Science | 2nd Floor, 1 Victoria Street, London SW1H 0ET | [REDACTED]
(Regulation 13) | [REDACTED] ([Regulation 13](#)) [@bis.gsi.gov.uk](mailto:[REDACTED]@bis.gsi.gov.uk)

Stay up to date with how Foresight is influencing UK government policy. Visit www.bis.gov.uk/foresight for the latest news.

You can now follow the Government Office for Science and Government Chief Scientific Adviser on Twitter: [@uksciencechief](https://twitter.com/uksciencechief).

From: jonathan jones (TSL) [jonathan.jones@sainsbury-laboratory.ac.uk]
Sent: 11 October 2013 13:50
To: [REDACTED] (Regulation 13) (GO-Science); David Baulcombe; jonathan jones (TSL); john pickett (RRes-Roth); Pere Puigdomènech Rosell; Jim Dunwell
Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science)
Subject: Re: GM Science Update v3 jllbewdcb 111013 ejw.docx

Attachments:

Hi all- I had a spare moment and so changes-accepted [REDACTED] (Regulation 13) 's latest and made mostly minor changes and sent in some references

Cheers JJ

From: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED]@bis.gsi.gov.uk>
Date: Friday, 11 October 2013 11:47
To: David Baulcombe <dcb40@cam.ac.uk>, Jonathan Jones <jonathan.jones@sainsbury-laboratory.ac.uk>, "john pickett (RRes-Roth)" <john.pickett@rothamsted.ac.uk>, Pere Puigdomenich <pere.puigdomenech@cragenomica.es>, Jim Dunwell <j.m.dunwell@reading.ac.uk>
Cc: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED]@bis.gsi.gov.uk>, "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED]@bis.gsi.gov.uk>
Subject: GM Science Update v3 jllbewdcb 111013 ejw.docx

Dear David et al.

Please find the latest version of the paper which I have thoroughly edited to reduce the length to 40 pages, while retaining the content, and ensuring that it met the style requested internally here. I have left it in track changes so that you can see the edits. You will also note that we have been successful in securing the original figures from ISAAA thanks to [REDACTED] (Regulation 13).

I really apologise for the delay in getting back to you but it took longer than anticipated. I would be grateful if you can take a look at this and comment on any factual inaccuracies which may have crept in. We will be putting this to Mark early on Monday, when he has some time to consider the content before another overseas visit. There are some references missing which we need to complete. Grateful if you can address these so that [REDACTED] (Regulation 13) can complete.

I would be grateful for any response by cop on Monday and look forward to hearing from you.

Happy to discuss any queries by phone if you would like to contact me on either of the numbers below.

Best regards

[REDACTED] (Regulation 13)

[REDACTED] (Regulation 13)

Government Office for Science | 2nd Floor, 1 Victoria Street, London SW1H 0ET | [REDACTED]
(Regulation 13) | [REDACTED] (Regulation 13) @bis.gsi.gov.uk

From: John Pickett (RRes-Roth) [john.pickett@rothamsted.ac.uk]
Sent: 11 October 2013 14:16
To: jonathan jones (TSL); [REDACTED] (Regulation 13) (GO-Science); David Baulcombe; Pere Puigdomènech Rosell; Jim Dunwell
Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science)
Subject: RE: GM Science Update v3 jjlbewdcb 111013 ejw.docx

Dear All

From my quick reading I feel it's a pity that it has needed quite such drastic shortening in parts but overall it contains the correct overview in my opinion.

Very best wishes,

John

From: Pere Puigdomènech Rosell [pere.puigdomenech@cragenomica.es]

Sent: 11 October 2013 16:43

To: [REDACTED] (Regulation 13) (UKTI Investment)

Subject: RE: GM Science Update v3 jjlbewdcb 111013 ejw.docx

Dear [REDACTED] (Regulation 13),

For the statement that the effects on health, none of the effects could be replicated (page 7), you could refer to either the opinions of the GMO EFSA Panel, they have provided detailed analysis in all cases. The report from the Australian and New Zealand authorities you sent to us is also conclusive. The references on insect resistance are probably only ojin technical reports but not in refereed journals.

Best regards.

Pere

De: [REDACTED] (Regulation 13) (GO-Science) [mailto:[REDACTED] (Regulation 13) @bis.gsi.gov.uk]

Enviado el: viernes, 11 de octubre de 2013 12:48

Para: David Baulcombe; jonathan jones (TSL); john.pickett@rothamsted.ac.uk; Pere Puigdomènech Rosell; Jim Dunwell

CC: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science)

Asunto: GM Science Update v3 jjlbewdcb 111013 ejw.docx

Dear David et al.

Please find the latest version of the paper which I have thoroughly edited to reduce the length to 40 pages, while retaining the content, and ensuring that it met the style requested internally here. I have left it in track changes so that you can see the edits. You will also note that we have been successful in securing the original figures from ISAAA thanks to [REDACTED] (Regulation 13).

I really apologise for the delay in getting back to you but it took longer than anticipated. I would be grateful if you can take a look at this and comment on any factual inaccuracies which may have crept in. We will be putting this to Mark early on Monday, when he has some time to consider the content before another overseas visit. There are some references missing which we need to complete. Grateful if you can address these so that [REDACTED] (Regulation 13) can complete.

I would be grateful for any response by cop on Monday and look forward to hearing from you.

Happy to discuss any queries by phone if you would like to contact me on either of the numbers below.

Best regards

[REDACTED] (Regulation 13)

(Regulation 13)

Government Office for Science | 2nd Floor, 1 Victoria Street, London SW1H 0ET | [REDACTED]

(Regulation 13) | [REDACTED] (Regulation 13) @bis.gsi.gov.uk

Stay up to date with how Foresight is influencing UK government policy. Visit

www.bis.gov.uk/foresight for the latest news.

You can now follow the Government Office for Science and Government Chief Scientific Adviser on Twitter: @uksciencechief.

From: [REDACTED] (Regulation 13) (UKTI Investment)
Sent: 11 October 2013 17:06
To: Pere Puigdomènech Rosell
Cc: [REDACTED] (Regulation 13) (GO-Science)
Subject: RE: GM Science Update v3 jjlbewdcb 111013 ejw.docx

Dear Pere

Thank you for this.

Best regards

[REDACTED] (Regulation 13)

[REDACTED] (Regulation 13)

Government Office for Science | 2nd Floor, 1 Victoria Street, London SW1H 0ET | [REDACTED]

(Regulation 13) | [REDACTED] [\[REDACTED\]@bis.gsi.gov.uk](mailto:[REDACTED]@bis.gsi.gov.uk)

Stay up to date with how Foresight is influencing UK government policy. Visit www.bis.gov.uk/foresight for the latest news.

You can now follow the Government Office for Science and Government Chief Scientific Adviser on Twitter: [@uksciencechief](https://twitter.com/uksciencechief).

From: [REDACTED] (Regulation 13) (GO-Science)
Sent: 14 October 2013 12:40
To: David Baulcombe
Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science)
Subject: RE: GM Science Update v3 jjlbewdcb 111013 ejw.docx

Dear David

Thank you for your helpful comments which I have received. Given the target audience, it was never going to be an easy task, and it was inevitable that it would need an independent review of the text which is in effect what I have done. I hope that this has been to your satisfaction.

I am still awaiting feedback from [REDACTED] (Regulation 13) here, and as soon as I have this I will get back to you on the next steps. We did wonder about reducing Section 1, but will see what Sir Mark and others think about this, as the variety of graphs were helpful and do bring the situation into perspective.

Hope you have a good trip in China, and will get back to you in the next couple of days.

Best regards

[REDACTED] (Regulation 13)

From: David Baulcombe [mailto:dcb40@cam.ac.uk]
Sent: 14 October 2013 11:47
To: [REDACTED] (Regulation 13) (GO-Science)
Subject: Re: GM Science Update v3 jjlbewdcb 111013 ejw.docx

Dear [REDACTED] (Regulation 13),

Unfortunately I am in China at present with only very limited email access. However I did manage to download and have added some changes – I hope I can get this message through to you.

For missing references I suggest you target the most likely member of the group – I have added some suggestions as notes on the text. If you wanted to reduce further I think that a précis of section 1 could probably go down to one or two pages. I could do it but not until Thursday when I have all day on a plane.

I am sorry this report has turned out to be so much work for your team.

All the best

David

PS take care – I did not rename the file – probably rename when opening.

From: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED]@bis.gsi.gov.uk>
Date: Friday, 11 October 2013 18:47
To: David Baulcombe <dcb40@cam.ac.uk>, "jonathan jones (TSL)" <jonathan.jones@sainsbury-

laboratory.ac.uk>, "john.pickett@rothamsted.ac.uk" <john.pickett@rothamsted.ac.uk>, Pere Puigdomènech Rosell <pere.puigdomenech@cragenomica.es>, Jim Dunwell <j.m.dunwell@reading.ac.uk>
Cc: "[REDACTED] (Regulation 13) (GO-Science)" <[\[REDACTED\]@bis.gsi.gov.uk](mailto:[REDACTED]@bis.gsi.gov.uk)>, "[REDACTED] (Regulation 13) (GO-Science)" <[\[REDACTED\]@bis.gsi.gov.uk](mailto:[REDACTED]@bis.gsi.gov.uk)>
Subject: GM Science Update v3 jjlbewdcb 111013 ejw.docx

Dear David et al.

Please find the latest version of the paper which I have thoroughly edited to reduce the length to 40 pages, while retaining the content, and ensuring that it met the style requested internally here. I have left it in track changes so that you can see the edits. You will also note that we have been successful in securing the original figures from ISAAA thanks to [REDACTED] (Regulation 13).

I really apologise for the delay in getting back to you but it took longer than anticipated. I would be grateful if you can take a look at this and comment on any factual inaccuracies which may have crept in. We will be putting this to Mark early on Monday, when he has some time to consider the content before another overseas visit. There are some references missing which we need to complete. Grateful if you can address these so that [REDACTED] (Regulation 13) can complete.

I would be grateful for any response by cop on Monday and look forward to hearing from you.

Happy to discuss any queries by phone if you would like to contact me on either of the numbers below.

Best regards
[REDACTED] (Regulation 13)

[REDACTED] (Regulation 13)
Government Office for Science | 2nd Floor, 1 Victoria Street, London SW1H 0ET | [REDACTED]
(Regulation 13) | [REDACTED] ([Regulation 13](mailto:[REDACTED]@bis.gsi.gov.uk)) @bis.gsi.gov.uk

Stay up to date with how Foresight is influencing UK government policy. Visit www.bis.gov.uk/foresight for the latest news.

You can now follow the Government Office for Science and Government Chief Scientific Adviser on Twitter: @uksciencechief.

Communications via the GSi may be automatically logged, monitored and/or recorded for legal purposes

From: [REDACTED] (Regulation 13) (GO-Science)
Sent: 15 October 2013 14:58
To: 'jonathan.jones (TSL)'
Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science)
Subject: GM review

Dear Jonathan,

I am in the process of finishing all the references for the GM Annex and there is one missing and I was wondering if you could help me with that. It is in section B1 on wheat:

There is scope for nutritional enhancement of wheat. Coeliac disease in humans results from an allergic response to certain wheat proteins. Lines of wheat have been generated using RNAi, to eliminate these proteins without reducing bread-making quality or animal feed utility of the grain. Compared with wheat, oats have a lower glycaemic index (GI) for the same amount of carbohydrate, due to elevated levels of a CSLH gene promoting (1,3;1,4)-beta-D-glucan accumulation. Low GI foods release sugar more slowly, whereas a diet rich in high GI foods is associated with larger pulses of sugar that may promote type II diabetes. Compared to starch, (1,3;1,4)-beta-D-glucan is digested more slowly, with the help of specific human gut microflora. Projects are underway to express this CSLH gene in wheat, potatoes and tomatoes; with the resulting product expected to promote healthier diets.

Do you have a reference for the last sentence saying that projects are underway to express CSLH in wheat, potatoes and tomatoes?

It would be fantastic if you could help us with that.

Thanks and best wishes,

[REDACTED] (Regulation 13)

[REDACTED] (Regulation 13)

Government Office for Science | 2nd Floor | 1 Victoria Street, London

From: jonathan jones (TSL) [jonathan.jones@sainsbury-laboratory.ac.uk]

Sent: 09 September 2013 11:01

To: [REDACTED] (Regulation 13) (UKTI Investment)

Subject: Re: :GM review

Great, thanks; there's a lingo cellulose in there, and I don't think you can classify Miscanthus as woody (it's a big grass) but otherwise fine!

JJ

From: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED]@bis.gsi.gov.uk>

Date: Monday, 9 September 2013 10:51

To: Jonathan Jones <jonathan.jones@sainsbury-laboratory.ac.uk>, Jim Dunwell <j.m.dunwell@reading.ac.uk>, "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED]@bis.gsi.gov.uk>, "[REDACTED] (Regulation 13) (Defra)" <[REDACTED]@DEFRA.GSI.GOV.UK>, "dcb40@cam.ac.uk" <dcb40@cam.ac.uk>

Cc: "john pickett (RRes-Roth)" <john.pickett@rothamsted.ac.uk>, "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED]@bis.gsi.gov.uk>

Subject: RE: :GM review

Jonathan

This is looking good. I have made a few additional suggestions using a recent biofuel review which Foresight commissioned and which is now in the public domain. We will provide the web-link - I am working off-line at the moment so unable to do so.

I will now work on the section for research and development for your views.

Best regards

[REDACTED] (Regulation 13)

From: [REDACTED] (Regulation 13) (UKTI Investment)
Sent: 18 September 2013 08:00
To: David Baulcombe
Cc: [REDACTED] (Regulation 13) (GO-Science)
Subject: GM Science Update v3 jjlbewdcb 180913 (1).docx

Attachments:

David

Please find the latest version. I am afraid I have only managed the Introduction and Section 1. Preparations for our conference on Friday overtook during the day so I started on this later than anticipated, and it takes time.

I am happy to continue later today after you have provided your input. It may help if you focus on sections 2 and 3 in the same style as I have started. As you will see from comments, there is a lot of text copied directly out of other documents so we need to use quotes or re-word. I have tried re-wording section 1, and have removed some facts where they were less clear, and concentrated on keeping the text succinct.

It would be helpful to keep your changes in track changes.

Happy to discuss anything this morning if that helps.

Best regards

[REDACTED] (Regulation 13)

[REDACTED] (Regulation 13)

Government Office for Science | 2nd Floor, 1 Victoria Street, London SW1H 0ET | [REDACTED]
(Regulation 13) | [REDACTED] [@bis.gsi.gov.uk](mailto:[REDACTED]@bis.gsi.gov.uk)

Stay up to date with how Foresight is influencing UK government policy. Visit www.bis.gov.uk/foresight for the latest news.

You can now follow the Government Office for Science and Government Chief Scientific Adviser on Twitter: @uksciencechief.

From: [REDACTED] (Regulation 13) (UKTI Investment)
Sent: 18 November 2013 21:52
To: David Baulcombe
Subject: Annex A - GM Science Update v6.docx

Attachments:

David

Further to our conversation this evening.

Please find attached the latest version of the GM science review. I have proof-read the review and made some minor edits in track changes related to punctuation etc.

I have also flagged certain paragraphs which you may want to check before we finalise the arrangements for publication.

Grateful if you can get back to us promptly. If there are any further queries, please do not hesitate to contact me.

Best regards

[REDACTED] (Regulation 13)

[REDACTED] ([Regulation 13](#))

Government Office for Science | 2nd Floor, 1 Victoria Street, London SW1H 0ET | [REDACTED]
(Regulation 13) | [REDACTED] ([Regulation 13](#)) [@bis.gsi.gov.uk](mailto:[REDACTED]@bis.gsi.gov.uk)

Stay up to date with how Foresight is influencing UK government policy. Visit www.bis.gov.uk/foresight for the latest news.

You can now follow the Government Office for Science and Government Chief Scientific Adviser on Twitter: [@uksciencechief](https://twitter.com/uksciencechief).

From: [REDACTED] (Regulation 13) (UKTI Investment)
Sent: 19 September 2013 15:59
To: David Baulcombe
Cc: [REDACTED] (Regulation 13) (GO-Science)
Subject: RE: report - further
Dear David

Thanks for this.

In teleconf this afternoon, but will try and call you between 16:30 - 17:00.

Useful call with Defra Tuesday. They were keen on two pronged approach 1) regulatory and EU, and 2) R&D crop improvement for Agri-Tech.

I will have to work on the summaries tonight.

Best regards
[REDACTED] (Regulation 13)

From: David Baulcombe [mailto:dcb40@cam.ac.uk]
Sent: 19 September 2013 12:27
To: [REDACTED] (Regulation 13) (GO-Science)
Subject: report - further

Dear [REDACTED] (Regulation 13) ,

Here is my latest offering – as yesterday but with a bit more work on the exec summary. Fell free to phone this afternoon if we need to clarify anything.

All the best

David

This email was received from the INTERNET.

Communications via the GSi may be automatically logged, monitored and/or recorded for legal purposes.

From: [REDACTED] (Regulation 13) (UKTI Investment)
Sent: 20 November 2013 16:04
To: [REDACTED] (Regulation 13) (UKTI Investment); 'David Baulcombe'
Cc: [REDACTED] (Regulation 13) (GO-Science)
Subject: RE: Annex A - GM Science Update v6.docx
David

Just a thought to give you a little more time.
I will actually be on leave Thursday, Friday and Monday for a long weekend.

Perhaps when you are happy with this, you could share it with the rest of the team (Jonathan, John, Petro).
As long as I have your cleared version by Tuesday am. I will then send it to Defra.

This will then still allow us to publish mid to late next week.

Best regards
[REDACTED] (Regulation 13)

From: [REDACTED] (Regulation 13) (GO-Science)
Sent: 20 November 2013 13:56
To: 'David Baulcombe'
Subject: RE: Annex A - GM Science Update v6.docx

David

Thanks for the update.

Best regards
[REDACTED] (Regulation 13)

From: David Baulcombe [mailto:dcb40@cam.ac.uk]
Sent: 20 November 2013 13:54
To: [REDACTED] (Regulation 13) (GO-Science)
Subject: Re: Annex A - GM Science Update v6.docx

I didn't manage to get to it yesterday – will be in London this evening and will hope to deal with it on the train.

David

From: David Baulcombe [dcb40@cam.ac.uk]

Sent: 21 November 2013 00:47

To: [REDACTED] (Regulation 13) (GO-Science); jonathan.jones (TSL); john.pickett@rothamsted.ac.uk; Pere Puigdomènech Rosell; Jim Dunwell

Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science)

Subject: Re: GM Science Update v6

Attachments:

Dear All,

Our text has been round the houses but is looking good. Please review this version and send any revisions to [REDACTED] (Regulation 13) by the start of next week.

All the best

David

This email was received from the INTERNET.

Communications via the GSi may be automatically logged, monitored and/or recorded for legal purposes.

From: Pere Puigdomènech Rosell [pere.puigdomenech@cragenomica.es]
Sent: 21 November 2013 16:25
To: David Baulcombe; [REDACTED] (Regulation 13) (GO-Science); jonathan jones (TSL); john.pickett@rothamsted.ac.uk; Jim Dunwell
Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science)
Subject: RE: GM Science Update v6

Attachments:

Dear all,

I have made a new revision of the text, especially in the first part, where I have included some comments. I have also added a couple of new developments, for instance the decision of the European Commission on the Pioneer 1507 maize and the Bt brinjal in Bangla Desh, this is of interest in relation with the discussion in India. I think that mentioning the viral resistance bean in Brazil is useful. I may write something if you think it is of interest.

