

ENGINEERING RECOMMENDATION P2 REVIEW

# Monthly Progress Report to 18 October 2015

DCRP P2 WG

**Report No.:** 16011094/PROG 9, Rev. 001

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Project name:	Engineering Recommendation P2 Review	DNV GL Energy Advisory
Report title:	Monthly Progress Report to 18 October 2015	PSP UK
Customer:	DCRP P2 WG	Palace House
	6th Floor, Dean Bradley House	3 Cathedral Street
	52 Horseferry Road	London
	London	SE1 9DE
	SW1P 2AF	Tel: +44 (0) 203 170 8165
Contact person:	D Spillet	04478894
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**Objective:**

This document reports on the monthly progress made by the Consortium for the P2 review project. Progress is reported on each of the work streams that are presently active including:

- estimated progress so far
- forecast time to complete and deliver
- issues encountered
- forecast of potential issues or risks
- forecast of any changes in scope
- Target progress for next month.

The report also includes the latest revision of overall P2 Review project programme (phase 1), the up dated outstanding actions register and the latest version of the general risk register.

The programmed dates for future progress reports are summarised below:

No.	DCRP P2 WG Meeting Date	Issue Monthly Progress Report
10	Wednesday 24 Nov	Friday 20 Nov
11	Friday 18 Dec	Friday 18 Dec

Rev. No.	Date	Reason for Issue	Prepared by
001	23/10/2015	Consortium monthly progress reporting	C MacKenzie



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## 1 ACTIVE WORK STREAMS

The active work streams and sub work streams are highlighted in Table 1 along with those work streams that are complete or have still to commence.

Work stream/sub-work stream	Deliverable	Activity Status
<b>Work Stream 1</b> -Project Initiation	Issue of initiation paper	Completed.
<b>Work Stream 2</b> - Assessment of P2/6 and Identifying Options for Reform		Ongoing
<b>WS2.0</b> Stakeholder interviews (intimate)	A summary report covering key highlights from the stakeholder engagement/interview activities.	Ongoing
<b>WS2.1</b> Framework for assessing security performance and measures and characteristic network designs	Framework for the development of future network design standards	Nearing completion
<b>WS2.2</b> Service quality and cost effectiveness of the delivered to consumers by the present network design practises	Summary report that will feed into the 'options' milestone report	Nearing completion
<b>WS2.3</b> Risk associated with asset replacement, common mode failures and high impact events	Summary report that will feed into the 'options' milestone report	Nearing completion
<b>WS2.4</b> Impact of Smart Grid technologies on service quality risk profile	Summary report that will feed into the 'options' milestone report	Nearing completion
<b>WS2.5</b> Assessment of impacts of alternative control and operation strategies on security of supply	Summary report that will feed into the 'options' milestone report	Ongoing
<b>WS2.6.</b> Loss inclusive design of distribution networks and impact on security of supply	Summary report that will feed into the 'options' milestone report	Nearing completion
<b>WS2.7:</b> Alignment of security of supply standard in distribution networks with other codes and schemes	Summary report that will feed into the 'options' milestone report	Complete
<b>WS2.9:</b> Options for future development of distribution network standard including 1st Iteration of the Techno economic Model	Summary report that will feed into the 'options' milestone report	Ongoing.
<b>Work Stream 3</b> - P2/6 Options Report	P2/6 Options Report	Still to start
<b>Work Stream 5</b> Stakeholder Engagement Report: Workshop	Stakeholder Workshop Report.	Still to start
<b>Work Stream 6</b> - Formal Strategy Consultation for P2/6	Formal Strategy Consultation Paper for P2/6	Still to start
<b>Work Stream 7</b> – Detailed review and analysis	Tabulated view of all question responses and actions to be taken with regards to final Phase 1 Report.	Still to start
<b>Work Stream 8</b> - Phase 1 report	Phase 1 final report	Still to start
<b>Work Stream 9</b> - Programme work for Phase 2	Work programme for Phase 2 – project plan and supporting documentation	Still to start

Table 1 Summary of Active Work Streams

## 2 ACTIVE WORK STREAM SUMMARIES

### 2.1 Estimated progress

For all active work streams the following table shows the estimated progress this month and the overall progress to date including the estimated percentage completion and key milestones achieved or tasks completed or a brief account of progress.

