VISUAL IMPACT PROVISION PROJECT

Peak District National Park Stakeholder Workshop, 24th March, 2015

REPORT OF MEETING

Report Purpose
This report aims to provide a summary of the key points raised at the National Grid Visual Impact Project – Peak District National Park Stakeholder Workshop held on 24th March, 2015 and in particular the discussion that led to the recommendations made and captured in Section 9.

It is an aide for participants and forms a record on the meeting. It is primarily drawn from the record made on flipcharts at the meeting (and provided in the photoreport) with wording added to help with clarity.

If on reading this report it raises any immediate questions for you about the project please contact: Ian McKenna on Ian.McKenna@nationalgrid.com

This report was produced by Suzannah Lansdell and Pippa Hyam of Good Partnership. If you have any comments or queries regarding this report please contact Pippa Hyam on pippa@goodpartnership.co.uk or 07956 903209

Contents

1. Participants

Name	Organisation
Jonathan Adamson	PLACE
Chris Baines	Chair of National Gird's VIP Stakeholder Advisory Group
Alexandria Bowden	United Utilities
Martin Burfoot	Peak District National Park Authority (PDNPA)
Andrew Darke	PLACE
Mike Gibson	Barnsley Metropolitan Borough Council
Simon Howard	United Utilities
John Keeley	Peak District National Park Authority (PDNPA)
Mandy Loach	Trans Pennine Trail
Allen Pestell	Ramblers Association
Richard Politt	Natural England
Anne Robinson	Friends of the Peak District
Neil Sinden	Member of National Grid's VIP Stakeholder Advisory Group - representing CPRE
Brian Taylor	Peak District National Park Authority (PDNPA)
Rhodri Thomas	Peak District National Park Authority (PDNPA)
Andy Tickle	CPRE/ Friends of the Peak District

National Grid and Consultant Participants

Name	Organisation
Stephen Hesketh	National Grid
Andrea Key	National Grid
Steve Knight-Gregson	National Grid
Ian McKenna	National Grid
Hector Pearson	National Grid
David A Smith	National Grid
Stuart Fox	Camargue
Parv Gandham	Camargue
Pippa Hyam	Good Partnership
Suzannah Lansdell	Good Partnership

2. Introductions

2.1 Workshop Aims

The aims of the workshop were:

- To explore with stakeholders and make recommendations to National Grid and the Visual Impact Provision (VIP) Stakeholder Advisory Group (SAG) on the way forward in the Peak District National Park.

2.2 Style of Meeting and Facilitation

The meeting was facilitated by Pippa Hyam and supported by Suzannah Lansdell. Their role was to keep the meeting on track and productive in meeting the aims of the workshop. A record of the meeting was made on flipcharts in real time and this forms the basis of this report which is primarily for the workshop participants. A copy of the photoreport of the flipcharts is included in Appendix 1.

2.3 Ground Rules

The Ground rules for the meetings were proposed and agreed as:

- Devices/ off
- Keep to time and task
- One person speaks at a time
- Focus is providing recommendations to the VIP process
- Aim for consensus but can record divergent views
- No attribution - except where divergent views require it in report

2.4 Workshop Agenda

The agenda of the meeting was as follows:

09:30	**Welcome** • Aims • Style of meeting • Ground Rules • Introductions • Agenda
	The VIP project - an overview: *Hector Pearson, National Grid*
	The role of the VIP Stakeholder Advisory Group: *Chris Baines & Neil Sinden*
	Short review of the work to date – change from Long Term Future Study to the VIP: *Steve Knight-Gregson*
	Tea & Coffee
	Overview of options
	Questions and explorations of options
	Lunch
	Developing recommendations
	Review, Actions and Close
4pm	End

3. The VIP Project – an overview

Hector Pearson from National Grid gave an overview of the Visual Impact Provision (VIP). This included the conditions around the VIP, the management of the VIP, the process for allocating funds and the next steps in the timeframe. Copies of Hector's slides are in Appendix 2. Following the presentation there was an opportunity for questions of clarification.