All the best.

Pere

From: Pere Puigdomènech Rosell [pere.puigdomenech@cragenomica.es]
Sent: 21 November 2013 16:27
To: David Baulcombe; [REDACTED] (Regulation 13) (GO-Science); jonathan jones (TSL); john.pickett@rothamsted.ac.uk; Jim Dunwell
Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science)
Subject: RE: GM Science Update v6

Attachments:

Sorry. This is the revised version.
Pere

Dear all,

I have made a new revision of the text, especially in the first part, where I have included some comments. I have also added a couple of new developments, for instance the decision of the European Commission on the Pioneer 1507 maize and the Bt brinjal in Bangla Desh, this is of interest in relation with the discussion in India. I think that mentioning the viral resistance bean in Brazil is useful. I may write something if you think it is of interest.

All the best.

Pere

From: Jim Dunwell [j.m.dunwell@reading.ac.uk]

Sent: 22 November 2013 15:16

To: David Baulcombe; [REDACTED] (Regulation 13) (GO-Science); jonathan jones (TSL); john.pickett@rothamsted.ac.uk; Pere Puigdomènech Rosell; Jim Dunwell

Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science)

Subject: RE: GM Science Update v6

Attachments:

Please see attached version (as modified after Pere).

I've added few more details, mostly about Africa.

Best regards

Jim

From: jonathan jones (TSL) [jonathan.jones@sainsbury-laboratory.ac.uk]

Sent: 24 November 2013 10:17

To: Jim Dunwell; David Baulcombe; [REDACTED] (Regulation 13) (GO-Science); jonathan jones (TSL); john pickett (RRes-Roth); Pere Puigdomènech Rosell

Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science)

Subject: Re: GM Science Update v6

Attachments:

Hi all

Some mostly minor editings here

I injected the below sentence into p3- hope it meets approval. Part of the current madness is that any gene introduced by GM has to have its allergenicity/toxicity tested even if it is already in the human diet via breeding into another variety (e.g. Rpi-blb1/2 for Fortuna potato)

It can reasonably be argued that elevating crop performance by moving a gene from one plant species to another is simply a sophisticated form of plant breeding.

Best wishes, JJ

From: John Pickett (RRes-Roth) [john.pickett@rothamsted.ac.uk]
Sent: 24 November 2013 20:02
To: jonathan jones (TSL); Jim Dunwell; David Baulcombe; [REDACTED] (Regulation 13) (GO-Science); Pere Puigdomènech Rosell
Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science)
Subject: Re: GM Science Update v6

My brief comments will come tomorrow. [REDACTED] (Regulation 13) J.

Sent from Samsung Mobile

----- Original message -----

From: "jonathan jones (TSL)" <jonathan.jones@sainsbury-laboratory.ac.uk>
Date: 24/11/2013 10:17 (GMT+00:00)
To: Jim Dunwell <j.m.dunwell@reading.ac.uk>, David Baulcombe <dcb40@cam.ac.uk>, [REDACTED] (Regulation 13) (GO-Science)" <[REDACTED] (Regulation 13) @bis.gsi.gov.uk>, "jonathan jones (TSL)" <jonathan.jones@sainsbury-laboratory.ac.uk>, "John Pickett (RRes-Roth)" <john.pickett@rothamsted.ac.uk>, Pere Puigdomènech Rosell <pere.puigdomenech@cragenomica.es>
Cc: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED] (Regulation 13) @bis.gsi.gov.uk>, "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED] (Regulation 13)@bis.gsi.gov.uk>
Subject: Re: GM Science Update v6
Hi all

Some mostly minor editings here

I injected the below sentence into p3- hope it meets approval. Part of the current madness is that any gene introduced by GM has to have its allergenicity/toxicity tested even if it is already in the human diet via breeding into another variety (e.g. Rpi-blb1/2 for Fortuna potato)

It can reasonably be argued that elevating crop performance by moving a gene from one plant species to another is simply a sophisticated form of plant breeding.

Best wishes, JJ

From: Jim Dunwell <j.m.dunwell@reading.ac.uk>
Date: Friday, 22 November 2013 15:15
To: David Baulcombe <dcb40@cam.ac.uk>, "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED] (Regulation 13) @bis.gsi.gov.uk>, Jonathan Jones <jonathan.jones@sainsbury-laboratory.ac.uk>, "john pickett (RRes-Roth)" <john.pickett@rothamsted.ac.uk>, Pere Puigdomenich <pere.puigdomenech@cragenomica.es>, Jim Dunwell <j.m.dunwell@reading.ac.uk>
Cc: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED] (Regulation 13) @bis.gsi.gov.uk>, "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED] (Regulation 13)@bis.gsi.gov.uk>
Subject: RE: GM Science Update v6

Please see attached version (as modified after Pere).

I've added few more details, mostly about Africa.

Best regards

Jim

From: [REDACTED] (Regulation 13) (RRes-Roth) [REDACTED] (Regulation 13) @rothamsted.ac.uk]
Sent: 25 November 2013 14:58
To: dcb40@cam.ac.uk
Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (RRes-Roth); pere.puigdomenech@cragenomica.es; John Pickett (RRes-Roth); j.m.dunwell@reading.ac.uk; jonathan jones (TSL; [REDACTED] (Regulation 13) (GO-Science)
Subject: FW: GM Science Update v6

From John Pickett:

Dear David

I'm mostly happy with the entire document given the constraints. However, on page 20 I suggest the minor addition because it falls under the comment only on disease as follows:

- 1) Bt traits (referred to in Section 1) in which a bacterial gene **conferring resistance to some insect pests** is transferred into the crop variety.

With best wishes

John

Sent via [REDACTED] (Regulation 13)
Department Secretary

Department of Biological Chemistry and Crop Protection
Rothamsted Research
Harpenden
Herts AL5 2JQ
United Kingdom

Tel: [REDACTED] (Regulation 13)
Fax: +44 ([REDACTED] (Regulation 13)
www: <http://www.rothamsted.bbsrc.ac.uk/>

Please note my e-mail address changed on 1st June 2011 to [REDACTED] (Regulation 13) @rothamsted.ac.uk

Rothamsted Research is a company limited by guarantee, registered in England under the registration number 2393175 and a not for profit charity number 802038.

----- Original message -----

From: Pere Puigdomènech Rosell <pere.puigdomenech@cragenomica.es>
Date: 21/11/2013 16:28 (GMT+00:00)
To: David Baulcombe <dcb40@cam.ac.uk>, [REDACTED] (Regulation 13) (GO-Science)" <[\[REDACTED\] \(Regulation 13\) @bis.gsi.gov.uk](mailto:[REDACTED](Regulation 13)@bis.gsi.gov.uk)>, "jonathan jones (TSL)" <David Baulcombe <dcb40@cam.ac.uk>, [REDACTED] (Regulation 13) (GO-Science)" <[\[REDACTED\] \(Regulation 13\) @bis.gsi.gov.uk](mailto:[REDACTED](Regulation 13)@bis.gsi.gov.uk)>, "jonathan jones (TSL)"

<jonathan.jones@sainsbury-laboratory.ac.uk>,"John Pickett (RRes-Roth)"
<john.pickett@rothamsted.ac.uk>,"Jim Dunwell <j.m.dunwell@reading.ac.uk>
>,"John Pickett (RRes-Roth)" <john.pickett@rothamsted.ac.uk>,"Jim Dunwell
<j.m.dunwell@reading.ac.uk>
Cc: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED] ([@bis.gsi.gov.uk](mailto:Regulation 13))>,"[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED] ([@bis.gsi.gov.uk](mailto:Regulation 13))>
Subject: RE: GM Science Update v6

Sorry. This is the revised version.
Pere

Dear all,
I have made a new revision of the text, especially in the first part, where I have included some comments. I have also added a couple of new developments, for instance the decision of the European Commission on the Pioneer 1507 maize and the Bt brinjal in Bangla Desh, this is of interest in relation with the discussion in India. I think that mentioning the viral resistance bean in Brazil is useful. I may write something if you think it is of interest.
All the best.
Pere

De: David Baulcombe [<mailto:dcb40@cam.ac.uk>]
Enviado el: jueves, 21 de noviembre de 2013 1:47
Para: [REDACTED] (Regulation 13) (GO-Science); jonathan jones (TSL); john.pickett@rothamsted.ac.uk; Pere Puigdomènech Rosell; Jim Dunwell
CC: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science)
Asunto: Re: GM Science Update v6

Dear All,

Our text has been round the houses but is looking good. Please review this version and send any revisions to [REDACTED] (Regulation 13) by the start of next week.

All the best

David

From: [REDACTED] (Regulation 13) (UKTI Investment)

Sent: 28 November 2013 11:16

To: David Baulcombe

Subject: RE: report

David

Are you free for a phone call today.

I have to finish a brief in the next half hour and then would be available to talk.

What time would suit you?

Best regards

[REDACTED] (Regulation 13)

From: [REDACTED] (Regulation 13) (UKTI Investment)
Sent: 28 November 2013 11:21
To: David Baulcombe
Subject: RE: report
Will call you at 12:00 noon then.

Regards

[REDACTED] (Regulation 13)

From: David Baulcombe [mailto:dcb40@cam.ac.uk]
Sent: 28 November 2013 11:19
To: [REDACTED] (Regulation 13) (GO-Science)
Subject: Re: report

I can take a phone call anytime until 12-15 and then offline until Sunday evening.

All the best

David

From: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED] ([Regulation 13](mailto:[REDACTED]@bis.gsi.gov.uk)) @bis.gsi.gov.uk>
Date: Thursday, 28 November 2013 11:15
To: David Baulcombe <dcb40@cam.ac.uk>
Subject: RE: report

David

Are you free for a phone call today.

I have to finish a brief in the next half hour and then would be available to talk.

What time would suit you?

Best regards

[REDACTED] (Regulation 13)

From: David Baulcombe [mailto:dcb40@cam.ac.uk]
Sent: 28 November 2013 10:54
To: [REDACTED] (Regulation 13) (GO-Science)
Subject: report

Dear [REDACTED] (Regulation 13) ,

I have now reviewed the various committee edits and suggest that you go with the attached and accept all changes. I have added in a sentence about the bean resistance in Brazil in section C3 – there is a reference there that is not in the ref list.

I spoke with Paul Nurse this week and he suggested that one route for publication could be through the RS as a report. It would have to be peer reviewed before submission and I wondered what you thought about that?

David

David Baulcombe

(+44) 1223 339386

dcb40@cam.ac.uk

[@dcb40](#) twitter

www.plantsci.cam.ac.uk/research/davidbaulcombe.html

PA [REDACTED] (Regulation 13)

[REDACTED] (Regulation 13)

- fax

[REDACTED] (Regulation 13) [@cam.ac.uk](#)

This email was received from the INTERNET.

Communications via the GSi may be automatically logged, monitored and/or recorded for legal purposes.

From: [REDACTED] (Regulation 13) (GO-Science)
Sent: 28 November 2013 22:48
To: John Pickett (RRes-Roth); jonathan jones (TSL); Jim Dunwell; David Baulcombe; Pere Puigdomènech Rosell
Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science)
Subject: GM Science Update v7

Attachments:

Dear All

Please find attached the final version, incorporating all your edits and comments, along with a re-worked Table 6.

I will let you know as soon as it is available on the GO-Science website.

Best regards

[REDACTED] (Regulation 13)

[REDACTED] (Regulation 13)

Government Office for Science | 2nd Floor, 1 Victoria Street, London SW1H 0ET | [REDACTED]

(Regulation 13) | [REDACTED] **(Regulation 13) @bis.gsi.gov.uk**

Stay up to date with how Foresight is influencing UK government policy. Visit www.bis.gov.uk/foresight for the latest news.

You can now follow the Government Office for Science and Government Chief Scientific Adviser on Twitter: @uksciencechief.

From: jonathan jones (TSL) [jonathan.jones@sainsbury-laboratory.ac.uk]

Sent: 29 November 2013 11:02

To: [REDACTED] (Regulation 13) (UKTI Investment)

Subject: Re: GM Science Update v7

Thanks [REDACTED] (Regulation 13)

Just spotted a typo in case it hasn't actually left the building, bests JJ

FlaviSavr tomato is actually FlavrSavr

From: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED] (Regulation 13) @bis.gsi.gov.uk>

Date: Thursday, 28 November 2013 22:47

To: "john pickett (RRes-Roth)" <john.pickett@rothamsted.ac.uk>, Jonathan Jones <jonathan.jones@sainsbury-laboratory.ac.uk>, Jim Dunwell <j.m.dunwell@reading.ac.uk>, David Baulcombe <dcb40@cam.ac.uk>, Pere Puigdomenich <pere.puigdomenich@cragenomica.es>

Cc: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED] (Regulation 13) @bis.gsi.gov.uk>, "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED] (Regulation 13)@bis.gsi.gov.uk>

Subject: GM Science Update v7

Dear All

Please find attached the final version, incorporating all your edits and comments, along with a re-worked Table 6.

I will let you know as soon as it is available on the GO-Science website.

Best regards

[REDACTED] (Regulation 13)

[REDACTED] (Regulation 13)

Government Office for Science | 2nd Floor, 1 Victoria Street, London SW1H 0ET | [REDACTED]

(Regulation 13) [REDACTED] (Regulation 13) @bis.gsi.gov.uk

Stay up to date with how Foresight is influencing UK government policy. Visit www.bis.gov.uk/foresight for the latest news.

You can now follow the Government Office for Science and Government Chief Scientific Adviser on Twitter: @uksciencechief.

Communications via the GSi may be automatically logged, monitored and/or recorded for legal purposes

This email was received from the INTERNET.

Communications via the GSi may be automatically logged, monitored and/or recorded for legal purposes.

From: [REDACTED] (Regulation 13) (UKTI Investment)

Sent: 02 December 2013 14:46

To: 'jonathan jones (TSL)'

Subject: RE: GM Science Update v7

Dear Jonathan

Thanks for this.

Best regards

[REDACTED] (Regulation 13)

[REDACTED] ([Regulation 13](#))

Government Office for Science | 2nd Floor, 1 Victoria Street, London SW1H 0ET | [REDACTED]

(Regulation 13) [REDACTED] ([Regulation 13](#)) [@bis.gsi.gov.uk](#)

Stay up to date with how Foresight is influencing UK government policy. Visit www.bis.gov.uk/foresight for the latest news.

You can now follow the Government Office for Science and Government Chief Scientific Adviser on Twitter: [@uksciencechief](#).

From: David Baulcombe [dcb40@cam.ac.uk]
Sent: 13 December 2013 10:27
To: [REDACTED] (Regulation 13) (UKTI Investment)
Subject: link
Morning [REDACTED] (Regulation 13) ,

Could you please send me the link to the GM report.

Thanks

David

This email was received from the INTERNET.

Communications via the GSI may be automatically logged, monitored and/or recorded for legal purposes.

From: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED] (Regulation 13) @bis.gsi.gov.uk>
Date: Wednesday, 20 November 2013 12:57
To: David Baulcombe <dcb40@cam.ac.uk>
Cc: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED] (Regulation 13) @bis.gsi.gov.uk>
Subject: RE: Annex A - GM Science Update v6.docx

David

Just wondering how you got on with this yesterday.

We are aiming to get the letter to the PM this week, and to have your report published on the GO-Science website next week.

We will need the final version so that it can be converted here into a pdf, and check that it meets the BIS criteria in terms of formatting. I think the formatting is pretty much there, as I tried to address this, when we formatted the document.

Grateful if you can let me know when you are likely to be able to return the document to us.

Thanks and looking forward to hearing from you.

Best regards

[REDACTED] (Regulation 13)

[REDACTED] (Regulation 13)

Government Office for Science | 2nd Floor, 1 Victoria Street, London SW1H 0ET | [REDACTED]

(Regulation 13) [REDACTED] (Regulation 13) @bis.gsi.gov.uk

Stay up to date with how Foresight is influencing UK government policy. Visit www.bis.gov.uk/foresight for the latest news.

You can now follow the Government Office for Science and Government Chief Scientific Adviser on Twitter: @uksciencechief.

From: David Baulcombe [<mailto:dcb40@cam.ac.uk>]
Sent: 19 November 2013 11:41
To: [REDACTED] (Regulation 13) (GO-Science)
Subject: Re: Annex A - GM Science Update v6.docx

[REDACTED] (Regulation 13)

I can do this later today.

All the best

David

From: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED] ([Regulation 13](mailto:[REDACTED]@bis.gsi.gov.uk)) @bis.gsi.gov.uk>
Date: Monday, 18 November 2013 21:55
To: David Baulcombe <dcb40@cam.ac.uk>
Subject: Annex A - GM Science Update v6.docx

David

Further to our conversation this evening.

Please find attached the latest version of the GM science review. I have proof-read the review and made some minor edits in track changes related to punctuation etc.

I have also flagged certain paragraphs which you may want to check before we finalise the arrangements for publication.

Grateful if you can get back to us promptly. If there are any further queries, please do not hesitate to contact me.

Best regards

[REDACTED] (Regulation 13)

[REDACTED] ([Regulation 13](#))

Government Office for Science | 2nd Floor, 1 Victoria Street, London SW1H 0ET | [REDACTED]
(Regulation 13) | [REDACTED] ([Regulation 13](#)) @bis.gsi.gov.uk

Stay up to date with how Foresight is influencing UK government policy. Visit www.bis.gov.uk/foresight for the latest news.

You can now follow the Government Office for Science and Government Chief Scientific Adviser on Twitter: @uksciencechief.

From: [REDACTED] (Regulation 13) (UKTI Investment)

Sent: 18 December 2013 10:14

To: 'David Baulcombe'

Subject: RE: link

Dear David

I saw both Jonathan and Jim yesterday, at the Science Media Centre, and given the retraction on the Serregeldin study, there will be some tweaks to the GM Science Review so that it is up to date. I will send all authors, the very latest version, which I received just after sending you the earlier version yesterday.

I have mentioned it in confidence with Fiona Fox, as it may be appropriate for the Science Media Centre to host a contribution from you as the authors. We will need to discuss this with Defra, as soon as we know the launch date. I will get back to you as soon as there is any news on this.

Wishing you all the best for Christmas and the New Year.

Best regards

[REDACTED] (Regulation 13)

From: REDACTED (Regulation 13) (GO-Science)
Sent: 18 December 2013 10:37
To: REDACTED (Regulation 13) (GO-Science); 'David Baulcombe'; 'Jonathan Jones (TSL)'; 'john.pickett@rothamsted.ac.uk'; 'Pere Puigdomènech Rosell'; 'Jim Dunwell'
Cc: REDACTED (Regulation 13) (GO-Science)
Subject: GM Science Update
Attachments: cst-13-1328a-gm-science-update v2.pdf

Dear All

Just to let you know that the GM Science Annex has been very well received by the Council for Science and Technology. Publication date for the GM Science Review to go on the GO-Science has been delayed till the New Year by No. 10 and Defra. As soon as we have a confirmed date, we will get back to you. Attached is the latest version meeting the accessibility requirements needed for it to go on the website - ie. figure captions etc.



cst-13-1328a-gm-sc
ience-update...