Work Stream	% completion last month	% completion this month	Key milestones achieved or tasks completed or brief account of progress
WS1	50	100	<ul style="list-style-type: none"> <li>Completed 1 May 2015.</li> </ul>
WS2.0	90	95	<ul style="list-style-type: none"> <li>Split into two areas; 1. questions covering Imperial's data request for the WS2 quantitative analysis and 2. questions for qualitative analysis required later in WS 2.</li> <li>The P2 sub working group continues to work with Imperial to review the data inputs and key analysis outputs as a peer review of Imperial's work.</li> <li>Area 2 the consortium has completed all interviews and gathered all completed questionnaires and is in the process of carrying out the qualitative analysis and developing the draft report.</li> <li>Area 2 draft report is nearing completion.</li> </ul>
WS 2.1	90	95	<ul style="list-style-type: none"> <li>Completed set of relevant data.</li> <li>Populated key network types with corresponding range of reliability parameters of network assets needed to assess the network reliability performance.</li> <li>Finalising writing up of summary section.</li> </ul>
WS2.2	90	95	<ul style="list-style-type: none"> <li>Performed high-level analysis to establish appropriateness of demand group definitions and treatment of interconnection/transfer capability.</li> <li>Carried out long term planning of EHV and 132kV networks analysis including analysis of potential impact of load payback on redundancy level of EHV and 132kV networks.</li> <li>Finalising summary section writing.</li> </ul>
WS2.3	80	95	<ul style="list-style-type: none"> <li>Agreed characteristic scenarios for asset replacement, common-mode failures and high impact events.</li> <li>Carried out additional case studies and sensitivity analysis.</li> </ul>

			<ul style="list-style-type: none"> <li>Finalising summary section writing.</li> </ul>
WS2.4	90	95	<ul style="list-style-type: none"> <li>Demonstration of possible evolution of compliance requirement.</li> <li>Finalising summary section writing.</li> </ul>
WS2.5	80	85	<ul style="list-style-type: none"> <li>Identified exposure to common mode failures associated with ICT infrastructure.</li> <li>Finalising summary section writing.</li> </ul>
WS2.6	90	95	<ul style="list-style-type: none"> <li>Finalising summary section writing.</li> </ul>
WS2.7	95	100	<ul style="list-style-type: none"> <li>We drafted a memo describing the structure, scope and likely content of the Workstream 2.7 report, and took feedback on this from the working group. We then produced a full draft report setting out an economic framework for the review of potential reform options, and how they interact with the broader regulatory framework, and Richard Druce presented a summary of this report at the August working group meeting. Albeit with a delay, we have now received all comments on this draft, and have circulated a final report.</li> </ul>
WS2.9	10	25	<ul style="list-style-type: none"> <li>Framework and introduction for the WS 2 options report which pulls together the outputs from the other WS2 sub-work streams written.</li> <li>Section outlining the process of reviewing the high level options for a new standard using the results from WS 2.0 to 2.6 and WS2.7 drafted and circulated to consortium members for comment.</li> <li>Awaiting the near final outputs from WS2.1 to 2.6 and the qualitative analysis from WS2.0 before progressing. We have outputs now from WS2.0 but are still awaiting inputs from Imperial on WS2.1 to 2.6.</li> <li>High level options outlined and appraised along the lines of WS2.7 report.</li> </ul>

Table 2 Summary of active works tream progress

## 2.2 Forecast time to complete and deliver

The following table shows the forecast time to complete and deliver the active work streams.

Work Stream	Forecast calendar weeks to complete	Comments
WS1	Completed on 1 May 2015.	
WS2	3 (2 weeks from Input on WS2.1 to 2.6 from Imperial).	Working to revised programme presented in the July progress report.
WS2.0	2	Working to revised programme presented in the July progress report. Qualitative analysis and report presently being worked on. Sept 2015 a further 3 weeks added to programme for this task.
WS2.1	1	Following July Workshop revised reliability and cost data issued for working group agreement. Summary section writing. The process of data input peer review and revised studies accounts for a part of the additional programme extension. Sept 2015 a further week added to programme for this task.
WS2.2	1	Following test cases presented at the July Workshop the case studies for EHV and 132 kV networks have been performed. Business case for more than two transformers per substation. The process of data input peer review and revised studies accounts for a part of the additional programme extension. Summary section writing. Sept 2015 a further week added to programme for this task.
WS2.3	1	Additional case studies and summary report writing. The process of data input peer review and revised studies accounts for a part of the additional programme extension. Sept 2015 a further week added to programme for this task.
WS2.4	1	Repeat initial value of automation case studies using agreed reliability data on more DNOs, and summary section writing. Impact of DSR cost on their optimal contribution. The process of data input peer review and revised studies accounts for a part of the additional programme extension. Sept 2015 a further week added to programme for this task.
WS2.5	1	Additional case studies and summary section writing. The process of data input peer review and revised studies accounts for a large part of the additional programme extension. Sept 2015 a further week added to programme for this task.
WS2.6	1	Continue working on the task, and summary section writing. The process of data input peer review and revised studies accounts for a part of the additional programme extension. Sept 2015 a further week added to programme for this task.