Issues and Questions Raised

- Why does there need to be shortlist of options?
- How was the £500m decided and what are the limitations and opportunities in the VIP?
- Is there a central government policy relating to VIP?
- There is recognition of the professional and personal passion on the VIP Stakeholder Advisory Group (SAG) organisations and individuals.
- This is an opportunity to see this VIP as a critical first stage and the opportunity to show potential for other regulators (e.g. OFWAT).
- The SAG has a tough job to assess which projects receive funds across the country.
- The SAG have received technical support from NG but also the landscape assessment has provided input in addition to local input (from recreation, ecologist etc.) It has all been an enormous amount of work to help the SAG/independent panel make its decision.

- The point was emphasized and recorded that there is a legacy to this area in the Long Term Future Study, but the focus of this meeting is to be the VIP process and funds recommendation.

- The regulator involvement to date has been really useful.
- People are conscious of the back story in this area and why it is difficult to put that to one side and focus on the VIP.

The SAG decisions – Neil Sinden

- Neil gave a quick overview of the challenge ahead for the SAG.
- The SAG are eager for feedback to help shape decisions that need to be made in September 2015.
- The SAG recognise it is not going to be an easy decision. Does the SAG go for fewer schemes in fewer areas or more schemes over wider area? Currently the SAG are unsure which way it will go.
- The SAG want to demonstrate the VIP can make a difference and impact for this regulator (Ofgem) and beyond.

4. Work to date – from Long Term Future Study to the VIP

Steve Knight-Gregson from National Grid gave a recap on the history to the Long Term Future Study and how that relates to the current VIP opportunity. Copies of Steve's slides are in Appendix 2. Following the presentation there was an opportunity for questions of clarification.

Issues and Questions Raised

- None of the Long Term Future Study work looked at east of the tunnel – which puts the east of tunnel area in a similar position to the other VIP areas in the country. The east side is up for discussion, but it is further back in terms of study.
    - This workshop was about treating all areas equally.
- Surface troughing at Woodhead uses 6 cables at the newer part of the tunnel around Tower 200 which is possible because it is a shorter length of line.
- Is there no filter of asset age in any decisions? Does the eastern side warrant replacement?
    - The Landscape report undertaken just looked at landscape and visual impact - not asset age.
    - The eastern side is in better condition, but not relevant to VIP decision making.
- Clarification that tower 238/237 is a tower on the border of the National Park boundary.

5. Establishing the Options

An overview of the 3 sections (taken from the landscape assessment) was given and broadly shown on a schematic slide (See Appendix 2). These were Crossing Bottoms Reservoir; Longdendale Valley and Dunford Bridge. The core options that were apparent for each section were briefly overviewed. The question was then asked about other possible options and this was discussed by the group.

Clarification Questions & Discussion on Options:

Crossing the Reservoir: Bridge

- The bridge would be a substantial structure
    - The challenge is the cliff face on the side of the reservoir that would have to be cut into for the cables to get up.
- Could a bridge be publicly accessible?
    - Unsure but could be explored.

Crossing the Reservoir: Tunnel

- The tunnel would have to be some 25m below water level, 10 metres below the bottom of the reservoir.
    - Would need a c. 35m deep shaft on the south side and 45m deep shaft on the north side.
    - The tunnel length would be some 1.5km in rock – it would be expensive - in the tens of millions of pounds, but is technically feasible.
- Would you be prepared to go up to the Park boundary?
    - It depends on the terrain.
- There is some flexibility in the areas defined – e.g. to take into account the setting.
- Tower 238 is on the boundary of the park.

- Landscape architects sections are done on landscape considerations, but could be extended – e.g. to take account of the siting of the sealing end compound.
- It would be possible to overlap sections in recommendations or do portions of sections.
- If landscape quality is important then need to deal with as much Overhead Line as possible.
- How much can be spent outside the National Park?
    - The policy allows for the "setting".

Other Options Resulting from Discussion

- Laying cable on reservoir bed – this was reviewed and rejected in the Long Term Future Study work.
- Running a cable across the Rhodeswood Dam.
    - Currently there is difficulty in taking HGVs over the dam. There is a loading issues and the dams were not constructed for that purpose.
- South of reservoir and over river.
    - This is quite a constrained corridor.
- Shifting the whole line to the north of the reservoir and seeing if it is possible to join up with the Highways proposal
    - This option was explored as an Overhead Line and was eliminated in the Long Term Future report.
    - Is there potential in future to collaborate with roadworks?
        - A628 – there is difficulty to stop traffic and likely not be timing line up – i.e. will it be there by 2021?
- Using the dam would need further exploration to establish whether this would be viable.
- If, for example, Longdendale Valley went forward, how far would it preclude any of the other sections/options if future VIP money becomes available?