In the interim, given the recent retraction of the Serageldin studies, it may be appropriate to double check the GM Science Annex to make sure it is as up to date as possible. However, this is not another opportunity to re-edit the document. Grateful if you can get back to me with any minor changes by the 6th January. Thanks.

Wishing you a very Happy Christmas and all the best for the New Year.

Best regards
REDACTED (Regulation 13)

REDACTED (Regulation 13)

Government Office for Science | 2nd Floor, 1 Victoria Street, London SW1H 0ET | REDACTED (Regulation 13) | [REDACTED \(Regulation 13\) @bis.gsi.gov.uk](mailto:REDACTED (Regulation 13)@bis.gsi.gov.uk)

Stay up to date with how Foresight is influencing UK government policy. Visit www.bis.gov.uk/foresight for the latest news.

You can now follow the Government Office for Science and Government Chief Scientific Adviser on Twitter: @uksciencechief.

From: David Baulcombe [dcb40@cam.ac.uk]
Sent: 19 December 2013 11:47
To: [REDACTED] (Regulation 13) (UKTI Investment)
Subject: Re: link
Dear [REDACTED] (Regulation 13) ,

Thanks for the update.

All the best

David

From: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED] (Regulation 13) @bis.gsi.gov.uk>
Date: Wednesday, 18 December 2013 10:13
To: David Baulcombe <dcb40@cam.ac.uk>
Subject: RE: link

Dear David

I saw both Jonathan and Jim yesterday, at the Science Media Centre, and given the retraction on the Serregeldin study, there will be some tweaks to the GM Science Review so that it is up to date. I will send all authors, the very latest version, which I received just after sending you the earlier version yesterday.

I have mentioned it in confidence with Fiona Fox, as it may be appropriate for the Science Media Centre to host a contribution from you as the authors. We will need to discuss this with Defra, as soon as we know the launch date. I will get back to you as soon as there is any news on this.

Wishing you all the best for Christmas and the New Year.

Best regards

[REDACTED] (Regulation 13)

From: David Baulcombe [<mailto:dcb40@cam.ac.uk>]
Sent: 17 December 2013 18:36
To: [REDACTED] (Regulation 13) (GO-Science)
Subject: Re: link

Dear [REDACTED] (Regulation 13) ,

Thanks – please let me know whether we should stand by ready to respond to media when it is published.

All the best

David

From: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED] (Regulation 13) @bis.gsi.gov.uk>
Date: Tuesday, 17 December 2013 14:35

To: David Baulcombe <dcb40@cam.ac.uk>

Subject: RE: link

David

My apologies for the delay in getting back to you.

The GM Science review was very well received at the CST meeting last week.

Publication has been delayed until the New Year, to ensure it receives appropriate profile.

Attached is the pdf version I currently have. There were some tweaks on accessibility of the picture captions which our communications colleague was working on.

With all best wishes for the New Year.

Best regards

██████████ (Regulation 13)

██████████ (Regulation 13)

Government Office for Science | 2nd Floor, 1 Victoria Street, London SW1H 0ET | ██████████

(Regulation 13) ██████████ (Regulation 13) @bis.gsi.gov.uk

Stay up to date with how Foresight is influencing UK government policy. Visit www.bis.gov.uk/foresight for the latest news.

You can now follow the Government Office for Science and Government Chief Scientific Adviser on Twitter: @uksciencechief.

From: jonathan jones (TSL) [jonathan.jones@sainsbury-laboratory.ac.uk]
Sent: 20 December 2013 11:53
To: [REDACTED] (Regulation 13) (GO-Science); 'David Baulcombe'; jonathan jones (TSL); john pickett (RRes-Roth); 'Pere Puigdomènech Rosell'; 'Jim Dunwell'
Cc: [REDACTED] (Regulation 13) (GO-Science)
Subject: Re: GM Science Update

Follow Up Flag: Follow up
Flag Status: Orange

Attachments: 1-s2.0-S1369526613000423-main.pdf
Not sure if this was on our reading list but it's quite a good source, JJ

From: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED]@bis.gsi.gov.uk>
Date: Wednesday, 18 December 2013 10:36
To: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED]@bis.gsi.gov.uk>, 'David Baulcombe' <dcb40@cam.ac.uk>, Jonathan Jones <jonathan.jones@sainsbury-laboratory.ac.uk>, "john pickett (RRes-Roth)" <john.pickett@rothamsted.ac.uk>, Pere Puigdomenich <pere.puigdomenech@cragenomica.es>, Jim Dunwell <j.m.dunwell@reading.ac.uk>
Cc: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED]@bis.gsi.gov.uk>
Subject: GM Science Update

Dear All

Just to let you know that the GM Science Annex has been very well received by the Council for Science and Technology. Publication date for the GM Science Review to go on the GO-Science has been delayed till the New Year by No. 10 and Defra. As soon as we have a confirmed date, we will get back to you.

Attached is the latest version meeting the accessibility requirements needed for it to go on the website - ie. figure captions etc.

In the interim, given the recent retraction of the Serageldin studies, it may be appropriate to double check the GM Science Annex to make sure it is as up to date as possible. However, this is not another opportunity to re-edit the document. Grateful if you can get back to me with any minor changes by the 6th January. Thanks.

Wishing you a very Happy Christmas and all the best for the New Year.

Best regards

[REDACTED] (Regulation 13)

[REDACTED] (Regulation 13)

Government Office for Science | 2nd Floor, 1 Victoria Street, London SW1H 0ET | [REDACTED]
(Regulation 13) | [REDACTED] (Regulation 13) @bis.gsi.gov.uk

Stay up to date with how Foresight is influencing UK government policy. Visit www.bis.gov.uk/foresight for the latest news.

From: jonathan jones (TSL) [jonathan.jones@sainsbury-laboratory.ac.uk]
Sent: 20 December 2013 13:28
To: 'David Baulcombe'; [REDACTED] (Regulation 13) (UKTI Investment)
Subject: FW: Report on GM
David and [REDACTED] (Regulation 13) - I defer to you on this, JJ

From: Fiona Fox <fiona@sciencemediacentre.org>
Date: Friday, 20 December 2013 13:23
To: "dc40@cam.ac.uk" <dc40@cam.ac.uk>, Jonathan Jones <jonathan.jones@sainsbury-laboratory.ac.uk>
Subject: Report on GM

Hi Folks,

A little bird in Go Science has informed me that you wonderful people have been working on an updated review of the science of GM for the Government.

I admit I had no idea about this work but am very excited about it and think the timing is perfect

So this is me blatantly lobbying you both to come into the Science Media Centre when your report is done and allow us to run a press briefing for you. Please say yes...we will be lovely to work with (unlike those pesky government press officers!!) and we will get you the very finest science journalists into the room, and it will be a great experience.

Of course if you already have a government press conference already planned I will concede defeat and go away quietly, but the Lord Loves a trier....

Let me know and maybe we could grab a chat on the phone early next year

Best wishes
Fiona

--

Fiona Fox
Chief Executive
Science Media Centre
215 Euston Road
London NW1 2BE

Tel: [REDACTED] (Regulation 13)
E: fiona@sciencemediacentre.org
Web: www.sciencemediacentre.org

My blog: [on science and the media](#)

From: Jim Dunwell [mailto:j.m.dunwell@reading.ac.uk]
Sent: 08 January 2014 11:12
To: [REDACTED] (Regulation 13) (Defra); [REDACTED] (Regulation 13) (GO-Science)
Subject: GM article

This is a copy of my brief GM article that appeared today.

(Jim M. Dunwell. (2014). Genetically modified (GM) crops: European and transatlantic divisions. *Molecular Plant Pathology*. 15 (2), 119–121.)

Jim

Prof. Jim Dunwell
School of Agriculture, Policy and Development
The University of Reading
Earley Gate, PO Box 237
Reading RG6 6AR (sat nav RG6 7BE)
UK

Tel [REDACTED] (Regulation 13)

Google scholar

http://scholar.google.co.uk/citations?hl=en&user=V0Hs4LMAAA AJ&view_op=list_works

From: jonathan jones (TSL) [jonathan.jones@sainsbury-laboratory.ac.uk]

Sent: 08 January 2014 21:35

To: [REDACTED] (Regulation 13) (UKTI Investment)

Subject: Re: Report on GM

Thanks [REDACTED] (Regulation 13) - best wishes for 2014 to you too!

I will be in US Jan 10th – 21st but could help with any public engagement when I get back

Keep me posted!

Best wishes

JJ

From: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED]@bis.gsi.gov.uk> ([Regulation 13](#))

Date: Monday, 6 January 2014 17:27

To: Jonathan Jones <jonathan.jones@sainsbury-laboratory.ac.uk>

Subject: RE: Report on GM

Jonathan

Happy New Year.

Still no news on launch date but will keep you informed.

Regards

[REDACTED] (Regulation 13)

From: jonathan jones (TSL) [<mailto:jonathan.jones@sainsbury-laboratory.ac.uk>]

Sent: 20 December 2013 14:54

To: [REDACTED] (Regulation 13) (GO-Science)

Subject: FW: Report on GM

Little bird??/!!!!

Seasons greetings

JJ

From: David Baulcombe [dcb40@cam.ac.uk]
Sent: 17 January 2014 15:37
To: [REDACTED] (Regulation 13) (UKTI Investment)
Subject: Re: Report on GM

A date after the 10th Feb would suit me.

David

From: jonathan jones (TSL) [jonathan.jones@sainsbury-laboratory.ac.uk]
Sent: 20 January 2014 18:11
To: Fiona Fox; [REDACTED] (Regulation 13) (UKTI Investment); David Baulcombe; jonathan jones (TSL)
Subject: Re: Report on GM
Great- let's get that date confirmed asap
Would it be good or bad to have back-to-back briefings on the GM report and on my potato trial publication?
JJ

From: Fiona Fox <fiona@sciencemediacentre.org>
Date: Monday, 20 January 2014 17:16
To: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED] ([@bis.gsi.gov.uk](mailto:Regulation 13))>, David Baulcombe <dcb40@cam.ac.uk>, Jonathan Jones <jonathan.jones@sainsbury-laboratory.ac.uk>
Subject: RE: Report on GM

Hi Folks,

This is fantastic news – I am delighted we will play host to the press briefing to publish this really important report.

Who should I talk to about what we need?

Here is a short idiots guide to SMC press briefings off the top of my head

- They all take place between 10.30 – 11.30am at our home in the Wellcome Trust
- The format is 3 or 4 scientists who speak for 5 minutes each by way of introduction followed by a q&a
- The scientists should be the authors of the report
- We need to issue the invitation to journalists about one week before the briefing
- With a report like this we would expect an embargo so would need to run the press briefing a day or two before the embargo lifts
- I or an SMC colleague will chair the briefing and facilitate the q&a
- The press briefing will be for national news journalists only – we do not do launch events for other stakeholders
- Once the speakers are confirmed I can send you further details on ‘dos and don’ts’ of SMC briefings

Cheers all – very much looking forward to working with you on all this

Fiona

From: [REDACTED] (Regulation 13) (GO-Science) [mailto:[REDACTED] ([@bis.gsi.gov.uk](mailto:Regulation 13))]
Sent: 17 January 2014 13:17
To: Fiona Fox; David Baulcombe; jonathan jones (TSL)
Subject: RE: Report on GM

Dear Fiona, David, Jonathan

Fiona, just to let you know that I have now been able to discuss this proposal with Sir Mark Walport. He is very happy for Science Media Centre to organise a press briefing /event with the authors for the launch. Be good to know how you want to handle this and engage your GM network group.

Sir Mark Walport is keen that there is not just one event raising the profile, but that this is sustained over a period with other opportunities during the following weeks, through the research institutes etc. Happy to discuss further early next week if this helps, but just wanted to let you know that we are back on the case finally.

We still have not got a confirmed date, but there is an imperative to make this happen within 2-3 weeks. Colleagues are liaising with Defra and No. 10 to find an appropriate date. As soon as we know, I will inform you.

David and Jonathan, I would be grateful if you can check whether there are any further changes to document before we make it public. I know there are a couple in my inbox. I will get to this on Monday and get back to you with a revised version then. In the interim, if there is anything else, please to pass this on, as this will speed up the process. Thanks.

Have a good weekend.

Best regards

██████████ (Regulation 13)

██████████ (Regulation 13)

Government Office for Science | 2nd Floor, 1 Victoria Street, London SW1H 0ET | ██████████

(Regulation 13) ██████████ (Regulation 13) @bis.gsi.gov.uk

Stay up to date with how Foresight is influencing UK government policy. Visit www.bis.gov.uk/foresight for the latest news.

You can now follow the Government Office for Science and Government Chief Scientific Adviser on Twitter: @uksciencechief.

From: Fiona Fox [<mailto:fiona@sciencemediacentre.org>]

Sent: 20 December 2013 14:43

To: David Baulcombe; jonathan jones (TSL)

Cc: ██████████ (Regulation 13) (GO-Science)

Subject: RE: Report on GM

Hurrah!!!!!! That's great news

Look forward to working with you all

Fiona

From: David Baulcombe [<mailto:dcb40@cam.ac.uk>]

Sent: 20 December 2013 14:04

To: Fiona Fox; jonathan jones (TSL)

Cc: ██████████ (Regulation 13) (GO-Science)

Subject: Re: Report on GM

Dear Fiona,

I am sure we can do something and as far as I know GO science have not planned anything. Perhaps when we have a likely date for release of the report then we could fix a date and do a press release?

David

From: [REDACTED] (Regulation 13) (GO-Science)
Sent: 31 January 2014 11:54
To: Jim Dunwell; Pere Puigdomènech Rosell; 'David Baulcombe'; 'jonathan jones (TSL)'; 'john.pickett@rothamsted.ac.uk'
Cc: [REDACTED] (Regulation 13) (GO-Science)
Subject: RE: GM Science Update - URGENT

Attachments:

Dear **Jim**

Thank you very much for this. Most helpful.

Attached is the latest version from comms with the figure legends and your amendments (latter in track changes).

How do you want to handle the latest web addresses, are we putting those in the text directly? See comments.

Dear **David, Jonathan and John**

Please let me know asap if you are content with these changes, and whether there is anything else missed.

Grateful if I can have these for Monday. Thanks

Best regards

[REDACTED] (Regulation 13)

From: Jim Dunwell [mailto:j.m.dunwell@reading.ac.uk]
Sent: 30 January 2014 12:08
To: [REDACTED] (Regulation 13) (GO-Science); Pere Puigdomènech Rosell; 'David Baulcombe'; 'jonathan jones (TSL)'; 'john.pickett@rothamsted.ac.uk'; 'Jim Dunwell'
Cc: [REDACTED] (Regulation 13) (GO-Science)
Subject: RE: GM Science Update - URGENT

Dear [REDACTED] (Regulation 13),
Please see attached version with minor amendments and updates.
Hope these are clear and self-explanatory.
Best regards
Jim

From: [REDACTED] (Regulation 13) (GO-Science) [mailto:[REDACTED] (Regulation 13)@bis.gsi.gov.uk]
Sent: 29 January 2014 12:47
To: Pere Puigdomènech Rosell; 'David Baulcombe'; 'jonathan jones (TSL)'; 'john.pickett@rothamsted.ac.uk'; 'Jim Dunwell'
Cc: [REDACTED] (Regulation 13) (GO-Science)
Subject: RE: GM Science Update - URGENT
Importance: High
Dear **All**

I need to finalise the GM Science Annex so that it can be launched as soon as we have a date confirmed. We are still waiting to hear when this is likely to be, but I will get back to you asap as soon as we know.

Grateful for any further comments suggestions asap, so that I can amend the document.

It would be really helpful if you can make them in track changes on the attached document and let me know which page numbers you have made amendments too. I am attaching this version for ease of reference, for you to check. I will then have to transfer any suggested changes to the latest version of the word document comms used to make the pdf. This had minor changes on the figure legends for accessibility, but no changes on the main narrative. I am trying to source this today.

Thanks.

Best regards

██████████ (Regulation 13)

From: Pere Puigdomènech Rosell [<mailto:pere.puigdomenech@cragenomica.es>]

Sent: 18 December 2013 16:40

To: ██████████ (Regulation 13) (GO-Science); 'David Baulcombe'; 'Jonathan Jones (TSL)'; 'John.Pickett@rothamsted.ac.uk'; 'Jim Dunwell'

Cc: ██████████ (Regulation 13) (GO-Science)

Subject: RE: GM Science Update

Dear ██████████ (Regulation 13) ,

Thank you for the update. Two recent developments in Europe regarding GMOs:

One is the Seralini' paper retraction but both Europe and France are putting money (more than 4 million euros together!) in order to repeat the Seralini experiment and doing it properly. Monsanto is opposing these projects and they may be impossible to conduct. As a whole it is a complete loss of time and money, in my view.

The second is that last Friday, the Ministers of Environment were supposed to vote the permission of the maize 1507 from Pioneer. The vote was postponed because a ruling of the European Court ruled that the potato Amflora was approved without following the proper procedure.

These development may provide further arguments to propose a simplification of the whole process. Happy Christmas and Best 2014!

Pere

De: ██████████ (Regulation 13) (GO-Science) [<mailto:██████████@bis.gsi.gov.uk>]

Enviado el: miércoles, 18 de diciembre de 2013 11:37

Para: ██████████ (Regulation 13) (GO-Science); 'David Baulcombe'; 'Jonathan Jones (TSL)'; 'John.Pickett@rothamsted.ac.uk'; Pere Puigdomènech Rosell; 'Jim Dunwell'

CC: ██████████ (Regulation 13) (GO-Science)

Asunto: GM Science Update

Dear All

Just to let you know that the GM Science Annex has been very well received by the Council for Science and Technology. Publication date for the GM Science Review to go on the GO-Science has been delayed till the New Year by No. 10 and Defra. As soon as we have a confirmed date, we will get back to you.

Attached is the latest version meeting the accessibility requirements needed for it to go on the website - ie. figure captions etc.

In the interim, given the recent retraction of the Serageldin studies, it may be appropriate to double check the GM Science Annex to make sure it is as up to date as possible. However, this is not another opportunity to re-edit the document.

Grateful if you can get back to me with any minor changes by the 6th January.
Thanks.

Wishing you a very Happy Christmas and all the best for the New Year.

Best regards

██████████ (Regulation 13)

██████████ (Regulation 13)

Government Office for Science | 2nd Floor, 1 Victoria Street, London SW1H 0ET | ██████████
(Regulation 13) | ██████████ **(Regulation 13) @bis.gsi.gov.uk**

Stay up to date with how Foresight is influencing UK government policy. Visit
www.bis.gov.uk/foresight for the latest news.

You can now follow the Government Office for Science and Government Chief Scientific Adviser on
Twitter: @uksciencechief.

From: John Pickett (RRes-Roth) [john.pickett@rothamsted.ac.uk]

Sent: 31 January 2014 12:24

To: [REDACTED] (Regulation 13) (GO-Science); Jim Dunwell; Pere Puigdomènech Rosell; 'David Baulcombe'; 'jonathan jones (TSL)'

Cc: [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (RRes-Roth)

Subject: RE: GM Science Update – URGENT

Dear [REDACTED] (Regulation 13)

I am indeed completely happy and discussed the issue, to this effect, further with David last night.