WS2.7	Completed.	We have now circulated an updated version of the WS2.7 report, which from the perspective of the Consortium, sufficiently addresses the comments received and is therefore finalised. Nonetheless, we would be happy to discuss with any working group member the approach we have taken to addressing the comments received, if this would be helpful.
WS2.9	3 (2 weeks from Input on WS2.1 to 2.6 from Imperial).	This has been delayed by delays to other WS2 sub work streams as reported last month. Further work on the report is expected to commence this month.

Table 3 Summary of active work stream forecast time to complete

## 2.3 Issues encountered

The following table shows the issues encountered and estimated delay caused for each active work stream along with potential options to mitigate delays where possible.

Work Stream	Issue encountered	Delay caused	Proposed mitigation	Forecast reduction in delay due to mitigation
WS2	WS2.0 DNO data collection and interviews.	Estimated to be 3.5 months.	Data collection and interviews now complete.	Cannot be estimated.
WS2.7	Delays in receiving comments from some key WG members on WS2.7 report.	1 week to overall programme	All comments finally received by 20 Oct 2015. WS2.7 report now complete ready for updates to WS2.9 report.	

Table 4 Summary of active work stream issues encountered

## 2.4 Forecast of potential issues or risks

A forecast of potential issues or risks impacting on delivery timescales, outputs agreed or quality of outputs for each active work stream are recorded in the following table. The table also contains potential options to mitigate any such impacts where possible.

Work Stream	Forecast Issue/Risk	Impact of Risk/Issue	Proposed mitigation	Forecast reduction in impact due to mitigation
WS2	Lack of agreement with WS2 analysis and modelling.	Impact on stakeholder buy in to analysis conclusions that will	A P2 sub group has been formed to review the Imperial data inputs and key outputs of the analysis associated with WS2.1 to 2.6. This group has already reviewed the data	Cannot be determined yet.



		direct the option selected for the new P2 ER.	inputs used by Imperial for the results presented on 20 July and further reviewed Imperial's data inputs following the 20 July presentation and prior to the results presented on 19 August. All data inputs are now peer reviewed by the DCRP P2 WG in the Consortium's view.	
WS2.1 to 2.6	Delay to summary reports and input to WS2.9 report due to G Strbac ill health.	Estimate a 1 week delay to overall programme due to late circulation of WS2.9 draft options report. This is the same delay indicated in table 4 associated with WS2.7.	The presentation of the WS2.9 inputs and options assessment will still go ahead at the WG meeting on 27 Oct as planned.	Reduce delay from 4 weeks to 1 week.
WS3	Some WG members slow to review and respond to the WS2.9 draft options report. This is based on responses to other reviews in the project to date.	Possible 4 to 8 weeks based on past performance.	ENA and DCRP chair to manage stakeholder response timelines.	

Table 5 Summary of active work stream forecast potential issues or risks

## 2.5 Forecast of any changes in scope

The following table includes a forecast of any potential changes in scope for each active work stream that would require discussions with the DCRP P2 WG regarding an agreed change in scope or a budget variation.

Work Stream	Forecast scope change	Reason for change	Cost of potential scope change
WS1	None to report		
WS2	Additional PM due to	Overall P2 programme delay of	The forecast

	programme delays from late receipt of data and DNO questionnaire responses and interview dates.	4.5 – 5 months estimated due to delays in receiving RRP data and also revising forward programme based on experience to date. This will result in additional management and reporting costs due to the programme extension from end of January 2016 until the programme is complete.	programme has slipped by nearly five months outside of the Consortium's control. An estimated cost for additional project management to continue the programme has been provided to the ENA. At the request of the DCRP P2 WG and ENA, this is to be formalised and presented by letter to the ENA.
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Table 6 Summary of active work stream forecast scope changes

## 2.6 Target progress for next month

The following table includes a forecast of the intended progress to be made in the next month based on the progress so far.