At the end of the discussion the following options were established to discuss at table groups.

Crossing Bottoms Reservoir

- Tunnel - cost would be in the tens of millions of pounds
- Bridge
- Run cables across the dam
- Going underground to south and bridge over river
- Aspects of these options included:
    - Tunnel extension - north of reservoir – Stalybridge side (note depth of shaft is the cost factor rather than the length of the tunnel)
    - Crowden crossing diversion

Longdendale Valley

- Troughs and direct burial - c £200m
- Going underground north along the A628

Dunford Bridge

- Remove approx. 8 towers and underground – cost would be low tens of millions of pounds
- Different pylon heights/designs

6. Questions and Further Exploration of the Options.

At table groups participants were asked to develop questions and issues that they needed to establish to help make a recommendation or recommendations to the SAG, cognisant that some information may not be available. The following points came back from tables.

6.1 Crossing Bottoms Reservoir

Tunnel

- The extension is good but…
    - How many air shafts might be needed?
    - Issue might be what it looks like.
    - Need more understanding of what it would be like when undergrounding converts back to overhead line
    - Holybank Quarry – this could be a possible site for a sealing end compound, however note it is in private ownership.
- Structures needed at either end of the tunnel – but these could be smaller than a sealing end compound.

Bridge

- Interesting consideration - could it be a feature bridge? The "Gateway to Glossop" – or a green bridge, making it accessible.
- Bridge could be built at the top of dam level – i.e. build on the dam line without compromising dam integrity.
- Generally negative view on the bridge option - but if get into compromises of sealing end compound, would become more favourable - i.e. becomes a comparator between a sealing end on the south side vs a bridge.
- Could there be gantry structures and graded height towers?
    - This is a possible potential.
- Cheap options should be looked at first (before expensive tunnel).
- North side - continue with troughing and undergrounding rather than Overhead line - go over watershed over Brushes Valley
- In moving from Bottoms catchment into Arnfield catchment any tunneling that affects the catchment would be a concern.

Run cable across the dam

- Do United Utilities need a new dam?
    - No planned work on the dam envisaged.
    - This would need a detailed engineering solution worked up to assess and it has met resistance in the past.
- How would you get the cables across the dam?

Going underground south and bridge over river to the West

- Thought this option would be difficult to consent in the timeframe with potential public opposition.
- Troughing to get to the west of Bottoms - new towers and move to the park boundary (undergrounding and some Overhead Lines)

- Another option would be to keep underground.
- Planning and public opposition issues and timeframe are key issues.
- Issue of steep climbs from the valley.
- Engineering and potential compromise to dam challenges.
- Across the River Etherow
    - Could take the whole line to the west of Hollingworth and rationalise lines.
    - Consenting issues and would mean a re-route of a lot of line and that does extend outside the Park.

Other options resulting from table discussion

- Crowden Crossing diversion and tunnel under Tintwistle
    - To consider as another option providing not compromised on timings.
    - Space that avoids dam
    - Users of trails need careful consideration – though the Northern Horse Trail would be an alternative. (National Grid have a specification for route upgrades needed).

Other VIP Issues noted

- The Panel need to consider the criteria for allocating funds and whether it is ok to spend significant budget outside the National Park.
- Eastern side of the tunnel
    - In a similar position as other VIP areas.
    - What are the issues and options?

6.2 Dunford Bridge

- Tourist impact – the area could do with being developed.
- Eyesore in Dunford - Terminal tower and sealing end compounds above the village.
- Old sidings on railway – plans to be developed into wildlife area.
- Corridor wider - so option to avoid the trail.
- Horrendous sealing end compound.
- Do undergrounding in the worst part and then lower height towers.
- Dilemma is where would you site a new sealing end compound?
- Following railway route
    - finish east of Hazlehead - there is a conifer area where sealing end could go.
    - 4Z0.1 - not an area of severest impact and is out of identified areas.
- Socio-economic impact quite large – would make a massive improvement.
- The £24m Landscape Enhancement Initiative fund could also be used to add further value.
- Dunford Bridge community benefit.
- Perception of the edge of the National Park and setting – would create a more natural setting.
- There would be lots of local support - would welcome it.
- Summary
    - Move the terminal tower - some questions of where moved to?
    - Positive community benefit and would be welcomed.