Very best wishes,

John

From: jonathan jones (TSL) [jonathan.jones@sainsbury-laboratory.ac.uk]

Sent: 31 January 2014 12:57

To: [REDACTED] (Regulation 13) (GO-Science); 'David Baulcombe'

Cc: [REDACTED] (Regulation 13) (GO-Science)

Subject: Re: GM Science Update - URGENT

I will try to take a final look this weekend

I realize I missed a chance to network about PubGM yesterday at BBSRC 20 years event; one can only handle so many trips to london; did GM ways forward come up at all?

vbw

JJ

From: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED]@bis.gsi.gov.uk>

Date: Friday, 31 January 2014 11:53

To: Jim Dunwell <j.m.dunwell@reading.ac.uk>, Pere Puigdomenich <pere.puigdomenech@cragenomica.es>, 'David Baulcombe' <dcb40@cam.ac.uk>, Jonathan Jones <jonathan.jones@sainsbury-laboratory.ac.uk>, "john pickett (RRes-Roth)" <john.pickett@rothamsted.ac.uk>

Cc: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED]@bis.gsi.gov.uk>

Subject: RE: GM Science Update - URGENT

Dear **Jim**

Thank you very much for this. Most helpful.

Attached is the latest version from comms with the figure legends and your amendments (latter in track changes).

How do you want to handle the latest web addresses, are we putting those in the text directly?
See comments.

Dear **David, Jonathan and John**

Please let me know asap if you are content with these changes, and whether there is anything else missed.

Grateful if I can have these for Monday. Thanks

Best regards

[REDACTED] (Regulation 13)

From: jonathan jones (TSL) [jonathan.jones@sainsbury-laboratory.ac.uk]
Sent: 31 January 2014 17:34
To: [REDACTED] (Regulation 13) (UKTI Investment)
Subject: FW: how are we doing on dates?
Yes please asap ! (Diary filling up, and I'm sure for DCB too)

JJ

From: Fiona Fox <fiona@sciencemediacentre.org>
Date: Friday, 31 January 2014 17:17
To: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED]@bis.gsi.gov.uk>, David Baulcombe <dcb40@cam.ac.uk>, Jonathan Jones <jonathan.jones@sainsbury-laboratory.ac.uk>
Subject: RE: how are we doing on dates?

Any news folks?

From: Fiona Fox [mailto:fiona@sciencemediacentre.org]
Sent: 27 January 2014 11:34
To: [REDACTED] (Regulation 13) (GO-Science); 'David Baulcombe'; 'jonathan jones (TSL)'
Subject: how are we doing on dates?

Lots of lovely media coverage on GM purple tomatoes over the weekend
Cheers
Fiona

Hi Fiona,

Here's some links to purple GM tomato headlines:

Mail Online: <http://www.dailymail.co.uk/news/article-2546276/PURPLE-tomato-juice-genetically-modified-fruit-engineered-health-benefits.html?ico=ushome^headlines>

ITV news: <http://www.itv.com/news/anglia/update/2014-01-26/bumper-crop-of-purple-tomatoes-harvested/>

The Times: <http://www.thetimes.co.uk/tto/science/article3985566.ece>

FT: <http://www.ft.com/cms/s/0/5d12b152-8504-11e3-a793-00144feab7de.html#axzz2rb0bP4k9>

Mirror: <http://www.mirror.co.uk/news/uk-news/genetically-modified-purple-tomato-juice-3061977>

Independent: <http://www.independent.co.uk/news/uk/home-news/purple-gm-tomatoes-one-step-closer-to-uk-shelves-9084507.html>

Huffington Post UK: http://www.huffingtonpost.co.uk/2014/01/25/gm-purple-tomatoes-norwich-scientists_n_4664502.html

BBC news (video): <http://www.bbc.co.uk/news/science-environment-25889792>

BBC news (article): <http://www.bbc.co.uk/news/science-environment-25885756>

The Guardian: <http://www.theguardian.com/science/2008/oct/27/cancer-gm-food>

Thanks,

 (Regulation 13)

This email was received from the INTERNET.

Communications via the GSi may be automatically logged, monitored and/or recorded for legal purposes.

From: jonathan jones (TSL) [jonathan.jones@sainsbury-laboratory.ac.uk]

Sent: 02 February 2014 15:29

To: Jim Dunwell; [REDACTED] (Regulation 13) (GO-Science); Pere Puigdomènech Rosell; 'David Baulcombe'; jonathan jones (TSL); john pickett (RRes-Roth)

Cc: [REDACTED] (Regulation 13) (GO-Science)

Subject: Re: GM Science Update - URGENT

Attachments:

Dear all, I have a few mostly minor changes and additions; my changes tracked in green on my screen
In my view we should refer to PubGM as a program rather than a facility; over-rule me if needs be
Best wishes

JJ

From: John Pickett (RRes-Roth) [mailto:john.pickett@rothamsted.ac.uk]

Sent: 03 February 2014 06:43

To: David Baulcombe; jonathan jones (TSL); Jim Dunwell; [REDACTED] (Regulation 13) (GO-Science); Pere Puigdomènech Rosell

Cc: [REDACTED] (Regulation 13) (GO-Science)

Subject: Re: GM Science Update - URGENT

Dear David

As I said when we met last week, I am most happy for elements of this document to be reused in this way. I personally feel that the UK public debate has moved on since the RS originally considered a discussion on this subject and should very much focus on the way forward rather than on whether there is a way forward.

Very best wishes,

John

Sent from Samsung Mobile

----- Original message -----

From: David Baulcombe

Date: 03/02/2014 05:36 (GMT+00:00)

To: "jonathan jones (TSL)", Jim Dunwell, "[REDACTED] (Regulation 13) (GO-Science)", Pere Puigdomènech Rosell, "John Pickett (RRes-Roth)"

Cc: "[REDACTED] (Regulation 13) (GO-Science)"

Subject: Re: GM Science Update - URGENT

Dear All,

I have been discussing our text with Paul Nurse and he would like to use it as a vehicle for a Royal Society-led discussion about GM. I suggest that we could extract the executive summary with perhaps small modification and removal of the policy and regulatory elements – he is keen that the RS-led discussion should be scientific.

I have the Mendeley reference database and I do not think it should be too difficult to add the citations to the exec summary – I think that is the major task if we were to do that.

What do you think? [REDACTED] (Regulation 13) – would that be acceptable to GO Science?

David

Email [REDACTED] Regulation 12 (4)d

From: Jim Dunwell [j.m.dunwell@reading.ac.uk]

Sent: 03 February 2014 10:28

To: jonathan jones (TSL); David Baulcombe; Jim Dunwell; [REDACTED] (Regulation 13) (GO-Science); Pere Puigdomènech Rosell; john pickett (RRes-Roth)

Cc: [REDACTED] (Regulation 13) (GO-Science)

Subject: RE: GM Science Update - URGENT

Hi,

I agree with Jonathan's comments that any discussion of future options for GM should take account of the context.

Jim

From: Pere Puigdomènech Rosell [pere.puigdomenech@cragenomica.es]
Sent: 03 February 2014 12:29
To: jonathan jones (TSL); David Baulcombe; Jim Dunwell; [REDACTED] (Regulation 13) (GO-Science); john pickett (RRes-Roth)
Cc: [REDACTED] (Regulation 13) (GO-Science)
Subject: RE: GM Science Update - URGENT

Attachments:

Dear all,

I am attaching the text with two additions, one on the adoption of herbicide-resistant sugar beet in the US. It is probable one of the most rapid adoptions in the world and the reference of modified macaques with the Cas9 technology just published in Cell. It shows that the system can efficiently be used in complex systems.

In my opinion any way to diffuse the conclusions of the document could be interesting.

Best regards.

Pere

De: jonathan jones (TSL) [mailto:jonathan.jones@sainsbury-laboratory.ac.uk]
Enviado el: lunes, 03 de febrero de 2014 10:50
Para: David Baulcombe; jonathan jones (TSL); Jim Dunwell; [REDACTED] (Regulation 13) (GO-Science); Pere Puigdomènech Rosell; john pickett (RRes-Roth)
CC: [REDACTED] (Regulation 13) (GO-Science)
Asunto: Re: GM Science Update - URGENT

Hi all, I certainly support this in principle, can you tell us more David about what this plan for a Royal Society-led discussion about GM might look like? Is it realistic to separate the science from policy/regulatory issues? Safety is a relatively clean scientific issue, but the benefits of using the technology are in a context of political/economic/social choices about what kind of seed industry and agriculture "we" want and what kind of food "we" want to produce and eat
JJ

From: David Baulcombe <dcb40@cam.ac.uk>
Date: Monday, 3 February 2014 05:35
To: Jonathan Jones <jonathan.jones@sainsbury-laboratory.ac.uk>, Jim Dunwell <j.m.dunwell@reading.ac.uk>, "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED] (Regulation 13) @bis.gsi.gov.uk>, Pere Puigdomenich <pere.puigdomenech@cragenomica.es>, "john pickett (RRes-Roth)" <john.pickett@rothamsted.ac.uk>
Cc: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED] (Regulation 13) @bis.gsi.gov.uk>
Subject: Re: GM Science Update - URGENT

Dear All,

I have been discussing our text with Paul Nurse and he would like to use it as a vehicle for a Royal Society-led discussion about GM. I suggest that we could extract the executive summary with perhaps small modification and removal of the policy and regulatory elements – he is keen that the RS-led discussion should be scientific.

I have the Mendeley reference database and I do not think it should be too difficult to add the citations to the exec summary – I think that is the major task if we were to do that.

What do you think? [REDACTED] (Regulation 13) – would that be acceptable to GO Science?

David

From: "jonathan jones (TSL)" <jonathan.jones@sainsbury-laboratory.ac.uk>
Date: Sunday, 2 February 2014 15:29
To: Jim Dunwell <j.m.dunwell@reading.ac.uk>, "[REDACTED] (Regulation 13) (GO-Science)"

<[REDACTED] (Regulation 13) @bis.gsi.gov.uk>, Pere Puigdomènech Rosell
<pere.puigdomenech@cragenomica.es>, David Baulcombe <dcb40@cam.ac.uk>, "Jonathan Jones
(TSL)" <jonathan.jones@sainsbury-laboratory.ac.uk>, "John Pickett (RRes-Roth)"
<john.pickett@rothamsted.ac.uk>

Cc: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED] (Regulation 13) @bis.gsi.gov.uk>

Subject: Re: GM Science Update - URGENT

Dear all, I have a few mostly minor changes and additions; my changes tracked in green on my screen
In my view we should refer to PubGM as a program rather than a facility; over-rule me if needs be
Best wishes

JJ

From: [REDACTED] (Regulation 13) (UKTI Investment)

Sent: 09 February 2014 10:19

To: 'jonathan jones (TSL)'

Subject: RE: how are we doing on dates?

Jonathan

Oh dear. We had no choice in date.

This was as given to us.

I hope you can sort something out or you can take part with SMC as a video link.

Best regards

[REDACTED] (Regulation 13)

From: jonathan jones (TSL) [jonathan.jones@sainsbury-laboratory.ac.uk]
Sent: 09 February 2014 13:09
To: [REDACTED] (Regulation 13) (UKTI Investment)
Subject: Re: how are we doing on dates?
I will definitely try to make it
JJ

From: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED]@bis.gsi.gov.uk>
Date: Sunday, 9 February 2014 10:19
To: Jonathan Jones <jonathan.jones@sainsbury-laboratory.ac.uk>
Subject: RE: how are we doing on dates?

Jonathan

Oh dear. We had no choice in date.
This was as given to us.

I hope you can sort something out or you can take part with SMC as a video link.

Best regards
[REDACTED] (Regulation 13)

From: jonathan jones (TSL) [mailto:jonathan.jones@sainsbury-laboratory.ac.uk]
Sent: 08 February 2014 17:50
To: [REDACTED] (Regulation 13) (GO-Science)
Subject: Re: how are we doing on dates?

I have some commitments it will be hard to get out of on March 13th/14th (but I will ask if necessary)
Cheers JJ

From: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED]@bis.gsi.gov.uk>
Date: Saturday, 8 February 2014 16:55
To: Jonathan Jones <jonathan.jones@sainsbury-laboratory.ac.uk>, Fiona Fox <fiona@sciencemediacentre.org>, David Baulcombe <dcb40@cam.ac.uk>
Subject: RE: how are we doing on dates?

Hi

Just to let you know that we now have a tentative date of 13 March.
Grateful if we can now plan for this bearing in mind it might just still get moved by UKGov.
However, this is a step forward.

Best regards
[REDACTED] (Regulation 13)

[REDACTED] (Regulation 13)
Government Office for Science | 2nd Floor, 1 Victoria Street, London SW1H 0ET |
[REDACTED] (Regulation 13) [REDACTED]@bis.gsi.gov.uk

From: jonathan jones (TSL) [jonathan.jones@sainsbury-laboratory.ac.uk]

Sent: 12 February 2014 12:47

To: Fiona Fox; [REDACTED] (Regulation 13) (UKTI Investment); jonathan jones (TSL); David Baulcombe

Subject: Re: how are we doing on dates?

Works for me too- I have shifted some other meetings

JJ

From: Fiona Fox <fiona@sciencemediacentre.org>

Date: Wednesday, 12 February 2014 12:44

To: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED] ([Regulation 13](#))@bis.gsi.gov.uk>, Jonathan Jones <jonathan.jones@sainsbury-laboratory.ac.uk>, David Baulcombe <dcb40@cam.ac.uk>

Subject: RE: how are we doing on dates?

Hi [REDACTED] (Regulation 13)

Thanks so much for the update. That dates works great for us..I have pencilled it in and will look forward to confirmation

Cheers

Fiona

From: David Baulcombe [dcb40@cam.ac.uk]

Sent: 12 February 2014 13:06

To: Fiona Fox; [REDACTED] (Regulation 13) (UKTI Investment); jonathan jones (TSL)

Subject: Re: how are we doing on dates?

I am sorry that I will be in China that day.

David

From: David Baulcombe [dcb40@cam.ac.uk]

Sent: 12 February 2014 15:44

To: jonathan jones (TSL); Fiona Fox; [REDACTED] (Regulation 13) (UKTI Investment)

Subject: Re: how are we doing on dates?

That would be fine with me – it would be good to have a couple of people.

David

From: jonathan jones (TSL) [jonathan.jones@sainsbury-laboratory.ac.uk]
Sent: 12 February 2014 20:59
To: [REDACTED] (Regulation 13) (UKTI Investment)
Cc: Fiona Fox
Subject: FW: how are we doing on dates?
Hi [REDACTED] (Regulation 13) - will you ask if Jim is free on that day?
Thanks, JJ

From: David Baulcombe <dcb40@cam.ac.uk>
Date: Wednesday, 12 February 2014 15:43
To: Jonathan Jones <jonathan.jones@sainsbury-laboratory.ac.uk>, Fiona Fox <fiona@sciencemediacentre.org>, "[REDACTED] (Regulation 13) (GO-Science)" <[\[REDACTED\] \(Regulation 13\) @bis.gsi.gov.uk](mailto:[REDACTED](Regulation 13)@bis.gsi.gov.uk)>
Subject: Re: how are we doing on dates?

That would be fine with me – it would be good to have a couple of people.

David

From: "jonathan jones (TSL)" <jonathan.jones@sainsbury-laboratory.ac.uk>
Date: Wednesday, 12 February 2014 13:56
To: David Baulcombe <dcb40@cam.ac.uk>, Fiona Fox <fiona@sciencemediacentre.org>, "[REDACTED] (Regulation 13) (GO-Science)" <[\[REDACTED\] \(Regulation 13\) @bis.gsi.gov.uk](mailto:[REDACTED](Regulation 13)@bis.gsi.gov.uk)>, "jonathan jones (TSL)" <jonathan.jones@sainsbury-laboratory.ac.uk>
Subject: Re: how are we doing on dates?

With David's permission, I could do this with Jim Dunwell if the date can't be moved (assuming Jim is available)

Cheers JJ

From: David Baulcombe <dcb40@cam.ac.uk>
Date: Wednesday, 12 February 2014 13:05
To: Fiona Fox <fiona@sciencemediacentre.org>, "[REDACTED] (Regulation 13) (GO-Science)" <[\[REDACTED\] \(Regulation 13\) @bis.gsi.gov.uk](mailto:[REDACTED](Regulation 13)@bis.gsi.gov.uk)>, Jonathan Jones <jonathan.jones@sainsbury-laboratory.ac.uk>
Subject: Re: how are we doing on dates?

I am sorry that I will be in China that day.

David

From: Fiona Fox <fiona@sciencemediacentre.org>
Date: Wednesday, 12 February 2014 12:47
To: "[REDACTED] (Regulation 13) (GO-Science)" <[\[REDACTED\] \(Regulation 13\) @bis.gsi.gov.uk](mailto:[REDACTED](Regulation 13)@bis.gsi.gov.uk)>, "jonathan jones (TSL)" <jonathan.jones@sainsbury-laboratory.ac.uk>, David Baulcombe <dcb40@cam.ac.uk>
Subject: RE: how are we doing on dates?

By the way remember it MUST be 10.30am or thereabouts – we keep doing things with government departments where they insist on silly times like 8.30am when every journalist is doing the school run, or 3pm when every print journalist is on deadline

We have started to be robust and refuse anything other than a 10.00, 10.30 or 11.00am start (for one hour)... otherwise we both anger journalists or lose them and that's a silly thing to do on a GM story where we need them to be happy !!

Best
Fiona

From: [REDACTED] (Regulation 13) (GO-Science) [mailto:[REDACTED]@bis.gsi.gov.uk] ([Regulation 13](#))
Sent: 08 February 2014 16:55
To: 'jonathan jones (TSL)'; Fiona Fox; David Baulcombe
Subject: RE: how are we doing on dates?

Hi

Just to let you know that we now have a tentative date of 13 March.
Grateful if we can now plan for this bearing in mind it might just still get moved by UKGov.
However, this is a step forward.

Best regards
[REDACTED] (Regulation 13)

[REDACTED] ([Regulation 13](#))
Government Office for Science | 2nd Floor, 1 Victoria Street, London SW1H 0ET | [REDACTED]
([Regulation 13](#)) [REDACTED] ([Regulation 13](#)) @bis.gsi.gov.uk
Stay up to date with how Foresight is influencing UK government policy. Visit www.bis.gov.uk/foresight for the latest news.
You can now follow the Government Office for Science and Government Chief Scientific Adviser on Twitter: @uksciencechief.

From: jonathan jones (TSL) [<mailto:jonathan.jones@sainsbury-laboratory.ac.uk>]
Sent: 02 February 2014 16:14
To: Fiona Fox; [REDACTED] (Regulation 13) (GO-Science); David Baulcombe; jonathan jones (TSL)
Subject: Re: how are we doing on dates?