Work Stream	Planned work targets
WS1	Completed.
WS2.0	The report outputs are ready to feed into the WS 2.9 report and the WS2.0 area 2 report will be completed this coming month..
WS2.1	Finalising writing of summary report.
WS2.2	Finalising writing of summary report.
WS2.3	Finalising writing of summary of the analysis carried out.
WS2.4	Finalising writing of summary report.
WS2.5	Finalising writing of Imperial section of summary report. DNV GL completing part of the write up.
WS2.6	Finalising writing of summary report.
WS2.7	We have now circulated an updated version of the WS2.7 report, which from the perspective of the Consortium, sufficiently addresses the comments received and is therefore finalised. Nonetheless, we would be happy to discuss with any working group member the approach we have taken to addressing the comments received, if this would be helpful.
WS2.9	The fully developed framework should be complete and all sections drafted.

Table 7 Summary of target progress for next month.



### **3 P2 REVIEW PROJECT PROGRAMME**

Based on progress to date and forecast completion times, the latest forecast delivery programme is included in Appendix A. Appendix A includes the original programme at the commencement of the project in January 2015 along with the revised programme agreed between the consortium members on 19 June followed by the latest programme forecast made at the beginning of August 2015. The revised programme reflects the data gathering issues encountered to date and the estimated time required completing the WS2 peer reviews at key stages.

Note, based on progress to 18 Oct there is a potential 2 week delay in the programme. The programme will be reviewed in November and will consider any potential future delays indicated in Table 5 as the programme moves into WS3.



## **4 OUTSTANDING ACTIONS REGISTER**

The outstanding actions register is provided in Appendix B.