6.3 Longdendale

The Longdendale Valley area has been the subject of discussion through the Long Term Future Study. An opportunity was given to PLACE and United Utilities to highlight some of the key issues as they saw them for this area.

PLACE Key Issues

- Impact of overhead lines along the valley.
- Surface toughing options.
- Main roads - views of landscape from roads, provides an introduction to the National Park.
- Landscaping of the road - could be an overlapping solution.
- Costing - Woodhead to Stalybridge.
- Undergrounding has been part of the discussion for a long time (e.g. since CEGB times).
- Anticipation of renewal of Longdendale line and works to be done.
- Eastern side - similar in terms of opportunity and anticipation would be addressed.
- Vision of PLACE is to take out pylons in the landscape, both in the Peak District and nationally.
- Willingness to pay studies suggested people would pay up to £2bn.

United Utilities Key Issues

- Exit at Woodhead – Tower 200.
    - United Utilities are key landowners.
- The area is a catchment for five reservoirs.
- Issues are for:
    - Maintaining raw water quality – want to achieve best raw water quality.
        - United Utilities done a lot of work on sustainable water catchment.
        - Need to maintain raw water quality and managing the risk of any works on that.
    - The line passes structural assets – e.g. bridges, culverts etc.
        - All are drinking water yield points that need to be considered.
    - Raw water supply
        - Supplies 580,000 customers.
        - Woodhead is the sole supply to Godley.
        - Risk management considerations– would need an alternative source of supply during any VIP work.
    - Investment into public access.
        - Undertaken landscaping and tree planting.
        - Operations obligation to improve access.
        - Would need to find alternative provision for access.
- So not as straightforward as might appear
- £200m cost for any works does not include any mitigation costs which United Utilities would pass on to National Grid.
- The risk is about the operational risk.

Comments

- While there is a loss of the trail then could use Northern Horse Trail, but would require investment to do so.
- Ongoing landscaping

- Landscape improvement from the VIP - how does that sit with United Utilities wanting to improve access?

8. Developing Recommendations

Bearing in mind what participants knew about the different sections and options, at table groups they were asked to agree two recommendations for the VIP SAG and a rationale. These were then collected and grouped in plenary and discussed to see if there was any consensus.

The following recommendations emerged from the table groups

- (equal 2nd) Tunnel under Bottoms Reservoir and A628 and beyond. Continue to cable to suitable cable sealing end compound locations

- (1st) Priority is west two sections (4Z0.3 and 4Z0.4) for burial with a preference to avoid sealing end compound on south side of Bottoms. Explore option of deep bore or skirting west of Bottoms Dam. Rationale: Visual amenity/landscape amenity.
- (1st) Underground from the end of Woodhead tunnel to Bottoms reservoir – key part to this solution is to ensure adequate restoration of the trail.
- (1st) Remove OHL (overhead lines) towers from Longdendale Valley – visual impact
- (1st) Longdendale (200-227) – underground.
  - Significant gains in visual impact in the National Park – biggest benefit
  - Potential synergistic benefits with road enhancements (future road tunnel/landscape enhancement
- (1st) Removal of pylons along Longdendale Valley by:
  - Further exploration of “Crowden Crossing route”
  - And Tintwistle Moor – direct route to beyond Park boundary
  - And “cleverer” way of crossing the dams

- (2nd) Remove sealing end compound at Dunford, remove maximum pylons back east towards Hazlehead, sealing end compound east of Hazlehead
  - Rationale - visual amenity, residential amenity, socio-economic potential for visitor/tourism
- (1st) 4Z0.2 Underground eastern end to Hazlehead
- (2nd) On the eastern side, a hybrid underground and low height pylon solution
- (equal 2nd) Remove tower 4Z0164 and cable out as far as Hazlehead (if possible)
- (2nd) Dunford Bridge - underground to Hazlehead east of National Park
  - lower cost - substantial local benefit
  - opportunity to link to other socio-economic benefits
  - improving public access to reservoir

8.1 Discussion of Recommendations

A plenary discussion of the recommendations captured the following points. Bold text denotes what was defined as key points by the group.