Hi Fiona
My understanding is we are in the hands of UKGov
JJ

From: jonathan jones (TSL) [jonathan.jones@sainsbury-laboratory.ac.uk]

Sent: 13 February 2014 11:41

To: [REDACTED] (Regulation 13) (UKTI Investment); David Baulcombe; Jim Dunwell

Subject: FW: Crop Biotech Update Special Edition (February 13, 2014)

The latest update arrived; we should ensure final letter carries reference to the latest ISAAA references
Vbw

JJ

<http://www.isaaa.org/resources/publications/briefs/46/executivesummary/default.asp>

From: Crop Biotech Update <cropbiotechupdate@isaaa.org>

Reply-To: Crop Biotech Update <cropbiotechupdate@isaaa.org>

Date: Thursday, 13 February 2014 06:28

To: Jonathan Jones <jonathan.jones@sainsbury-laboratory.ac.uk>

Subject: Crop Biotech Update Special Edition (February 13, 2014)



In This Issue

February 13, 2014

[[Invite a Friend](#)] [[Executive Summary](#)] [[Press Release](#)] [[Infographic](#)] [[Top Ten Facts](#)] [[PPT Slides](#)] [[Contents](#)] [[List of Tables and Figures](#)] [[Order Online](#)]

BEIJING (Feb. 13, 2014) — The International Service for the Acquisition of Agri-Biotech Applications (ISAAA) today released a report which indicates more than 18 million farmers in 27 countries planted biotech crops in 2013, reflecting a five million, or three percent, increase in global biotech crop hectareage. 2013 also marks the first-ever commercial plantings of drought-tolerant biotech maize in the United States.

Global biotech crop hectareage has increased from 1.7 million hectares in 1996 to over 175 million

hectares in 2013. During this 18 year period, more than a 100-fold increase of commercial biotech crop hectarage has been reported. The United States continues to lead global biotech crop plantings at 70.1 million hectares or 40 percent of total global hectares.

“Accumulated hectarage of biotech crops planted worldwide to-date stands at 1.6 billion hectares or 150 percent of the total landmass of China,” said Clive James, author of the report and ISAAA Founder and Chairman Emeritus. “Each of the top ten countries planting biotech crops during 2013 planted more than one million hectares, providing a broad foundation for future growth.”

According to the report, more than 90 percent, or 16.5 million, of farmers planting biotech crops are small and resource-poor. Of the countries planting biotech crops, eight are industrial countries and 19 are developing countries. For the second year, developing countries planted more hectares of biotech crops than industrialized countries, representing confidence and trust of millions of risk-adverse farmers around the world that have experienced the benefits of these crops. Nearly 100 percent of farmers who try biotech crops continue to plant them year after year, the report notes.

Two new drought-tolerant crops

Given the importance of drought on crop productivity, exacerbated by climate change, drought tolerance is judged to be an important development. In the United States, approximately 2,000 farmers in the drought-prone Corn Belt planted about 50,000 hectares of the first biotech drought-tolerant maize. Also, Indonesia, the fourth most populous country in the world, developed and approved planting of the world’s first drought-tolerant sugarcane (the first biotech sugarcane to be approved globally) and plans to commercialize it for planting in 2014.

“Biotech crops are demonstrating their global value as a tool for resource poor farmers who face decreased water supplies and increased weed and pest pressures – and the effects of climate change will only continue to expand the need for this technology,” said James.

Biotech drought-tolerant maize technology has been donated to Africa through the Water Efficient Maize for Africa (WEMA) project, a public/private partnership by Monsanto and BASF, funded by the Gates and Buffet foundations and implemented through the International Maize and Wheat Improvement Center (CIMMYT) in Mexico and Kenya-based African Agricultural Technology Foundation (AATF). Planting of biotech drought-tolerant maize in Africa is expected in 2017. Drought is the biggest constraint to maize productivity in Africa on which 300 million Africans depend for survival.

Status and opportunities for biotech crops in China

China, with a population of 1.3 billion, is the most populous country in the world. Between 1996 and 2012, biotech cotton in China generated economic benefits valued at over \$15 billion, with \$2.2 billion occurring during the past year. Biotech crops also provided important benefits to farmers and the environment in China, with insecticide use decreasing by 50 percent or more on biotech cotton.

“China has already experienced the benefits of biotech cotton for fiber, and could also benefit from biotech maize through increased and improved grain production for animal feed,” said James. “China could also benefit from the approval of biotech traits for rice, the staple food crop in Asia.”

Some observers speculate China might be paving the way to approval of a major biotech crop, like the phytase-maize that received biosafety clearance in 2009, when two biotech rice traits were also approved. The feed demand of sustaining China’s 500 million swine and 13 billion poultry is causing the country to become increasingly reliant on imported maize, to supplement the 35 million hectares of maize it grows.

Increased hectarage in developing countries

Growth in developing countries continues to expand. Latin American, Asian and African farmers collectively grew 54 percent of global biotech crop hectares (up two percent from 2012), thereby increasing the hectarage gap between industrial and developing countries from approximately 7 to 14 million hectares between 2012 and 2013, respectively.

South America collectively planted 70 million hectares or 41 percent; Asia collectively planted 20 million hectares or 11 percent; and Africa collectively planted just over 3 million hectares or two percent of the global biotech hectarage.

“Growth in industrial countries and mature markets in developing countries continued to plateau in 2013 as adoption rates were sustained at 90 percent or more, leaving little room for expansion,” said James. “During the past year, growth was led by developing countries, namely Brazil, which posted an impressive 3.7 million hectare or 10 percent increase, reaching 40.3 million total hectares. During the next year, growth is expected to continue in developing countries – and Brazil will continue to lead the way, consistently closing the gap with the United States.”

Success in developing countries can often be attributed to public/private partnerships. For example,

Brazil, in cooperation with BASF, has developed and approved a herbicide-tolerant soybean that is ready for commercialization, having successfully completed all steps necessary for development and deployment of the product. Such partnerships instill pride which generates confidence and incentive necessary for success.

EMBRAPA in Brazil, using entirely national resources, has also developed and achieved approval of virus-resistant beans, which is an important contribution to sustainability.

Breaking the impasse to approve biotech crops

Developing countries are continuing to push forward with biotech research/development and commercialization, and have demonstrated the political willpower to approve new biotech crop traits, the report noted. Approvals in 2013 include:

- Bangladesh approved its first biotech crop, biotech eggplant (Brinjal), developed through a public-private partnership with an Indian company, Mahyco. Bangladesh serves as an exemplary model for other small and poor countries – it broke the impasse of the approval process to commercialize biotech eggplant in both India and the Philippines. Bangladesh is also pursuing approval of Golden Rice and biotech potato.
- Indonesia approved drought tolerant sugarcane for food use, with plans to cultivate in 2014.
- Panama approved planting of biotech maize.

Continued developments in biotech crop technology combined with increased adoption by small and poor farmers are important factors in the future of global biotech crop adoption. Substantial developments in 2013 include:

- In Africa, Burkina Faso and Sudan increased biotech cotton hectareage by an impressive 50 percent and 300 percent, respectively. Also, seven additional countries are conducting biotech crop field trials as the penultimate step to approval for commercialization. These countries include: Cameroon, Egypt, Ghana, Kenya, Malawi, Nigeria and Uganda.
- The Philippines is nearing the completion of its field trials with Golden Rice.

The lack of appropriate, science-based, cost- and time-effective regulatory systems continues to be the major constraint to adoption in Africa (and across the world).

Status of biotech crops in the European Union

The modest hectareage in the European Union (EU) was up 15 percent between 2012 and 2013. Five EU countries planted 148,013 hectares of biotech maize, up 18,942 hectares from 2012. Spain led the EU with a record 136,962 hectares of biotech maize, up 18 percent since 2012. Romania maintained the same hectareage as 2012. Portugal, Czechia and Slovakia planted fewer hectares of biotech maize than 2012, which the report attributed to burdensome EU reporting procedures for farmers.

Biotech crops benefit food security, sustainability and the environment

Between 1996 and 2012, biotech crops have made positive contributions through: decreased production costs and increased productivity (estimated at 377 million tons) valued at US \$117 billion; environmental benefits by eliminating the need for 497 million kg (a.i.) of pesticides; reduced CO₂ emissions by 27 billion kg in 2012 alone (equivalent to removing 12 million cars from the road for one year); conserving biodiversity by saving 123 million hectares of land from being placed in agricultural production during the period 1996 to 2012; and alleviating poverty for 16.5 million small farmers and farm families, totaling more than 65 million people.

By the numbers

- United States continued to be the lead country with 70.1 million hectares, with 90 percent adoption across all crops.
- Brazil ranked second for the fifth consecutive year, increasing its hectareage of biotech crops more than any other country – an impressive record increase of 3.7 million hectares or 10 percent from 2012.
- Argentina retained its third place with 24.4 million hectares.
- India, which displaced Canada for the fourth place, had a record 11 million hectares of biotech cotton with an adoption rate of 95 percent.
- Canada was fifth at 10.8 million hectares with decreased plantings of canola but maintained a

high adoption rate of 96 percent.

***Information about ISAAA and the author**

The International Service for the Acquisition of Agri-biotech Applications (ISAAA) is a not-for-profit organization with an international network of centers designed to contribute to the alleviation of hunger and poverty by sharing knowledge and crop biotechnology applications. Clive James, Emeritus Chairman and Founder of ISAAA, has lived and/or worked for the past 30 years in the developing countries of Asia, Latin America and Africa, devoting his efforts to agricultural research and development issues with a focus on crop biotechnology and global food security

Further information about ISAAA can be obtained from its website www.isaaa.org. Please contact the ISAAA Center in SouthEast Asia: e-mail publications@isaaa.org for your copy of Brief 46. You may purchase a copy on-line at <http://www.isaaa.org/purchasepublications/> for US\$50. This includes a hard copy of the full version of Brief 46, Executive Summary, and Top Ten Facts. The publication is available free of charge to eligible nationals of developing countries.

Do not hesitate to tell other colleagues/contacts about this mail list. If they wish to join, they may do so at <http://www.isaaa.org/subscribe>

If you will be changing your e-mail address soon, please [update your subscription preferences](#) to continue receiving the Crop Biotech Update.

Please visit Crop Biotech Update web pages (<http://www.isaaa.org/kc>) to view previous issues of this newsletter and see other available resources for download.

This email was sent to jonathan.jones@tsl.ac.uk

[why did I get this?](#) [unsubscribe from this list](#) [update subscription preferences](#)

ISAAA · 105 Leland Lab · Cornell University · Ithaca, New York 14853 · USA

From: [REDACTED] (Regulation 13) (UKTI Investment)
Sent: 13 February 2014 19:04
To: 'Jim Dunwell'
Cc: 'David Baulcombe'; 'fiona@sciencemediacentre.org'; 'jonathan.jones (TSL)'
Subject: Launch of GM Science Annex - 13 March

Dear Jim

As part of the launch of the GM Science Annex, Fiona Fox (cc'd) is organising a press briefing at 10:30 am.

Unfortunately, David Baulcombe is not available on that date, but Jonathan is available.

We were wondering if you were available and could support Jonathan at the event, fielding questions from the press etc.

I do hope so.

Grateful if you can confirm whether this is feasible and looking forward to hearing from you.

Thanks.

Best regards

[REDACTED] (Regulation 13)

[REDACTED] (Regulation 13)

Government Office for Science | 2nd Floor, 1 Victoria Street, London SW1H 0ET | [REDACTED]
(Regulation 13) | [REDACTED] ([Regulation 13](mailto:[REDACTED]@bis.gsi.gov.uk)) @bis.gsi.gov.uk

Stay up to date with how Foresight is influencing UK government policy. Visit www.bis.gov.uk/foresight for the latest news.

You can now follow the Government Office for Science and Government Chief Scientific Adviser on Twitter: @uksciencechief.

From: [REDACTED] (Regulation 13) (UKTI Investment)
Sent: 14 February 2014 09:44
To: 'Pere Puigdomènech Rosell'
Subject: RE: GM Science Update - URGENT- copyright query

Dear Pere

We will need copyright permission for every Figure we include. This is standard process.

Can you get copyright from Nature?

Best regards

[REDACTED] (Regulation 13)

From: Pere Puigdomènech Rosell [pere.puigdomenech@cragenomica.es]

Sent: 14 February 2014 09:48

To: [REDACTED] (Regulation 13) (UKTI Investment)

Subject: RE: GM Science Update - URGENT- copyright query

Dear [REDACTED] (Regulation 13) ,

I am afraid that I don't know how to get the copyright from Nature. I suppose that should be easier from your office.

I will try to get another equivalent figure. If this is not possible we could just delete it.

Best regards.

Pere

De: [REDACTED] (Regulation 13) (GO-Science) [mailto:[REDACTED] (Regulation 13) @bis.gsi.gov.uk]

Enviado el: viernes, 14 de febrero de 2014 10:44

Para: Pere Puigdomènech Rosell

Asunto: RE: GM Science Update - URGENT- copyright query

Dear Pere

We will need copyright permission for every Figure we include. This is standard process.

Can you get copyright from Nature?

Best regards

[REDACTED] (Regulation 13)

From: Pere Puigdomènech Rosell [mailto:pere.puigdomenech@cragenomica.es]

Sent: 14 February 2014 09:37

To: [REDACTED] (Regulation 13) (GO-Science)

Subject: RE: GM Science Update - URGENT- copyright query

Dear [REDACTED] (Regulation 13) ,

Do we need a copyright permission for a public report?

In the case of Figure 14 is from Nature. If there is any problem it could easily be deleted. It is informative but not essential.

Best regards.

Pere Puigdomenech

De: [REDACTED] (Regulation 13) (GO-Science) [mailto:[REDACTED] (Regulation 13) @bis.gsi.gov.uk]

Enviado el: jueves, 13 de febrero de 2014 20:00

Para: 'Jim Dunwell'; Pere Puigdomènech Rosell; 'David Baulcombe'; 'jonathan jones (TSL)'; 'john.pickett@rothamsted.ac.uk'

CC: [REDACTED] (Regulation 13) (GO-Science)

Asunto: RE: GM Science Update - URGENT- copyright query

Dear Jim (and others)

Apologies for not replying sooner, but now working in team on flood emergency, so not had time to get back to you.

We will need to have permission to reproduce Figures 11 and 14, and the contents of Tables 3, 5 and 6.

Can you follow up on this and make sure we have this asap? If you cannot do this, who should be able to? Grateful if someone can follow up on this.

The GM Science Annex will hopefully be published along with the CST's Letter to the PM on GM, on the GO-Science website on the 13 March.

If there are any additional changes on the latest version (attached), please give let me know asap. We still need a decision on the format for references to web addresses.

I look forward to hearing from you.

Best regards

██████████ (Regulation 13)

██████████ (Regulation 13)

Government Office for Science | 2nd Floor, 1 Victoria Street, London SW1H 0ET | ██████████

(Regulation 13) | ██████████ (Regulation 13) @bis.gsi.gov.uk

Stay up to date with how Foresight is influencing UK government policy. Visit www.bis.gov.uk/foresight for the latest news.

You can now follow the Government Office for Science and Government Chief Scientific Adviser on Twitter: @uksciencechief

From: jonathan jones (TSL) [jonathan.jones@sainsbury-laboratory.ac.uk]
Sent: 14 February 2014 10:00
To: [REDACTED] (Regulation 13) (UKTI Investment)
Cc: 'David Baulcombe'; 'fiona@sciencemediacentre.org'; jonathan jones (TSL)
Subject: Re: Launch of GM Science Annex - 13 March

John Pickett?

From: jonathan jones (TSL) [jonathan.jones@sainsbury-laboratory.ac.uk]

Sent: 14 February 2014 10:02

To: [REDACTED] (Regulation 13) (UKTI Investment)

Subject: Re: Launch of GM Science Annex - 13 March

Maybe I could give him a call? He would be better than John Pickett because he really knows the regulations

JJ

From: jonathan jones (TSL) [jonathan.jones@sainsbury-laboratory.ac.uk]
Sent: 14 February 2014 10:27
To: Jim Dunwell; [REDACTED] (Regulation 13) (UKTI Investment)
Cc: 'David Baulcombe'; 'fiona@sciencemediacentre.org'; jonathan jones (TSL)
Subject: Re: Launch of GM Science Annex - 13 March

I just talked with Jim. He is actually participating in a long-standing GM debate at Reading that morning 11 -1

I discussed with him the possibility that he join by Skype 10 –11. I could make sure I am there for 10 He will let us know soon if he might be available by Skype Fiona; could we start at 10 instead of 10.30?

JJ

From: Jim Dunwell <j.m.dunwell@reading.ac.uk>
Date: Friday, 14 February 2014 09:53
To: "[REDACTED] (Regulation 13) (GO-Science)" <[\[REDACTED\] \(Regulation 13\) @bis.gsi.gov.uk](mailto:[REDACTED]@bis.gsi.gov.uk)>, Jim Dunwell <j.m.dunwell@reading.ac.uk>
Cc: 'David Baulcombe' <dcb40@cam.ac.uk>, Fiona Fox <fiona@sciencemediacentre.org>, Jonathan Jones <jonathan.jones@sainsbury-laboratory.ac.uk>
Subject: RE: Launch of GM Science Annex - 13 March

Dear [REDACTED] (Regulation 13) ,
Unfortunately, I have a teaching commitment on the 13th from 11-1.
Hopefully you can find an alternative.
Jim

From: jonathan jones (TSL) [jonathan.jones@sainsbury-laboratory.ac.uk]

Sent: 12 February 2014 13:57

To: David Baulcombe; Fiona Fox; [REDACTED] (Regulation 13) (UKTI Investment); jonathan jones (TSL)

Subject: Re: how are we doing on dates?

With David's permission, I could do this with Jim Dunwell if the date can't be moved (assuming Jim is available)

Cheers JJ

From: Jim Dunwell [j.m.dunwell@reading.ac.uk]

Sent: 14 February 2014 14:35

To: [REDACTED] (Regulation 13) (GO-Science); 'Jim Dunwell'; Pere Puigdomènech Rosell; 'David Baulcombe'; 'jonathan jones (TSL)'; 'john.pickett@rothamsted.ac.uk'

Cc: [REDACTED] (Regulation 13) (GO-Science)

Subject: RE: GM Science Update - URGENT- copyright query

Dear [REDACTED] (Regulation 13) ,

I am proceeding with obtaining copyright permission for the Figure.

RightsLink, the agent for Nature (figure 14) do not charge for non-commercial website use, but they do require the name of the website (URL) and its owner.

Are you able to provide these details?

Thanks,

Jim

From: jonathan jones (TSL) [jonathan.jones@sainsbury-laboratory.ac.uk]
Sent: 14 February 2014 18:15
To: [REDACTED] (Regulation 13) (UKTI Investment); Fiona Fox
Subject: FW: latest

From: Jim Dunwell <j.m.dunwell@reading.ac.uk>
Date: Friday, 14 February 2014 18:09
To: Jonathan Jones <jonathan.jones@sainsbury-laboratory.ac.uk>
Subject: latest

Hi,
I have not been able to contact Hannah yet to discuss possible changes to my schedule.

Jim
Prof. Jim Dunwell
School of Agriculture, Policy and Development
The University of Reading
Earley Gate, PO Box 237
Reading RG6 6AR (sat nav RG6 7BE)
UK
Tel: [REDACTED] (Regulation 13)

This email was received from the INTERNET.

Communications via the GSi may be automatically logged, monitored and/or recorded for legal purposes.

From: John Pickett (RRes-Roth) [john.pickett@rothamsted.ac.uk]

Sent: 21 February 2014 09:13

To: [REDACTED] (Regulation 13) (UKTI Investment)

Subject: RE: GM Science Update - URGENT- copyright query

Dear [REDACTED] (Regulation 13)

His is all fine by me so when you have completed the final formal issues I am happy for final submission next week.