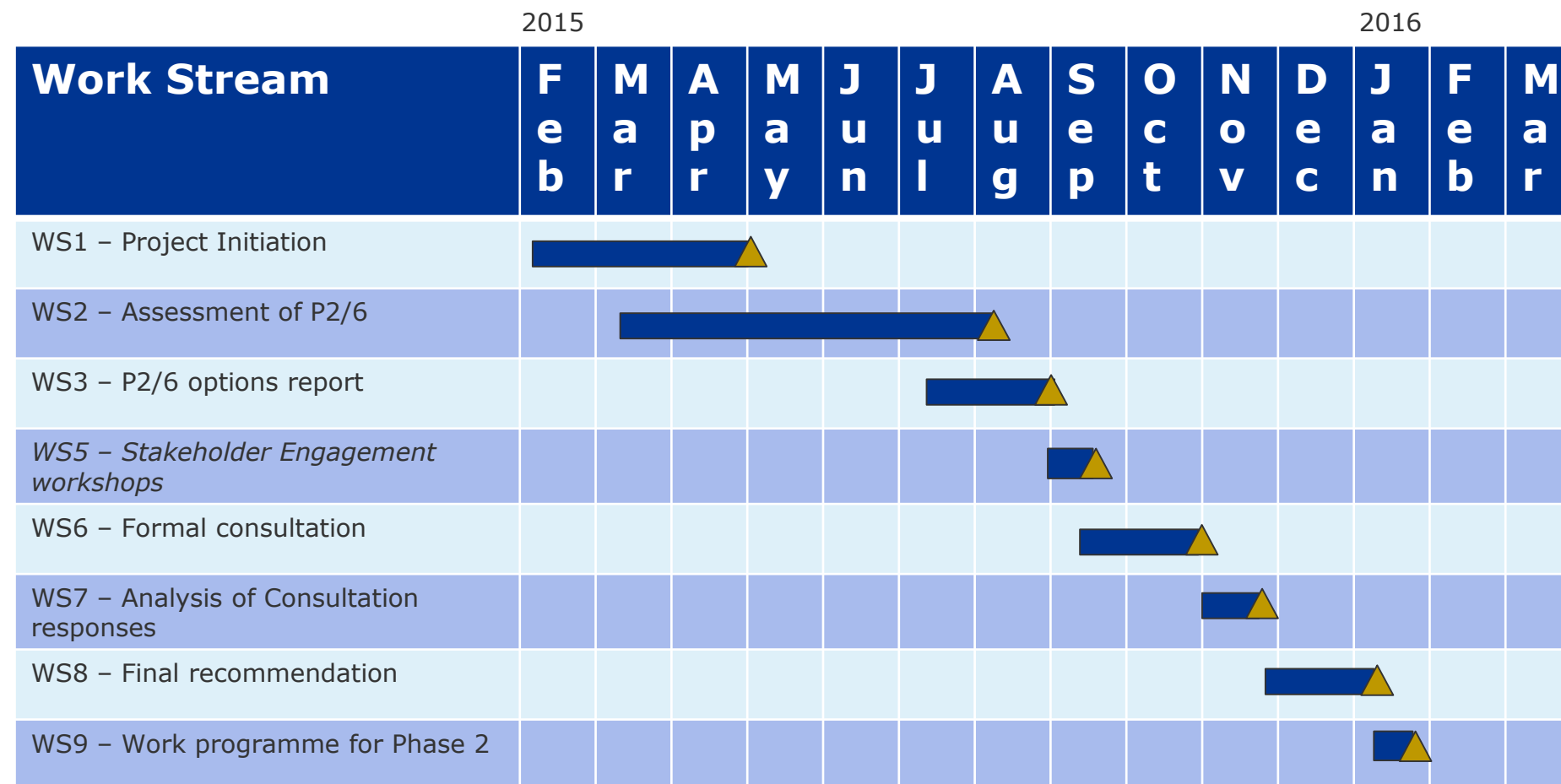
## 5 RISK REGISTER

The latest generic register of risks to programme delivery and mitigating controls is provided in Appendix C. The detailed risks and mitigation measures are provided in Table 5 in section 2.4.



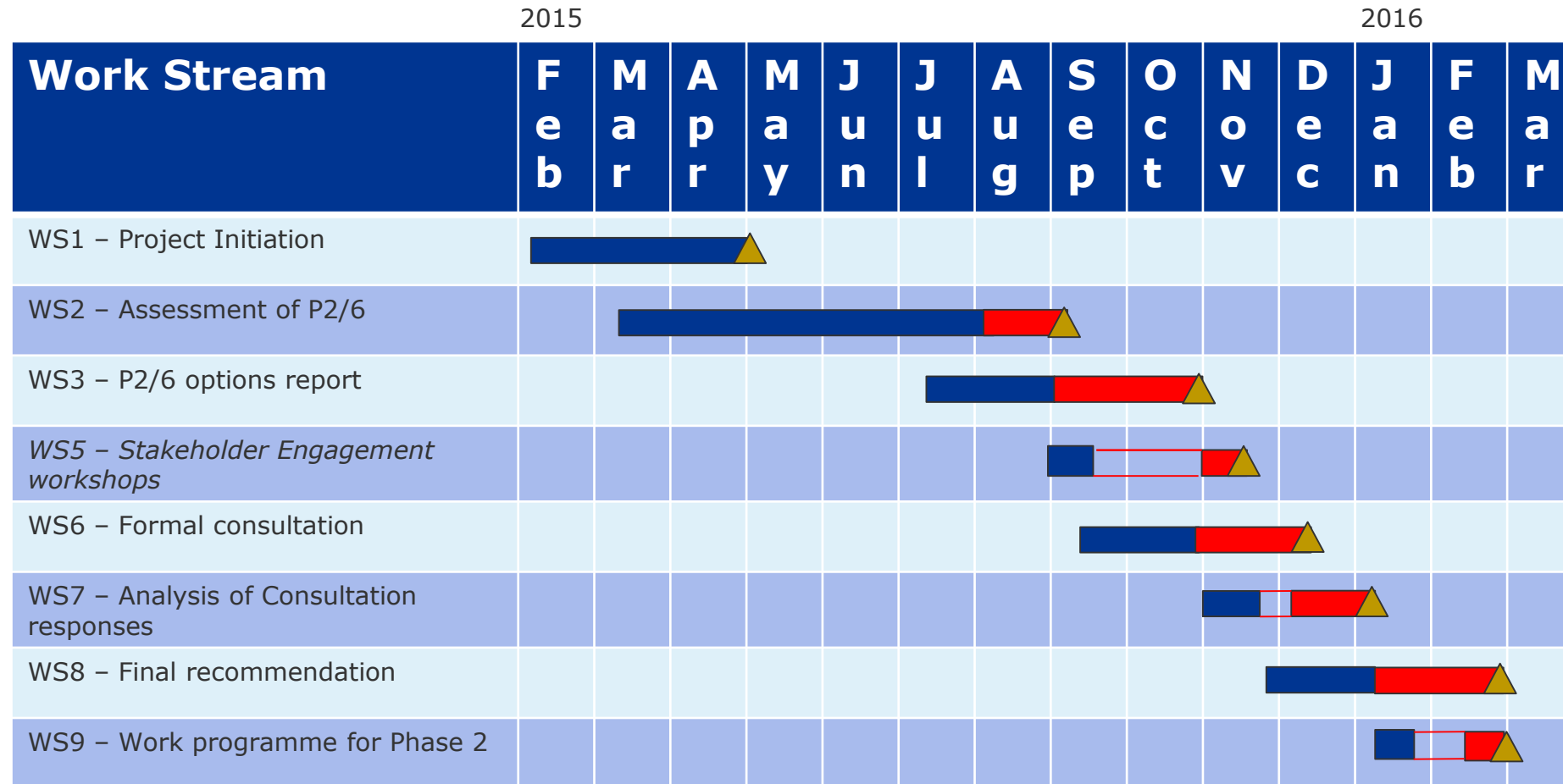
## **Appendix A      Project Programme**