Longdendale Valley

- **Remove pylons in the Longdendale Valley (along the 4Z0.3 to 4Z0.4 stretch)**
- Explore options and look at work already done and check back.
- Difficult bit is how any work is "finished" / continued with pylons
    - how far north can we get?
    - how the crossing is done.
- Need care that what is put in instead of overhead lines is in line with the National Park i.e. restoration of the trail.
- **Should have a net improvement - if underground not detriment to the trail**
    - **should enhance the trail**
    - **route quality and enhancement of the visitor experience**
- Mechanism for how delivered not yet defined.
    - but things like undergrounding, tunneling, troughs
    - different routes.
- Is there an option to do some of the route only technically with "temporary" infrastructure?
    - Any infrastructure would be permanent regardless as has to meet standards.
- Can't stop at south end of reservoir because of sealing end compound.
- End at Woodhead Tunnel - south of Bottoms Reservoir (these are the priority parts)
- View that whatever VIP chosen should have the best impact
    - but shouldn't tell SAG how to make the decision.
- **North of reservoir to west of Park - group suggest that this is a bigger scheme, but having to choose for this VIP (make a precursor to the recommendation)**
    - **long term aim to resolve pylons throughout Park and its setting.**
- Recommendation - do as much as possible, make a beacon
- Recommendation - do a portion.

Recommendation – Suggestions Summary

- Longdendale Valley preference
    - some debate about how it is best achieved
    - stop at reservoir or before Stalybridge – go as far as can go
    - location of sealing end compound important

Dunford Bridge

- Moderate scoring.
- 4Z0.2 (high scoring).
- Difficulty is where you put the sealing end compound.
- In line with overall aim to also consider Dunford Bridge and challenge where to stop.

9. Recommendations to the VIP Stakeholder Advisory Group agreed by stakeholders

After the discussion a form of words was developed by the facilitators and shared with the group for comment and amendment. **Whilst the English used in the drafting may not be well formed, the purpose was to try to agree on the recommendation rather than wordsmith collectively. The following was agreed by the group and it was also agreed (see Action List) that the group in reviewing this report should not seek to change the words agreed.**

Context

- The overall aim of these stakeholders is to reduce the visual impact of lines throughout the National Park whilst enhancing the physical enjoyment and accessibility of the Park to users and the landscape - the totality of the landscape and the setting.

Recommendation 1:

- Prioritise removal of the overhead towers between 4Z0.3 to 4Z0.4 in Longdendale Valley
    - Taking into account how to "stop" without damaging the environment further.
    - Consider whether that would mean a scheme extending across the reservoir and north towards the boundary of the Park if sealing end compound too great an impact.
    - To consider alternative methods other than trenching and undergrounding along existing route - e.g. route A628 corridor (along north coast of reservoir) to Crowden Crossing and or crossing the moor.

Recommendation 2:

- Explore further the potential for removing section 4Z0.2 and underground beyond Hazlehead or finding a stopping point where appropriate.

[Noting it is:]

- Recognised that the Stakeholder Advisory Group and National Grid need to talk to United Utilities and to other stakeholders about how to achieve objectives, the needs of United Utilities and other stakeholders to meet their statutory obligations.

10. Way Forward

- Is there further evidence stakeholders can provide to the process? What about the involvement of local communities?
- In the eastern section National Grid will replicate what has been done in other VIP areas around the country– e.g. technical stakeholder meetings and public workshops prior to the September SAG meeting.
- Further investigations will be done on Recommendation 1 on what is possible and costs and need to check back with this group to check support.
- Suggestion to do a public "drop-in" on the western side.
- Note that work over the summer will be at a high level – i.e. not the level of detail of the Long Term Future Study.

11. Actions

WHAT	WHO	WHEN
Photoreport and summary report to National Grid	PH / SL	1/4/15
Draft report to participants for review (please do not add words to recommendation [Section 9])	Camargue	13/4/15
Report published on VIP website	Camargue	Early May
Technical and public engagement at Dunford and in west public drop in	Camargue	Summer
In process of reviewing recommendations get in touch with stakeholders to gather feedback and evidence as per other areas	Camargue & NG	Now onwards
Co-ordinate with Highways Agency	Camargue & NG	Ongoing

Appendix 1: Photoreport

Report date:

Facilitator: Pippa Hyam and Suzannah Lansdell

Contact details: Pippa@goodpartnership.co.uk

VISUAL IMPACT PROVISION PROJECT
Peak District National Park Stakeholder Workshop, 24th March, 2015