Sincere congratulations on bringing this all together.

John

John A Pickett, CBE, DSc, FRS

[REDACTED] (Regulation 13)

Rothamsted Research

Harpden

Herts AL5 2JQ

United Kingdom

Tel: [REDACTED] (Regulation 13)

Mob: [REDACTED] (Regulation 13)

Fax: +44 [REDACTED] (Regulation 13)

www: <http://www.rothamsted.bbsrc.ac.uk>

PLEASE NOTE CHANGE OF E-MAIL ADDRESS FROM 1ST JUNE 2011 TO john.pickett@rothamsted.ac.uk

Rothamsted Research is a company limited by guarantee, registered in England under the registration number 2393175 and a not for profit charity number 802038.

From: [REDACTED] (Regulation 13) (GO-Science)
Sent: 21 February 2014 15:18
To: 'Jim Dunwell'; 'Pere Puigdomènech Rosell'; 'David Baulcombe'; 'jonathan jones (TSL)'; 'john.pickett@rothamsted.ac.uk'
Cc: [REDACTED] (Regulation 13) (GO-Science)
Subject: RE: GM Science Update - URGENT- copyright query

Jim

Gov.uk owns the site.

Regards
[REDACTED] (Regulation 13)

From: Jim Dunwell [mailto:j.m.dunwell@reading.ac.uk]
Sent: 21 February 2014 15:15
To: [REDACTED] (Regulation 13) (GO-Science); 'Jim Dunwell'; 'Pere Puigdomènech Rosell'; 'David Baulcombe'; 'jonathan jones (TSL)'; 'john.pickett@rothamsted.ac.uk'
Cc: [REDACTED] (Regulation 13) (GO-Science)
Subject: RE: GM Science Update - URGENT- copyright query

Thanks, I'll do this.
Do I give BIS or GOS as owner of this site?
Jim

From: [REDACTED] (Regulation 13) (GO-Science) [mailto:[REDACTED] (Regulation 13)@bis.gsi.gov.uk]
Sent: 21 February 2014 15:13
To: 'Jim Dunwell'; 'Pere Puigdomènech Rosell'; 'David Baulcombe'; 'jonathan jones (TSL)'; 'john.pickett@rothamsted.ac.uk'
Cc: [REDACTED] (Regulation 13) (GO-Science)
Subject: RE: GM Science Update - URGENT- copyright query

The URL will be:
<https://www.gov.uk/government/publications/genetic-modification-gm-technologies>
Best to get permission for the Tables if possible.
I would be me or [REDACTED] (Regulation 13) making amendments with the Tables if needed.
Best regards
[REDACTED] (Regulation 13)

From: Jim Dunwell [mailto:j.m.dunwell@reading.ac.uk]
Sent: 21 February 2014 15:10
To: [REDACTED] (Regulation 13) (GO-Science); 'Pere Puigdomènech Rosell'; Jim Dunwell; 'David Baulcombe'; 'jonathan jones (TSL)'; 'john.pickett@rothamsted.ac.uk'
Cc: [REDACTED] (Regulation 13) (GO-Science)
Subject: RE: GM Science Update - URGENT- copyright query

Thanks.
All formal permission for all Figs need same details of the url and owner of the website.
I'll pursue the Tables permission, but it might also be simpler to rearrange the order of the columns or rows, and simply state that they are adapted from.....
Do you have someone who could make these amendments with the Tables, in case this is needed?
Jim

From: David Baulcombe [dcb40@cam.ac.uk]
Sent: 24 February 2014 18:45
To: [REDACTED] (Regulation 13) (UKTI Investment)
Subject: Re: Are we still on for 13th March
Dear [REDACTED] (Regulation 13),

I would be pleased to do an oped – do you have a likely outlet?

David

From: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED] (Regulation 13)@bis.gsi.gov.uk>
Date: Monday, 24 February 2014 17:16
To: 'Fiona Fox' <fiona@sciencemediacentre.org>, "jonathan jones (TSL)" <jonathan.jones@sainsbury-laboratory.ac.uk>
Cc: "[REDACTED] (Regulation 13)sciencemediacentre.org" <[REDACTED] (Regulation 13)sciencemediacentre.org>, David Baulcombe <dcb40@cam.ac.uk>
Subject: RE: Are we still on for 13th March

Fiona

Yes we are.

Sir Mark seems interested to attend too.

There is also a suggestion for David Baulcombe to give an oped a few days after this event.

Best regards

[REDACTED] (Regulation 13)

From: [REDACTED] (Regulation 13) (UKTI Investment)

Sent: 25 February 2014 09:13

To: 'Fiona Fox'

Cc: jonathan jones (TSL); [REDACTED] (Regulation 13)sciencemediacentre.org; David Baulcombe

Subject: RE: Are we still on for 13th March
Fiona

Just to confirm that it is not a given for Mark attending, he expressed interest.

The reason for delaying the oped was that it might provide an opportunity to mop up some of the discussion within the media following the launch.

I will put you in touch with the Press Officer here for taking this forwards.

Best regards

[REDACTED] (Regulation 13)

From: Fiona Fox [mailto:fiona@sciencemediacentre.org]

Sent: 24 February 2014 19:20

To: [REDACTED] (Regulation 13) (GO-Science)

Cc: jonathan jones (TSL); [REDACTED] (Regulation 13)sciencemediacentre.org; David Baulcombe

Subject: Re: Are we still on for 13th March

Wonderful that Mark can join us. Will he speak to the report or be there as a third party to respond and give his perspective?

Can I just say that any OpEd should coincide with publication not be several days later. Would you like me to offer that piece to a newspaper? And if so which paper would be the preference?

Also is there any other press officer I should be dealing with? I am happy to be the main press officer for this but I should check in with others if this report is owned by anyone else? I would also like to know if you are planning a press release and if so who would draft that? If there is an exec summary in the report then we may not need one but always useful to have a press release which gives the media the 'top line' you favour.

Cheers

Fiona

Sent from my iPad

On 24 Feb 2014, at 17:16, "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED]@bis.gsi.gov.uk> wrote:

Fiona

Yes we are.

Sir Mark seems interested to attend too.

There is also a suggestion for David Baulcombe to give an oped a few days after this event.

Best regards

 (Regulation 13)

From: jonathan jones (TSL) [jonathan.jones@sainsbury-laboratory.ac.uk]
Sent: 25 February 2014 17:30
To: Jim Dunwell; jonathan jones (TSL); Fiona Fox; [REDACTED] (Regulation 13) (UKTI Investment)
Cc: [REDACTED] (Regulation 13)sciencemediacentre.org
Subject: Re: Are we still on for 13th March
that's absolutely great, thanks very much Jim
Vbw
JJ

From: Jim Dunwell <j.m.dunwell@reading.ac.uk>
Date: Tuesday, 25 February 2014 17:29
To: Jonathan Jones <jonathan.jones@sainsbury-laboratory.ac.uk>, Fiona Fox <fiona@sciencemediacentre.org>, "[REDACTED] (Regulation 13) @bis.gsi.gov.uk" <[REDACTED] (Regulation 13) @bis.gsi.gov.uk>
Cc: "[REDACTED] (Regulation 13)sciencemediacentre.org" <[REDACTED] (Regulation 13)sciencemediacentre.org>, Jim Dunwell <j.m.dunwell@reading.ac.uk>
Subject: RE: Are we still on for 13th March

Hi,
I've now fixed it so I can be available on the 13th, hopefully good news!
Jim

From: jonathan jones (TSL) [mailto:jonathan.jones@sainsbury-laboratory.ac.uk]
Sent: 24 February 2014 17:15
To: Fiona Fox; [REDACTED] (Regulation 13) @bis.gsi.gov.uk; jonathan jones (TSL)
Cc: [REDACTED] (Regulation 13)sciencemediacentre.org; Jim Dunwell
Subject: Re: Are we still on for 13th March
Jim – if you join by speakerphone would 10 be better than 10.30 given your 11 am presentation?
JJ

From: Fiona Fox <fiona@sciencemediacentre.org>
Date: Monday, 24 February 2014 17:13
To: "[REDACTED] (Regulation 13) @bis.gsi.gov.uk" <[REDACTED] (Regulation 13) @bis.gsi.gov.uk>, Jonathan Jones <jonathan.jones@sainsbury-laboratory.ac.uk>
Cc: "[REDACTED] (Regulation 13)sciencemediacentre.org" <[REDACTED] (Regulation 13)sciencemediacentre.org>
Subject: Are we still on for 13th March

I am being asked about another briefing so just want to double check that this is looking definite
Also Jonathan did you say it had to be a 10.00am start?

Cheers

Fiona

--

Fiona Fox
Chief Executive
Science Media Centre
215 Euston Road
London NW1 2BE

Tel: [REDACTED] (Regulation 13)
E: fiona@sciencemediacentre.org
Web: www.sciencemediacentre.org
My blog: [on science and the media](#)

From: [REDACTED] (Regulation 13) (UKTI Investment)
Sent: 25 February 2014 17:46
To: 'Fiona Fox'; Jim Dunwell; jonathan jones (TSL)
Cc: [REDACTED] (Regulation 13)
Subject: RE: Are we still on for 13th March

Jim

Great news.

Regards

[REDACTED] (Regulation 13)

From: Fiona Fox [mailto:fiona@sciencemediacentre.org]
Sent: 25 February 2014 17:37
To: Jim Dunwell; jonathan jones (TSL); [REDACTED] (Regulation 13) (GO-Science)
Cc: [REDACTED] (Regulation 13)
Subject: RE: Are we still on for 13th March

Yipeeeeeeeeeeeeeeeeeee

From: [REDACTED] (Regulation 13) (GO-Science)
Sent: 26 February 2014 12:08
To: 'Jim Dunwell'; 'Pere Puigdomènech Rosell'; 'David Baulcombe'; 'jonathan jones (TSL)'; 'john.pickett@rothamsted.ac.uk'
Cc: [REDACTED] (Regulation 13) (GO-Science)
Subject: RE: GM Science Update - URGENT- copyright query

Jim

Is there a way around paying Landes by re-formatting the table in some way so it is different?

It seems a horrible precedent having to pay each year the GM Annex is on the website, and if you use this for the Royal Society publication, you will have the same issue.

Best regards

[REDACTED] (Regulation 13)

From: Jim Dunwell [mailto:j.m.dunwell@reading.ac.uk]
Sent: 26 February 2014 11:41
To: Jim Dunwell; [REDACTED] (Regulation 13) (GO-Science); 'Pere Puigdomènech Rosell'; Jim Dunwell; 'David Baulcombe'; 'jonathan jones (TSL)'; 'john.pickett@rothamsted.ac.uk'
Cc: [REDACTED] (Regulation 13) (GO-Science)
Subject: RE: GM Science Update - URGENT- copyright query

I now have permission from Wiley for Figure 11 (Copyright Clearance Centre RightsLink® License Number 3336440386502).
Can I proceed to make payment to Landes Bioscience for Table 5?
Thanks,
Jim

From: /o=University of Reading/ou=First Administrative Group/cn=Recipients/cn=absdunwl **On Behalf Of** Jim Dunwell
Sent: 25 February 2014 10:28
To: [REDACTED] (Regulation 13) (GO-Science); 'Pere Puigdomènech Rosell'; Jim Dunwell; 'David Baulcombe'; 'jonathan jones (TSL)'; 'john.pickett@rothamsted.ac.uk'
Cc: [REDACTED] (Regulation 13) (GO-Science)
Subject: RE: GM Science Update - URGENT- copyright query
Dear [REDACTED] (Regulation 13),

Present state of copyright permissions is:-

[Figure 11.](#)

Awaiting permission from Wiley

[Figure 14.](#)

Copyright Clearance Centre RightsLink®

License Number 3335821433063

[Table 3.](#)

This is an open access article under the terms of the [Creative Commons Attribution License](#), which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

[Table 5.](#)

Cost from Landes Bioscience is £96.01 for posting on website for more than 12 months

[Will BIS reimburse if I pay this?]

Table 6.

Copyright Clearance Centre RightsLink®

License Number 3335831176883

Hope this is OK.

Jim

From: [REDACTED] (Regulation 13) (GO-Science) [[mailto:\[REDACTED\]@bis.gsi.gov.uk](mailto:[REDACTED]@bis.gsi.gov.uk)] ([Regulation 13](#))

Sent: 20 February 2014 18:56

To: 'Pere Puigdomènech Rosell'; Jim Dunwell; 'David Baulcombe'; 'jonathan jones (TSL)'; 'john.pickett@rothamsted.ac.uk'

Cc: [REDACTED] (Regulation 13) (GO-Science)

Subject: RE: GM Science Update - URGENT- copyright query

Dear All

Please find attached the latest version including all your suggestions.

Grateful if you can confirm this is now final.

We need to finalise early next week, so any further comments etc. need to be with me by cop Sunday.

Jim

We will get back to you with the url which should not be a problem.

How are we doing with permission for Fig 11 and Tables 3, 5 and 6.

I look forward to hearing from you.

Best regards

[REDACTED] (Regulation 13)

[REDACTED] (Regulation 13)

Government Office for Science | 2nd Floor, 1 Victoria Street, London SW1H 0ET | [REDACTED]

(Regulation 13) | [REDACTED] ([Regulation 13](#)) @bis.gsi.gov.uk

Stay up to date with how Foresight is influencing UK government policy. Visit

www.bis.gov.uk/foresight for the latest news.

You can now follow the Government Office for Science and Government Chief Scientific Adviser on

Twitter: @uksciencechief.

From: Pere Puigdomènech Rosell [<mailto:pere.puigdomenech@cragenomica.es>]

Sent: 14 February 2014 14:50

To: Jim Dunwell; [REDACTED] (Regulation 13) (GO-Science); 'David Baulcombe'; 'jonathan jones (TSL)'; 'john.pickett@rothamsted.ac.uk'

Cc: [REDACTED] (Regulation 13) (GO-Science)

Subject: RE: GM Science Update - URGENT- copyright query

This is excellent.

Thank you Jim.

Pere

De: Jim Dunwell [<mailto:j.m.dunwell@reading.ac.uk>]

Enviado el: viernes, 14 de febrero de 2014 15:35

Para: [REDACTED] (Regulation 13) (GO-Science); 'Jim Dunwell'; Pere Puigdomènech Rosell; 'David Baulcombe'; 'jonathan jones (TSL)'; 'john.pickett@rothamsted.ac.uk'

CC: [REDACTED] (Regulation 13) (GO-Science)

Asunto: RE: GM Science Update - URGENT- copyright query

Dear [REDACTED] (Regulation 13),

I am proceeding with obtaining copyright permission for the Figure. RightsLink, the agent for Nature (figure 14) do not charge for non-commercial website use, but they do require the name of the website (URL) and its owner. Are you able to provide these details?

Thanks,
jim

From: [REDACTED] (Regulation 13) (GO-Science) [[mailto:\[REDACTED\]@bis.gsi.gov.uk](mailto:[REDACTED]@bis.gsi.gov.uk)] ([Regulation 13](#))

Sent: 13 February 2014 19:00

To: 'Jim Dunwell'; Pere Puigdomènech Rosell; 'David Baulcombe'; 'jonathan jones (TSL)'; 'john.pickett@rothamsted.ac.uk'

Cc: [REDACTED] (Regulation 13) (GO-Science)

Subject: RE: GM Science Update - URGENT- copyright query

Dear Jim (and others)

Apologies for not replying sooner, but now working in team on flood emergency, so not had time to get back to you.

We will need to have permission to reproduce Figures 11 and 14, and the contents of Tables 3, 5 and 6.

Can you follow up on this and make sure we have this asap? If you cannot do this, who should be able to? Grateful if someone can follow up on this.

The GM Science Annex will hopefully be published along with the CST's Letter to the PM on GM, on the GO-Science website on the 13 March.

If there are any additional changes on the latest version (attached), please give let me know asap. We still need a decision on the format for references to web addresses.

I look forward to hearing from you.

Best regards

[REDACTED] (Regulation 13)

[REDACTED] (Regulation 13)

Government Office for Science | 2nd Floor, 1 Victoria Street, London SW1H 0ET | [REDACTED]

(Regulation 13) | [REDACTED] ([Regulation 13](#)) @ [bis.gsi.gov.uk](mailto:[REDACTED]@bis.gsi.gov.uk)

Stay up to date with how Foresight is influencing UK government policy. Visit www.bis.gov.uk/foresight for the latest news.

You can now follow the Government Office for Science and Government Chief Scientific Adviser on Twitter: @uksciencechief.

From: Jim Dunwell [<mailto:j.m.dunwell@reading.ac.uk>]

Sent: 03 February 2014 10:33

To: [REDACTED] (Regulation 13) (GO-Science); Jim Dunwell; Pere Puigdomènech Rosell; 'David Baulcombe'; 'jonathan jones (TSL)'; 'john.pickett@rothamsted.ac.uk'

Cc: [REDACTED] (Regulation 13) (GO-Science)

Subject: RE: GM Science Update - URGENT- copyright query

Dear [REDACTED] (Regulation 13) ,

Just one additional query.

If you are intending that this report be put in the public domain on the Go-Science web site, then we need to be careful about copyright, as I don't think we have official rights to reproduce Figs 11 and 14, and contents of Tables 3, 5, 6.

Could you please advise?

Thanks,
Jim

From: [REDACTED] (Regulation 13) (GO-Science)
Sent: 26 February 2014 12:19
To: 'Jim Dunwell'; 'Pere Puigdomènech Rosell'; 'David Baulcombe'; 'jonathan jones (TSL)'; 'john.pickett@rothamsted.ac.uk'
Cc: [REDACTED] (Regulation 13) (GO-Science)
Subject: RE: GM Science Update - URGENT- copyright query

Jim

Sorry, I misread the timeframe on payment.

I understand from David there was some interest from Royal Society in a discussion meeting on the science aspects of the document and a potential publication peer-reviewed for Royal Society. David can explain further.

Best regards

[REDACTED] (Regulation 13)

From: Jim Dunwell [mailto:j.m.dunwell@reading.ac.uk]
Sent: 26 February 2014 12:13
To: [REDACTED] (Regulation 13) (GO-Science); 'Jim Dunwell'; 'Pere Puigdomènech Rosell'; 'David Baulcombe'; 'jonathan jones (TSL)'; 'john.pickett@rothamsted.ac.uk'
Cc: [REDACTED] (Regulation 13) (GO-Science)
Subject: RE: GM Science Update - URGENT- copyright query

Just to clarify.

I assume the payment is a one-off as states "more than one year", not each year.

Also, could you please expand the comment about a Royal Society publication? I have not heard this mentioned previously.

Jim

From: [REDACTED] (Regulation 13) (GO-Science) [mailto:[REDACTED] (Regulation 13)@bis.gsi.gov.uk]
Sent: 26 February 2014 12:09
To: 'Jim Dunwell'; 'Pere Puigdomènech Rosell'; 'David Baulcombe'; 'jonathan jones (TSL)'; 'john.pickett@rothamsted.ac.uk'
Cc: [REDACTED] (Regulation 13) (GO-Science)
Subject: RE: GM Science Update - URGENT- copyright query

Jim

Is there a way around paying Landes by re-formatting the table in some way so it is different?