The original (January 2015) high level summary programme is shown below.



▲ = defined deliverable

The programme review carried out on June 19 2015 has resulted in the revised programme below. Revisions are coloured red.

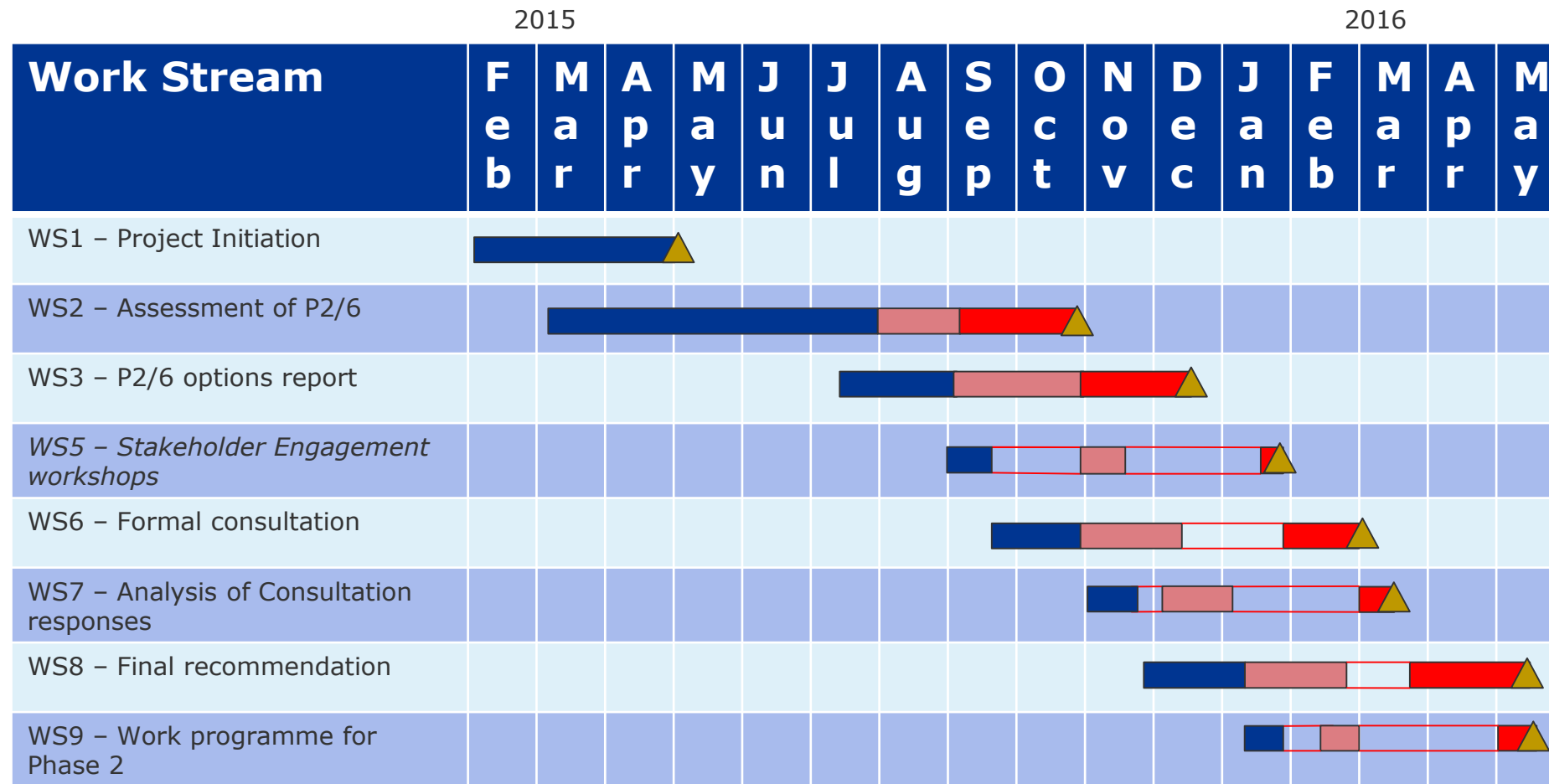


▲ = defined deliverable





The programme review carried out in August 2015 has resulted in the revised programme below. The June revisions are coloured pink and the August revisions are coloured red.