Photo report

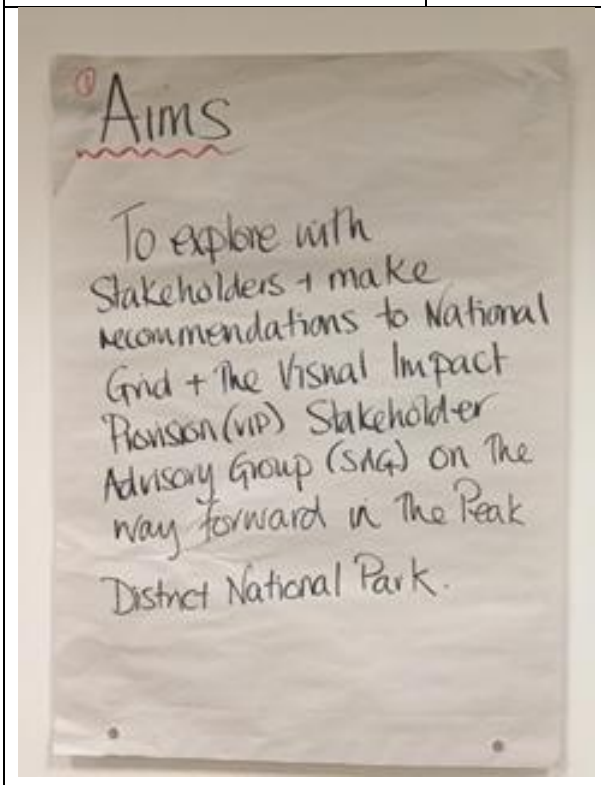
These are photographs of the flip chart record made at the meeting detailed below
Meeting Participants were responsible for checking the accuracy of the wall-record during the meeting

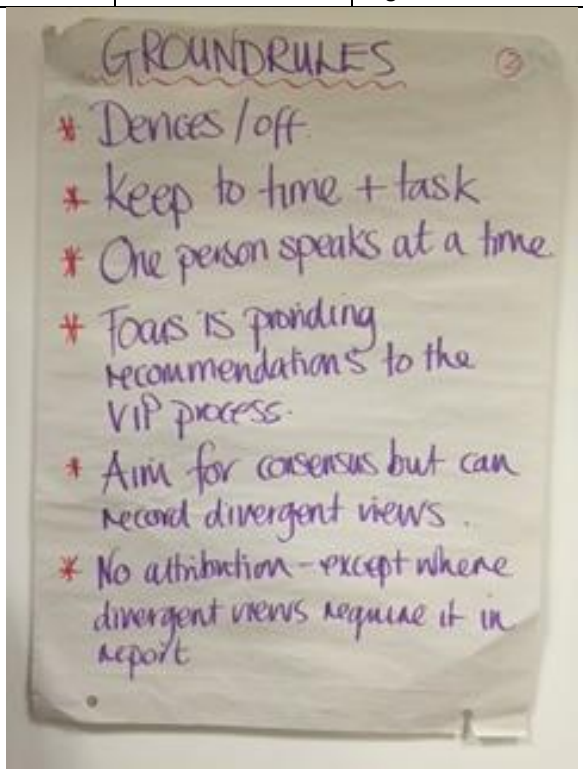
- This report serves as a useful aide-memoire for meeting Participants
- The original flip charts are held by National Grid
- Note that photo reports are quite cryptic and should only be shown to people who were not present as part of a briefing by a participant, should ground rules permit

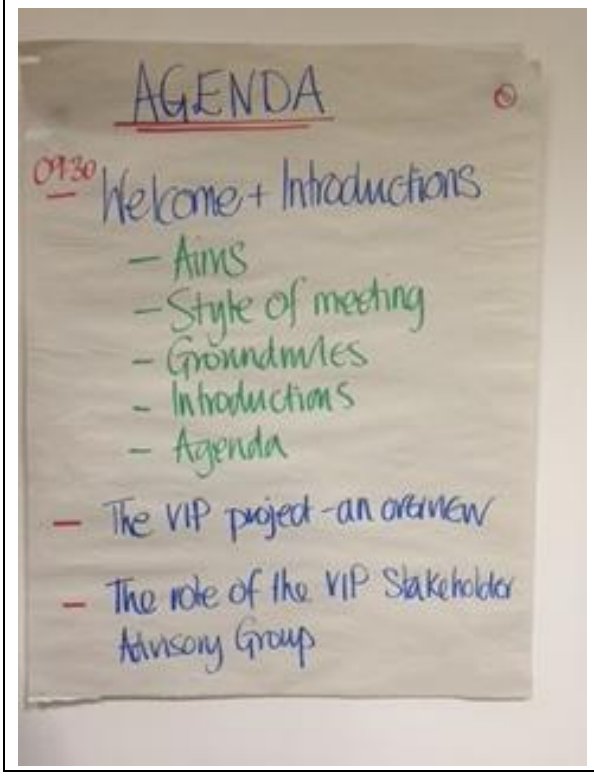
A full written report using these photo's notes made during working sessions and notes made by members of the facilitation team will be circulated to all participants.