It seems a horrible precedent having to pay each year the GM Annex is on the website, and if you use this for the Royal Society publication, you will have the same issue.

Best regards

[REDACTED] (Regulation 13)

From: John Pickett (RRes-Roth) [john.pickett@rothamsted.ac.uk]

Sent: 27 February 2014 09:39

To: [REDACTED] (Regulation 13) (GO-Science); 'Jim Dunwell'; 'Pere Puigdomènech Rosell'; 'David Baulcombe'; 'jonathan jones (TSL)'

Cc: [REDACTED] (Regulation 13) (GO-Science)

Subject: RE: GM Science Update - URGENT- copyright query

Dear [REDACTED] (Regulation 13)

I keenly support the idea that David has mentioned re the Roy Soc. This will further exploit all the work that has gone into this document.

Very best wishes,

John

From: jonathan jones (TSL) [jonathan.jones@sainsbury-laboratory.ac.uk]

Sent: 28 February 2014 16:30

To: [REDACTED] (Regulation 13) (UKTI Investment)

Subject: Re: GM Science Update - URGENT- copyright query

Hi [REDACTED] (Regulation 13) , have we reached a stage where I can forward the latest state of the CST letter on GM to [REDACTED] (Regulation 13)

Or could you?

Cheers JJ

From: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED] (Regulation 13) @bis.gsi.gov.uk>

Date: Wednesday, 26 February 2014 12:18

To: Jim Dunwell <j.m.dunwell@reading.ac.uk>, Pere Puigdomenich

<pere.puigdomenech@cragenomica.es>, 'David Baulcombe' <dcb40@cam.ac.uk>, Jonathan Jones

<jonathan.jones@sainsbury-laboratory.ac.uk>, "john pickett (RRes-Roth)"

<john.pickett@rothamsted.ac.uk>

Cc: "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED] (Regulation 13) @bis.gsi.gov.uk>

Subject: RE: GM Science Update - URGENT- copyright query

Jim

Sorry, I misread the timeframe on payment.

I understand from David there was some interest from Royal Society in a discussion meeting on the science aspects of the document and a potential publication peer-reviewed for Royal Society. David can explain further.

Best regards

[REDACTED] (Regulation 13)

From: jonathan jones (TSL) [jonathan.jones@sainsbury-laboratory.ac.uk]

Sent: 28 February 2014 17:39

To: [REDACTED] (Regulation 13) (Communications); 'Fiona Fox'; [REDACTED] (Regulation 13) (UKTI Investment); Jim Dunwell; jonathan jones (TSL)

Subject: Re: GM Briefing on 13th March

Hi [REDACTED] (Regulation 13)

, not sure I understand exactly what you mean by "back some day" but I am unable to attend on 12th-Royal Society SC9 meeting at that time that morning

Jonathan Jones

From: "[REDACTED] (Regulation 13) (Communications)" <[REDACTED]@bis.gsi.gov.uk>

Date: Friday, 28 February 2014 17:28

To: Fiona Fox <fiona@sciencemediacentre.org>, "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED]@bis.gsi.gov.uk>, Jim Dunwell <j.m.dunwell@reading.ac.uk>, Jonathan Jones <jonathan.jones@sainsbury-laboratory.ac.uk>, [REDACTED] (Regulation 13) @btinternet.com>

Subject: RE: GM Briefing on 13th March

Hi Fiona

Sorry for not being in touch sooner. Would it be very inconvenient to move the press briefing back some day 12 March embargoed into 13th to ensure that Sir Mark can attend.

I will get material over to you first thing next week.

Thanks

[REDACTED] (Regulation 13)

[REDACTED] (Regulation 13) | Department for Business, Innovation & Skills | [REDACTED] | [\[REDACTED\]@bis.gsi.gov.uk](mailto:[REDACTED]@bis.gsi.gov.uk) | 1 Victoria Street, London SW1H 0ET | [REDACTED] (Regulation 13)

| [REDACTED] (Regulation 13)

| www.bis.gov.uk | Blog: blogs.bis.gov.uk | Twitter: @bisgovuk

The Department for Business, Innovation & Skills (BIS) is making a difference by supporting sustained growth and higher skills across the economy.

BIS: working together for growth

From: jonathan jones (TSL) [jonathan.jones@sainsbury-laboratory.ac.uk]

Sent: 28 February 2014 17:40

To: Fiona Fox

Cc: [REDACTED] (Regulation 13) (UKTI Investment)

Subject: Re: GM Briefing on 13th March

Absolutely no way I can make 12th
sorry

From: Fiona Fox <fiona@sciencemediacentre.org>

Date: Friday, 28 February 2014 17:35

To: "[REDACTED] (Regulation 13) (Communications)" <[REDACTED]@bis.gsi.gov.uk>, "[REDACTED] (Regulation 13) (GO-Science)" <[REDACTED]@bis.gsi.gov.uk>, Jim Dunwell <j.m.dunwell@reading.ac.uk>, Jonathan Jones <jonathan.jones@sainsbury-laboratory.ac.uk>, "[REDACTED] (Regulation 13) @btinternet.com

Subject: RE: GM Briefing on 13th March

Hi [REDACTED] (Regulation 13) much as I would love to have Mark there I happen to know that both Jonathan Jones and Jim Dunwell who are authors of the report have gone to huge and painful lengths to be here for 10.30 on the 13th as requested. If they can change to 12th then we can do it and it would be great to have Mark with us (though it may clash with a bit briefing on Tamiflu in the lancet but that is TBC) but if not I suggest we stick with Thursday

Look forward to seeing the stuff

Have a great weekend everyone

Fiona

From: [REDACTED] (Regulation 13) (Communications) [mailto:[REDACTED]@bis.gsi.gov.uk]

Sent: 28 February 2014 17:29

To: 'Fiona Fox'; [REDACTED] (Regulation 13) (GO-Science); Jim Dunwell; jonathan jones (TSL); [REDACTED] (Regulation 13) @btinternet.com

Subject: RE: GM Briefing on 13th March

Hi Fiona

Sorry for not being in touch sooner. Would it be very inconvenient to move the press briefing back some day 12 March embargoed into 13th to ensure that Sir Mark can attend.

I will get material over to you first thing next week.

Thanks

[REDACTED] (Regulation 13)

[REDACTED] (Regulation 13) | Department for Business, Innovation & Skills | [REDACTED]
([\[REDACTED\]@bis.gsi.gov.uk](mailto:[REDACTED]@bis.gsi.gov.uk)) | 1 Victoria Street, London SW1H 0ET | [REDACTED]
(Regulation 13)

| [REDACTED] (Regulation 13)
| www.bis.gov.uk | Blog: blogs.bis.gov.uk | Twitter: @bisgovuk

The Department for Business, Innovation & Skills (BIS) is making a difference by supporting sustained growth and higher skills across the economy.

BIS: working together for growth

From: Fiona Fox [<mailto:fiona@sciencemediacentre.org>]

Sent: 28 February 2014 17:21

To: [REDACTED] (Regulation 13) (GO-Science); Jim Dunwell; jonathan jones (TSL); [REDACTED] (Regulation 13) [REDACTED] (Regulation 13) (Communications)

Subject: GM Briefing on 13th March

Hi Folks,

Just to let you know that this has now gone out on our Heads Up where we tell journalists what press briefings are coming up in next few weeks

I still haven't heard anything from any government press officers – which is fine as we still have time – but I will need to write an invitation next week and I have absolutely no material to work from

Can one of you send me the report or an exec summary? So I can draft an invitation next week.

Cheers
Fiona

This email was received from the INTERNET.

Communications via the GSi may be automatically logged, monitored and/or recorded for legal purposes.

Communications via the GSi may be automatically logged, monitored and/or recorded for legal purposes

This email was received from the INTERNET.

Communications via the GSi may be automatically logged, monitored and/or recorded for legal purposes.

From: [REDACTED] (Regulation 13) (GO-Science)
Sent: 05 March 2014 18:26
To: [REDACTED] (Regulation 13) (GO-Science); 'Pere Puigdomènech Rosell'; 'Jim Dunwell'; 'David Baulcombe'; 'jonathan.jones (TSL)'; 'john.pickett@rothamsted.ac.uk'
Cc: [REDACTED] (Regulation 13) (GO-Science)
Subject: RE: GM Science Update - URGENT- copyright query

Dear All

Finally, getting close to the launch.

I have now sent the attached version to our comms colleague so that it can be converted into a pdf.

As soon as I have this, I will forward onto you.

Best regards

[REDACTED] (Regulation 13)

From: Fiona Fox [mailto:fiona@sciencemediacentre.org]

Sent: 06 March 2014 12:40

To: MPST Walport; [REDACTED] (Regulation 13) (Communications); [REDACTED] (Regulation 13) (GO-Science)

Cc: jonathan jones (TSL); David Baulcombe; Jim Dunwell; [REDACTED] (Regulation 13)@jic.ac.uk

Subject: The GM Report and the embargo

Hi Folks,

Hope you are well

I am writing to try to persuade you to put a midnight embargo on the GM Science Update report and CST Letter on GM in order to give these important developments the best possible chance of good quality coverage as well as making the impact I believe they deserve in the media.

As you know GM has been and continues to be a contentious issue which divides opinion. While the media coverage has improved dramatically in recent years – partly through the efforts of the SMC working closely with the plant science community – it remains a subject that can be reported very badly with agenda driven journalists still operating on several newspapers. As a result press officers like [REDACTED] (Regulation 13) at JIC and myself have spent much time over recent years talking to the best science reporters, working out how to move GM stories from the political and consumer journalists to science reporters and ensuring that much more of the media work on GM is proactive. As a result stories like the ‘whiffy wheat’ trial, the purple tomatoes research, the omega 3 GM trial, and the findings of the gm potatoes trial have all been covered beautifully by the UK media and even newspapers like the Daily Mail have started to cover the story in a more measured way.

It is because of this that when I heard that an independent group of scientists has been invited to update the CST on the science of GM since the Royal Society report that I wrote to [REDACTED] (Regulation 13) to suggest a proactive media briefing and to suggest that the SMC run the launch.

The answer I received before Christmas was a positive one and I have been planning this press briefing with the authors ever since. In line with SMC’s approach we decided that a 00.01hrs embargo would be needed allowing for the briefing on the morning of Thursday 13th and the story to appear in the news on the morning of Friday 14th. There are two reasons for this:

1. **Quality of coverage.** This is a complex report of nearly 50 pages. Embargoes are common in science to allow science reporters to take some time to read the report, to seek third party comments and to have several hours to write up the story rather than several minutes. Science journalists expect and like embargoes and for us there would have to be a good reason why not to put this report under embargo
2. **Impact.** I have read this report and I believe it is excellent and very important. If this report is for immediate release at 11.00am on Thursday it will appear only in on-line media throughout the day on Thursday and is unlikely to last as anything other than a short piece or news in brief in the newspapers the next day. In contrast a midnight embargo will mean that the

UK's policy makers wake up to this story on the Today programme and prominently displayed in their national newspapers on Friday morning. We feel that an immediate release on this story will be a missed opportunity to generate positive media coverage for the science and the policy recommendations in this report. We feel that would be a terrible shame.

I admit I have been rather confused as to the status of this report. Because I had been liaising primarily with the authors who are all academics and because [REDACTED] (Regulation 13) had said BIS was happy for us to run the briefing I assumed that we could set the embargo. So I have already spoken to journalists and issued the invitation with the 00.01 hrs embargo on it. I now understand that there is a Letter from the CST to be published alongside this report (I had not understood that before this week) and I understand from a call with [REDACTED] (Regulation 13) this morning that BIS press office do see the letter as a government letter and favour an immediate release. Obviously if the CST letter is released at 11.00am we would have to lift our embargo too.

Can we discuss? The authors are all happy with the midnight embargo but obviously none of us want to make life difficult for our friends in Government so we can reconsider if there are good reasons to do so.

Best wishes
Fiona

--

Fiona Fox
Chief Executive
Science Media Centre
215 Euston Road
London NW1 2BE

Tel: [REDACTED] (Regulation 13)
E: fiona@sciencemediacentre.org
Web: www.sciencemediacentre.org

My blog: [on science and the media](#)

The Science Media Centre is an independent venture working to promote the voices, stories and views from the scientific community to the news media when science is in the headlines. Over 80 supporters including scientific institutions, media groups, charities, universities, corporate organisations and individuals fund the Centre, with donations capped at 5% of the running costs to preserve its independence.

Science Media Centre is a registered charity (no. 1140827) and a company limited by guarantee (no. 7560997). Registered in England and Wales.

From: [REDACTED] (Regulation 13) (UKTI Investment)

Sent: 07 March 2014 09:21

To: [REDACTED] (Regulation 13) (RRes-Roth)

Cc: [REDACTED] (Regulation 13) (Communications); [REDACTED] (Regulation 13) (GO-Science);
[REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science)

Subject: RE: GM Science Update - latest version, publication date and publicity?

Dear [REDACTED] (Regulation 13)

The document is being update again at the moment as we found some errors in the pdf version.

[REDACTED] (Regulation 13) (cc'd) is coordinating press activities for us. There will be a Press briefing hosted by Science Media Centre on Thursday which Fiona Fox is co-ordinating.

We will get back to you with the final version, but please note that the document is embargoed till midnight on Thursday and should not be circulated.

Best regards

[REDACTED] (Regulation 13)

From: [REDACTED] (Regulation 13) (RRes-Roth) [mailto:[REDACTED] (Regulation 13)@rothamsted.ac.uk]

Sent: 07 March 2014 09:29

To: [REDACTED] (Regulation 13) (GO-Science)

Cc: [REDACTED] (Regulation 13) (Communications); [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science)

Subject: RE: GM Science Update - latest version, publication date and publicity?

Dear [REDACTED] (Regulation 13) ,

Thank you very much indeed. I will wait to hear from you about the final version. I will co-ordinate with [REDACTED] (Regulation 13) about the press activities and I will speak with Fiona as well. Of course we will observe the embargo.

Many thanks again,

[REDACTED] (Regulation 13)

From: [REDACTED] (Regulation 13) (GO-Science) [mailto:[REDACTED] (Regulation 13)@ukti.gsi.gov.uk]

Sent: 07 March 2014 09:27

To: [REDACTED] (Regulation 13) (RRes-Roth)

Cc: [REDACTED] (Regulation 13) (Communications); [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13) (GO-Science)

Subject: RE: GM Science Update - latest version, publication date and publicity?

Dear [REDACTED] (Regulation 13)

The document is being update again at the moment as we found some errors in the pdf version.

[REDACTED] (Regulation 13)

is coordinating press activities for us. There will be a Press briefing hosted by Science Media Centre on Thursday which Fiona Fox is co-ordinating.

We will get back to you with the final version, but please note that the document is embargoed till midnight on Thursday and should not be circulated.

Best regards

[REDACTED] (Regulation 13)

From: [REDACTED] (Regulation 13) (RRes-Roth) [mailto:[REDACTED] (Regulation 13)@rothamsted.ac.uk]

Sent: 06 March 2014 22:56

To: [REDACTED] (Regulation 13) (GO-Science)

Subject: GM Science Update - latest version, publication date and publicity?

Importance: High

Dear [REDACTED] (Regulation 13) ,

colleagues form TSL and JIC informed me that the GM Science update report is now finalised and that it will be publicly available next Thursday 13th March.

Professor John Pickett provided me with the most updated draft that he had which is the attached.

Is this the final document that will be published? Will it be published next Thursday and where? and are there any publicity activities planned to announce the publication of this document?

I would be grateful if you could give me some feedback at your earliest convenience.

Many thanks in advance.

Kind regards,

██████████ (Regulation 13)

Dr ██████████ (Regulation 13)
Communications Officer
Rothamsted Research

[Follow us on Twitter @Rothamsted](#)

From: jonathan jones (TSL) [jonathan.jones@sainsbury-laboratory.ac.uk]

Sent: 07 March 2014 10:14

To: [REDACTED] (Regulation 13) (UKTI Investment)

Subject: text

For these reasons we propose the establishment of an R & D capacity (PubGM) that would allow preliminary evaluation of the practical application of academic research findings transferred to crops

For these reasons we propose the establishment of an R & D program (PubGM) that would allow evaluation of the practical application of academic research findings in crops in the field.

This email was received from the INTERNET.

Communications via the GSi may be automatically logged, monitored and/or recorded for legal purposes.

From: [REDACTED] (Regulation 13) (UKTI Investment)
Sent: 07 March 2014 13:24
To: 'jonathan.jones (TSL)'; 'Pere Puigdomènech Rosell';
'john.pickett@rothamsted.ac.uk'; 'David Baulcombe';
fiona@sciencemediacentre.org
Subject: FW: CST letter
Attachments: Letter to the Prime Minister from the Council for Science and Technology - 21st
November 2013.pdf

JJ

As requested, but please **do not circulate further**.

Best regards

[REDACTED] (Regulation 13)

[REDACTED] (Regulation 13)

Government Office for Science | 2nd Floor, 1 Victoria Street, London SW1H 0ET | [REDACTED]
(Regulation 13) | [REDACTED] [\[REDACTED\]@bis.gsi.gov.uk](mailto:[REDACTED]@bis.gsi.gov.uk)

Stay up to date with how Foresight is influencing UK government policy. Visit
www.bis.gov.uk/foresight for the latest news.

You can now follow the Government Office for Science and Government Chief Scientific Adviser on
Twitter: @uksciencechief.

From: [REDACTED] (Regulation 13) (UKTI Investment)
Sent: 10 March 2014 11:30
To: [REDACTED] (Regulation 13) (RRes-Roth)'
Subject: RE: Urgent RE: GM Science Update - latest version, publication date and publicity?

[REDACTED] (Regulation 13)

Herewith.

Regards

[REDACTED] (Regulation 13)

From: [REDACTED] (Regulation 13) (RRes-Roth) [mailto:[REDACTED] (Regulation 13)@rothamsted.ac.uk]
Sent: 10 March 2014 09:25
To: [REDACTED] (Regulation 13) (GO-Science)
Subject: RE: Urgent RE: GM Science Update - latest version, publication date and publicity?
Importance: High

Hi [REDACTED] (Regulation 13),

I hope you had a good weekend. I can appreciate that you are very busy but I will be grateful if you could send the most recent version of the report. In the old draft that I have there is another error. I am sure that you have probably now corrected it but just in case I describe bellow.

In the 'GM science update' document there is an error. It repeats several times that there are two GM events authorised for cultivation in EU. Today only one is authorised, MON810. The other event the report refers to as approved (Amflora) was in fact annulled 4 months ago. In 2010 Amflora was authorised for cultivation and industrial processing in the EU however, for strategic/marketing reasons BASF withdrew it from commercial sale and it has no longer been cultivated in the EU since 2011. In 2013 a case was taken to the EU court claiming that the EC had not followed its own guidelines. They won their case and the EC annulled the authorisation in Dec 2013.
http://europa.eu/rapid/press-release_CJE-13-160_en.htm

I look forward to hearing from you.

Kind regards,

[REDACTED] (Regulation 13)

From: [REDACTED] (Regulation 13) (GO-Science) [mailto:[REDACTED] (Regulation 13)@ukti.gsi.gov.uk]
Sent: 07 March 2014 18:49
To: [REDACTED] (Regulation 13) (RRes-Roth)
Subject: RE: Urgent RE: GM Science Update - latest version, publication date and publicity?