▲ = defined deliverable





## **Appendix B      Outstanding Actions Register**

Outstanding actions following meeting on 23 September 2015.



**Action Description**

**Action/Responsible/Due Date**

3 Consortium to consider impact of WS7 information provided by DCRP P2 WG on P2 review. WS 2 activity for NERA and Imperial.

GS, RD /Consortium PM/during workstream 2.  
**Ongoing**

DCRP P2 WG to check with Ofgem how interactions with WS7 may be handled.

**Ongoing** (meeting 6) SC to check with Ofgem (GE) how the interactions with WG7 may be handled with the P2/6 review.  
(Meeting 7) SC has spoken with GE and GE is happy to act as link to WS7 works.

11 DCRP P2 WG is to advise any other party that they would wish to peer review the modelling inputs and out puts in anticipation of a public consultation on proposals that may be justified (in part) by evidence produced using Imperial’s techno-economic model.

DCRP P2 WG/DS/ by 23 Feb 2015.

**Outstanding** (agreed on 27/3/2015 to leave this open for further discussion with Ofgem who raised this item) (Meeting 6) SC to discuss this with Gareth Evens of Ofgem.  
(Meeting 7) SC has spoken with GE, action is on GE to advise if they wish a peer review. SC noted that GE may be happy with plans for DCRP P2 WG to review IC’s analysis inputs and outputs which has started based on a review of GS’s presentation material from webinar on 20 July 2015.

(Meeting 8), noted that the P2 sub group formed and agreed at meeting 7 is now carrying out the peer review function of data inputs, assumptions and modelling output conclusions. Steve Cox of ENWL has taken a lead role in this review process supported by WPD and NPG.

6.4b Consortium to investigate if HILP event details are publically available from Ofgem.

GS/CMack/17 July

(Meeting 7) Outstanding action on GS.

(Meeting 8) Outstanding action on GS. See new action 8.4.

6.4c GE to confirm if Ofgem holds any details on HILP events from DPCR5 reports.

GE/DS/ 3 July

**(Meeting 8) Outstanding action, DS to chase GE for a response.**

**(Meeting 9) Actions on DS and GE still outstanding.**

New Action

Action/Responsible/Due Date

8.4 GS to review Ofgem web site for sources for further HILP information, papers and reports.

GS 4 Sept 2015

**(Post meeting 9 note, CMack carried out a search on the Ofgem web site on 24 Sept 2015**



Action Description	Action/Responsible/Due Date
8.5 Discussion relating to the use of P2/6 in the defence of potential legal challenges, SC to investigate with ENWL legal team how many claims are there per year where ENWL has used P2/6 to fight the claim and win.	but could not find any reports on HILP events). SC to discuss with ENWL legal department and report back by 4 Sept. Meeting 9, SC still awaiting a response, action left open.
8.6 Feedback was sought by RD regarding the draft WS2.7 report circulated prior to the meeting and the summary presentation.	Feedback was requested from all WG members directly to RD by 9 September 2015. Meeting 9, since the Consortium did not receive feedback from some key stakeholders, the dead line was extended by two weeks and then a further 1 week to 29 Sept 2015 for SP, WPD.
8.7 SC provided high level feedback to the materials presented to the review meeting on 20 July (SC's email was circulated to WG members on 31 July 2015 by CMack, see Appendix A for SC's email) – other WG members were asked to review and agree that SC's comments cover their own organisations' view or provide their own feedback to Goran's presentation. To date most DCRP P2 WG members have not responded.	All DCRP P2 WG members to indicate their agreement that SC's feedback covers their own organisation's views or to provide their own feedback by 4 Sept 2015. Meeting 9. CMack has not seen any evidence of this. SC to chase responses from other DNOs.
8.9 DS to consider when the drop dead date is to set the date for the WS 5 stakeholder event for week starting 18 January 2016 and check with C MacK closer to this date the likelihood of the programme meeting this date.	DS. Meeting 9. Discussed date for WS5 industry stakeholder event in January 2016 and the need for timely completion of the WS2.9 report and DCRP P2 WG agreement on WS3 final options report. This was discussed further under agenda item 4 regarding risks to the programme. KC indicated that for a January 2016 event, the ENA's events team should start planning this month.
9.1 KC asked if the consortium had a more detailed programme than the one in the progress report. CMack is to forward this to KC.	CMack/CMack/2 Oct 2015
9.2 All data inputs to the Imperial model provided by Imperial to the DCRP P2 WG and P2 sub group are to be reviewed and any data amendments agreed and provided to Imperial by end of week commencing 28 Sept 2015.	P2 Sub group/ SC/2 Oct 2015
9.3 The DCRP P2 WG is to agree if the WS3 time scale (see extract from WS 3 programme recorded in the minutes for item 4) is acceptable or whether this should be extended, pushing the remainder of the programme back and allowing the WS5	DCRP P2 WG/DS/9 Oct 2015