Hi [REDACTED] (Regulation 13)

Thanks for doing this.
This is much better. I will use this.

Regards

██████████ (Regulation 13)

From: ██████████ (Regulation 13) (RRes-Roth) [<mailto:██████████@rothamsted.ac.uk>]
Sent: 07 March 2014 15:48
To: ██████████ (Regulation 13) (GO-Science)
Subject: RE: Urgent RE: GM Science Update - latest version, publication date and publicity?

Hi ██████████ (Regulation 13) ,

I think the paragraph below is much better to describe this work and should be accessible to the public. Let me know what you think and many thanks and apologies at the same time. Let me know if this paragraph can work for you.

Kind regards,

██████████ (Regulation 13)

Plant oils lack the health-beneficial omega-3 long chain polyunsaturated fatty acids (LC-PUFAs) which are found in fish oils and those from other marine organisms such as algae and krill. There has been considerable interest and effort in developing oilseed crops in which the omega-3 LC-PUFAs such as eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA) are produced. Such fatty acids can reduce the risk of cardiovascular disease (*Flock et al.2013*) but natural stocks from the oceans are a diminishing resource. GM oilseed crops such as *Brassica napus* and *Camelina sativa* have been developed to accumulate EPA and DHA in their seed oils, representing a potential sustainable, terrestrial source of fish oils.

Flock, M.R., Harris, W.S., Kris-Etherton, P.M. (2013) Long-chain omega-3 fatty acids: time to establish a dietary reference intake. *Nutrition Reviews* Vol.71 (10): 692-707

From: ██████████ (Regulation 13) (GO-Science) [<mailto:██████████@ukti.gsi.gov.uk>]
Sent: 07 March 2014 14:17
To: ██████████ (Regulation 13) (RRes-Roth)
Subject: RE: Urgent RE: GM Science Update - latest version, publication date and publicity?

What is your number.

From: ██████████ (Regulation 13) (RRes-Roth) [<mailto:██████████@rothamsted.ac.uk>]
Sent: 07 March 2014 14:13
To: ██████████ (Regulation 13) (GO-Science)
Subject: Urgent RE: GM Science Update - latest version, publication date and publicity?
Importance: High

Dear ██████████ (Regulation 13) ,

Is it possible that we speak on the phone sometime this afternoon – I have been reading the report and at parts where references to Rothamsted science is made I believe some aspects need correction.

I look forward to hearing from you at your earliest convenience.

Many thanks and kind regards,

 (Regulation 13)

From: [REDACTED] (Regulation 13) (UKTI Investment)
Sent: 10 March 2014 13:44
To: [REDACTED] (Regulation 13) (RRes-Roth)
Cc: 'David Baulcombe'; 'jonathan jones (TSL)'; 'john.pickett@rothamsted.ac.uk'; 'Pere Puigdomènech Rosell'
Subject: GM Science Update - Report to CST (9).docx
Importance: High
Attachments:

[REDACTED] (Regulation 13)

With amendments for BASF and Amflora as requested.

Please confirm that you are now content with this, so that I can finalise.

All

This is the version we will be converting into a pdf tonight.

Best regards

[REDACTED] (Regulation 13)

[REDACTED] (Regulation 13)

UK Trade and Investment | 1st Floor, 1 Victoria Street, London SW1H 0ET | [REDACTED]
(Regulation 13) | [REDACTED] ([Regulation 13](mailto:[REDACTED]@bis.gsi.gov.uk)) @bis.gsi.gov.uk

UK Trade&Investment is the government organisation that helps UK based companies succeed in international markets. We assist overseas companies to bring high quality investment to the UK's vibrant economy.

www.ukti.gov.uk | [UKTI blog](#) | [UKTI Twitter](#) | [UKTI LinkedIn](#) | [Business is GREAT Facebook](#) | [UKTI YouTube](#) | [UKTI Flickr](#)

With professional advisers in over 100 international markets, UK Trade & Investment is the Government Department that helps UK-based companies succeed in the global economy and assists overseas companies to bring their high-quality investment to the UK.

From: Pere Puigdomènech Rosell [pere.puigdomenech@cragenomica.es]

Sent: 10 March 2014 14:34

To: [REDACTED] (Regulation 13) (UKTI Investment)

Subject: RE: GM Science Update - Report to CST (9).docx

Dear [REDACTED] (Regulation 13) ,

Thank you very much for all the work you did.

When will it be public?

Best regards.

Pere

From: [REDACTED] (Regulation 13) (GO-Science) [REDACTED] (Regulation 13) @ukti.gsi.gov.uk]

Sent: Monday, March 10, 2014 2:44 PM

To: [REDACTED] (Regulation 13) (RRes-Roth)'

Cc: 'David Baulcombe'; 'jonathan jones (TSL)'; 'john.pickett@rothamsted.ac.uk'; Pere Puigdomènech Rosell

Subject: GM Science Update - Report to CST (9).docx

[REDACTED] (Regulation 13)

With amendments for BASF and Amflora as requested.

Please confirm that you are now content with this, so that I can finalise.

All

This is the version we will be converting into a pdf tonight.

Best regards

[REDACTED] (Regulation 13)

[REDACTED] (Regulation 13) | 1st Floor, 1 Victoria Street, London SW1H 0ET |

[REDACTED] (Regulation 13) | [REDACTED] (Regulation 13)

@bis.gsi.gov.uk<mailto:[REDACTED] (Regulation 13) @bis.gsi.gov.uk>

UK Trade&Investment is the government organisation that helps UK based companies succeed in international markets. We assist overseas companies to bring high quality investment to the UK's vibrant economy.

www.ukti.gov.uk<<http://bit.ly/1bygiCm>> | UKTI blog<<http://bit.ly/19EvT3A>> | UKTI Twitter<<http://bit.ly/19EwaDm>> | UKTI LinkedIn<<http://bit.ly/UKTILinkedin>> | Business is GREAT Facebook<<http://on.fb.me/1atEmJr>> | UKTI YouTube<<http://bit.ly/TxGJ3z>> | UKTI Flickr<<http://bit.ly/aImRIIm>> With professional advisers in over 100 international markets, UK Trade & Investment is the Government Department that helps UK-based companies succeed in the global economy and assists overseas companies to bring their high-quality investment to the UK.

From: [REDACTED] (Regulation 13) (UKTI Investment)
Sent: 10 March 2014 16:27
To: 'Pere Puigdomènech Rosell'
Subject: RE: GM Science Update - Report to CST (9).docx

Pere

It has taken quite a bit of time but nearly there.

The document is embargoed until Thursday midnight and will therefore be available on Friday on the Government Office for Science website.

There is a press briefing which Jim, JJ and I will attend on Thursday morning.

Best regards

[REDACTED] (Regulation 13)

From: [REDACTED] (Regulation 13) (UKTI Investment)
Sent: 10 March 2014 17:19
To: [REDACTED] (Regulation 13) (RRes-Roth)'
Cc: 'David Baulcombe'; 'jonathan jones (TSL)'; John Pickett (RRes-Roth); 'Pere Puigdomènech Rosell'
Subject: RE: GM Science Update - Report to CST (9).docx
[REDACTED] (Regulation 13)

I have not amended this, but in double checking again, I have found another reference in the footnote on p34.

I believe this one is alright, but grateful for confirmation.

Best regards

[REDACTED] (Regulation 13)

[REDACTED] (Regulation 13)

UK Trade and Investment | 1st Floor, 1 Victoria Street, London SW1H 0ET | [REDACTED] (Regulation 13) | [REDACTED] (Regulation 13) @bis.gsi.gov.uk

UK Trade&Investment is the government organisation that helps UK based companies succeed in international markets. We assist overseas companies to bring high quality investment to the UK's vibrant economy.

www.ukti.gov.uk | [UKTI blog](#) | [UKTI Twitter](#) | [UKTI LinkedIn](#) | [Business is GREAT Facebook](#) | [UKTI YouTube](#) | [UKTI Flickr](#)

With professional advisers in over 100 international markets, UK Trade & Investment is the Government Department that helps UK-based companies succeed in the global economy and assists overseas companies to bring their high-quality investment to the UK.

From: [REDACTED] (Regulation 13) (RRes-Roth) [mailto:[REDACTED] (Regulation 13)@rothamsted.ac.uk]
Sent: 10 March 2014 14:18
To: [REDACTED] (Regulation 13) (GO-Science)
Cc: 'David Baulcombe'; 'jonathan jones (TSL)'; John Pickett (RRes-Roth); 'Pere Puigdomènech Rosell'
Subject: RE: GM Science Update - Report to CST (9).docx

Dear [REDACTED] (Regulation 13)

Thank you.

I just wanted to clarify that in the interest of accuracy and in order for the document to reflect the recent developments, I pointed out the issue about the Amflora potato.

It seems that in most cases this has now been edited with the exception of page 10 at the first paragraph under A3 – there is still reference of two events being approved in the EU.

I hope this helps.

Kind regards,

[REDACTED] (Regulation 13)

Dr [REDACTED] (Regulation 13)
[REDACTED] (Regulation 13)
Rothamsted Research
Tel: [REDACTED] (Regulation 13)

From: [REDACTED] (Regulation 13) (UKTI Investment)
Sent: 11 March 2014 07:20
To: Fiona Fox; jonathan.jones@sainsbury-laboratory.ac.uk;
j.m.dunwell@reading.ac.uk; MPST Walport; [REDACTED] (Regulation 13); [REDACTED]
(Regulation 13)
(Communications); [REDACTED] (Regulation 13)
Cc: [REDACTED] (Regulation 13)
Subject: RE: Thursday morning

Hi Fiona

There were further amendments to the report late yesterday to correct some recent developments. We should have a new pdf version today, which we will send across, and will bring hard copies.

Best regards
[REDACTED] (Regulation 13)

-----Original Message-----

From: Fiona Fox [mailto:fiona@sciencemediacentre.org]
Sent: 11 March 2014 07:15
To: jonathan.jones@sainsbury-laboratory.ac.uk; j.m.dunwell@reading.ac.uk; MPST Walport;
[REDACTED] (Regulation 13); [REDACTED] (Regulation 13) (Communications);
[REDACTED] (Regulation 13) (GO-Science); [REDACTED] (Regulation 13)
Cc: [REDACTED] (Regulation 13)
Subject: Thursday morning

Hi folks,

Just wanted to check if you would like me to book a room for a pre meeting on Thursday? Say at 9 or 9.30? Let me know. If you are all chilled and relaxed then we can just grab coffee and relax but if you feel the need to run through what you plan to say I will get a room.

Also can I please check who is bringing what documents? [REDACTED] (Regulation 13) / [REDACTED] (Regulation 13) will you bring copies of the report and CST letter? I guess bring 25 to be safe.

Can someone send me a final copy of the report please.

Cheers
Fiona

From: [REDACTED] (Regulation 13) (UKTI Investment)

Sent: 12 March 2014 12:53

To: 'Pere Puigdomènech Rosell'; 'Jim Dunwell'; 'David Baulcombe'; 'jonathan jones (TSL)'; 'john.pickett@rothamsted.ac.uk'

Cc: [REDACTED] (Regulation 13) (GO-Science)

Subject: GM Science Update - Final Version

Dear All

Please find attached the pdf version of the GM Science Annex with the latest amendments provided by Rothamsted to update the correct position regarding Amflora.

Best regards

[REDACTED] (Regulation 13)

[REDACTED] (Regulation 13)

UK Trade and Investment | 1st Floor, 1 Victoria Street, London SW1H 0ET | [REDACTED]

(Regulation 13) | [REDACTED] [@bis.gsi.gov.uk](mailto:[REDACTED]@bis.gsi.gov.uk)

UK Trade&Investment is the government organisation that helps UK based companies succeed in international markets. We assist overseas companies to bring high quality investment to the UK's vibrant economy.

www.ukti.gov.uk | [UKTI blog](#) | [UKTI Twitter](#) | [UKTI LinkedIn](#) | [Business is GREAT Facebook](#) | [UKTI YouTube](#) | [UKTI Flickr](#)

With professional advisers in over 100 international markets, UK Trade & Investment is the Government Department that helps UK-based companies succeed in the global economy and assists overseas companies to bring their high-quality investment to the UK

From: [REDACTED] (Regulation 13) (UKTI Investment)

Sent: 12 March 2014 12:55

To: 'Jim Dunwell'; jonathan jones (TSL); Fiona Fox; MPST Walport; [REDACTED] (Regulation 13) (JIC); [REDACTED] (Regulation 13) (Communications); [REDACTED] (Regulation 13)

Cc: [REDACTED] (Regulation 13)

Subject: RE: Thursday morning

Attachments:

Hi Fiona

This is the final version of the GM Science Annex.
GO-Science will be bringing the 25 copies as requested.

See you tomorrow.

Best regards

[REDACTED] (Regulation 13)

-----Original Message-----

From: Jim Dunwell [mailto:j.m.dunwell@reading.ac.uk]

Sent: 12 March 2014 09:16

To: jonathan jones (TSL); Fiona Fox; j.m.dunwell@reading.ac.uk; MPST Walport; [REDACTED] (Regulation 13) (JIC); [REDACTED] (Regulation 13) (Communications); [REDACTED] (Regulation 13) (UKTI Investment); [REDACTED] (Regulation 13)

Cc: [REDACTED] (Regulation 13)

Subject: RE: Thursday morning

I hope to be there at that time, so we can plan some coordination.

Jim

-----Original Message-----

From: jonathan jones (TSL) [mailto:jonathan.jones@sainsbury-laboratory.ac.uk]

Sent: 11 March 2014 08:57

To: Fiona Fox; jonathan jones (TSL); j.m.dunwell@reading.ac.uk; MPST Walport; [REDACTED] (Regulation 13) (JIC); [REDACTED] (Regulation 13)@bis.gsi.gov.uk; [REDACTED] (Regulation 13); [REDACTED] (Regulation 13)

Cc: [REDACTED] (Regulation 13)

Subject: Re: Thursday morning

I aim to get there 9.15ish A quiet room to mentally rehearse messages would be helpful
Thanks very much JJ

On 11/03/2014 07:15, "Fiona Fox" <fiona@sciencemediacentre.org> wrote:

>Hi folks,

>

>Just wanted to check if you would like me to book a room for a pre
>meeting on Thursday? Say at 9 or 9.30? Let me know. If you are all
>chilled and relaxed then we can just grab coffee and relax but if you
>feel the need to run through what you plan to say I will get a room.
>
>Also can I please check who is bringing what documents? [REDACTED] (Regulation 13) /
[REDACTED] (Regulation 13)
>will you bring copies of the report and CST letter? I guess bring
>25 to be safe.
>
>Can someone send me a final copy of the report please.
>
>Cheers
>Fiona
>
>Sent from my iPad

This email was received from the INTERNET.

Communications via the GSi may be automatically logged, monitored and/or recorded for
legal purposes.

From: [REDACTED] (Regulation 13) (UKTI Investment)
Sent: 12 March 2014 14:39
To: '[REDACTED] (Regulation 13) (JIC)'
Cc: 'Jim Dunwell'; 'jonathan jones (TSL)'; 'Fiona Fox';
MPST Walport; [REDACTED] (Regulation 13) (Communications);
'[REDACTED] (Regulation 13)'; '[REDACTED] (Regulation 13)';
[REDACTED] (Regulation 13) (GO-Science)
Subject: RE: Thursday morning

[REDACTED] (Regulation 13)

The URL will be:

<https://www.gov.uk/government/publications/genetic-modification-gm-technologies>

Best regards

[REDACTED] (Regulation 13)

-----Original Message-----

From: [REDACTED] (Regulation 13) (JIC) [[mailto:\[REDACTED\]@jic.ac.uk](mailto:[REDACTED]@jic.ac.uk)]
Sent: 12 March 2014 13:23
To: [REDACTED] (Regulation 13) (UKTI Investment)
Cc: Jim Dunwell; jonathan jones (TSL); Fiona Fox; MPST
Walport; [REDACTED] (Regulation 13) (Communications);
[REDACTED] (Regulation 13); [REDACTED] (Regulation 13)
Subject: Re: Thursday morning

Thanks [REDACTED] (Regulation 13) . Do you know what the
URL will be yet too (from 0001 hours Friday)?
[REDACTED] (Regulation 13)

Sent from my iPhone

> On 12 Mar 2014, at 13:15, "[REDACTED] (Regulation 13)
(UKTI Investment)" <[REDACTED] (Regulation 13)
@ukti.gsi.gov.uk> wrote:
>
> Hi Fiona
>
> This is the final version of the GM Science Annex.
> GO-Science will be bringing the 25 copies as requested.
>
> See you tomorrow.
>
> Best regards
> [REDACTED] (Regulation 13)

From: Pere Puigdomènech Rosell [pere.puigdomenech@cragenomica.es]

Sent: 14 March 2014 11:51

To: [REDACTED] (Regulation 13) (UKTI Investment)

Subject: RE: GM Science Update - Final Version

Dear [REDACTED] (Regulation 13),

I have seen the document posted in the website. The date of publication appears as March 2013. Is this a mistake?

Thank you for the text. I am very glad to have had the opportunity to collaborate in it.

Best regards.

Pere

De: [REDACTED] (Regulation 13) (UKTI Investment) [mailto:[REDACTED] (Regulation 13)@ukti.gsi.gov.uk]

Enviado el: miércoles, 12 de marzo de 2014 13:53

Para: Pere Puigdomènech Rosell; 'Jim Dunwell'; 'David Baulcombe'; 'jonathan jones (TSL)'; 'john.pickett@rothamsted.ac.uk'

CC: [REDACTED] (Regulation 13) (GO-Science)

Asunto: GM Science Update - Final Version

Dear All

Please find attached the pdf version of the GM Science Annex with the latest amendments provided by Rothamsted to update the correct position regarding Amflora.

Best regards

[REDACTED] (Regulation 13)

[REDACTED] (Regulation 13)

UK Trade and Investment | 1st Floor, 1 Victoria Street, London SW1H 0ET | [REDACTED]

(Regulation 13) | [REDACTED] (Regulation 13) @bis.gsi.gov.uk

UK Trade&Investment is the government organisation that helps UK based companies succeed in international markets. We assist overseas companies to bring high quality investment to the UK's vibrant economy.

www.ukti.gov.uk | [UKTI blog](#) | [UKTI Twitter](#) | [UKTI LinkedIn](#) | [Business is GREAT Facebook](#) | [UKTI YouTube](#) | [UKTI Flickr](#)

With professional advisers in over 100 international markets, UK Trade & Investment is the Government Department that helps UK-based companies succeed in the global economy and assists overseas companies to bring their high-quality investment to the UK.

The original of this email was scanned for viruses by the Government Secure Intranet virus scanning service supplied by Vodafone in partnership with Symantec. (CCTM Certificate Number 2009/09/0052.) On leaving the GSi this email was certified virus free.

Communications via the GSi may be automatically logged, monitored and/or recorded for legal purposes.

From: [REDACTED] (Regulation 13) (UKTI Investment)
Sent: 14 March 2014 11:56
To: Pere Puigdomènech Rosell
Subject: RE: GM Science Update - Final Version

Dear Pere

Thanks for spotting this. We will amend.

Best regards

[REDACTED] (Regulation 13)