<b>Action Description</b>	<b>Action/Responsible/Due Date</b>
stakeholder engagement event to have a firm date set and organised.	
9.4 GS is to prepare the summary write ups for the key WS2 analysis areas and submit to the DCRP P2 WG as soon as possible to assist with the WG's review of the outputs.	GS/GS/9 Oct 2015.
9.5 GS asked the DNO members for guidance on the cost of transfer capacity at the different voltage levels.	P2 sub group/SC/9 Oct 2015
9.6 WS2.7, any WG members who have not provided their comments on the report are to provide these by Tuesday 29 Sept.	AB,PA,AC/DS/29 Sept 2015
9.7 The cost of implementing the move to a CBA based standard has been raised as a concern in the feedback to the WS2.7 report. RD asked WG members for any evidence of such costs.	DCRP P2 WG/DS/2 Oct 2015
9.8 SC to ask his legal and treasury people to provide an assessment of the impact on WACC (weighted average cost of capital) of not having P2/6 or equivalent to protect against legal challenges. This is to be fed into the WS2.7 report via RD.	SC/SC/9 Oct 2015
9.9 RD is to draft a letter from SC to GE to seek some guidance from Ofgem on the feasible high level P2/6 replacement option the DCRP P2 WG can realistically recommend subject the need for Ofgem's approval. SC then to finalise and send to GE	RD/RD/2 Oct 2015 SC/SC/9 Oct 2015



## **Appendix C      Risk Register**



Cells contain formulas and will be calculated. Do not update these cells.

Text Blue text represents sample text and should be ignored. This row is not included in graph and sort algorithm.

Acceptable risk score =

Use this page to register all risk factors currently known. Use a scale of 1- 5 (highest) to indicate probability and consequence for each factor.

			*Probability	*Consequence	Risk score = P x C	Risk score last period		
								Sort list to identify top 5 risks
Id	RBS	Risk description	P	C	Score	Last period	Action	Responsible
3	Project Management	Timescales slip on work streams and project end date or work cannot be completed within timescales	3	4	12		PM will work with ENA and team to revise the programme where possible.	PM
4	Technical	Work stream outputs do not deliver the expected results	2	4	8		PM and team will work with ENA to address any such issues as they occur.	PM
5	Technical	Data is delayed or unavailable (for techno-economic model)	4	3	12		All consortium members to make PM aware of issues. PM to assist with data from stakeholders.	PM
6	Project Management	Working together is difficult as partners are physically remote	2	2	4		PM to hold regular meetings with consortium partners to review any issues.	PM
1	External	Access to Stakeholders	1	3	3		Liaise closely with ENA, make sure process is transparent (robust stakeholder engagement process)	PM
7	Organizational	Insufficient resource or expertise within consortium to undertake work	1	3	3		Team includes duplicate resources	PM
8	Technical	Peer review process by DCRP P2 WG takes excessive time to reach a point where all DCRP P2 WG members are have with the robustness of data inputs and outputs from the IC analysis.	4	3	12		A P2 sub group has been put in place to speed up the peer review process	DCRP P2 WG chair.

Risk register embedded file, used for amendments.



Risk Register V  
003.xlsx







## **About DNV GL**

Driven by our purpose of safeguarding life, property and the environment, DNV GL enables organizations to advance the safety and sustainability of their business. We provide classification and technical assurance along with software and independent expert advisory services to the maritime, oil and gas, and energy industries. We also provide certification services to customers across a wide range of industries. Operating in more than 100 countries, our 16,000 professionals are dedicated to helping our customers make the world safer, smarter and greener.