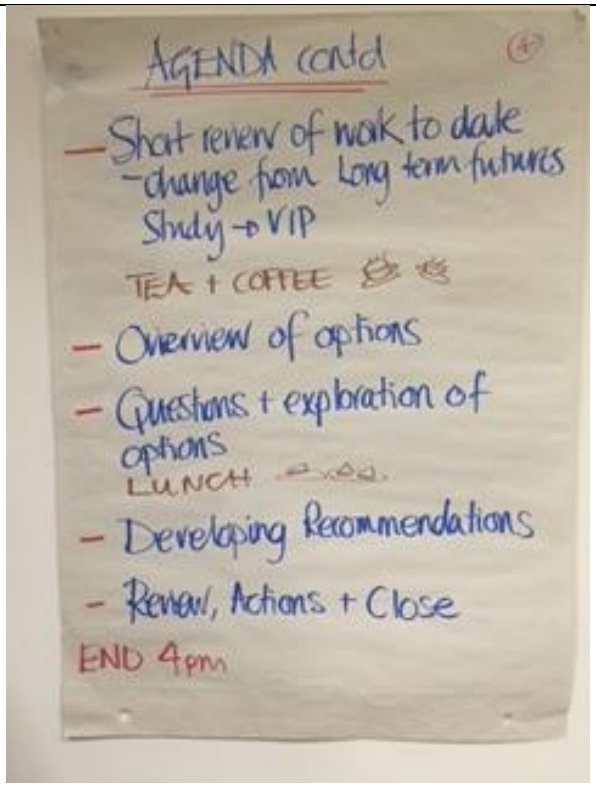
Date 24 March 2015

Date	24/03/15	Project	VIP – Peak District
Facilitators	Pippa Hyam and Suzannah Lansdell	Task	Aims, ground rules and Agenda

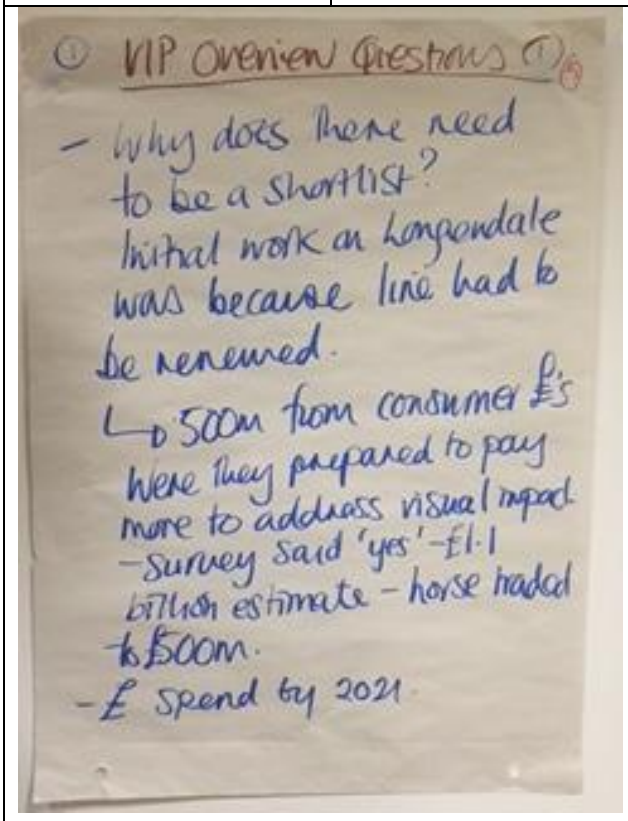


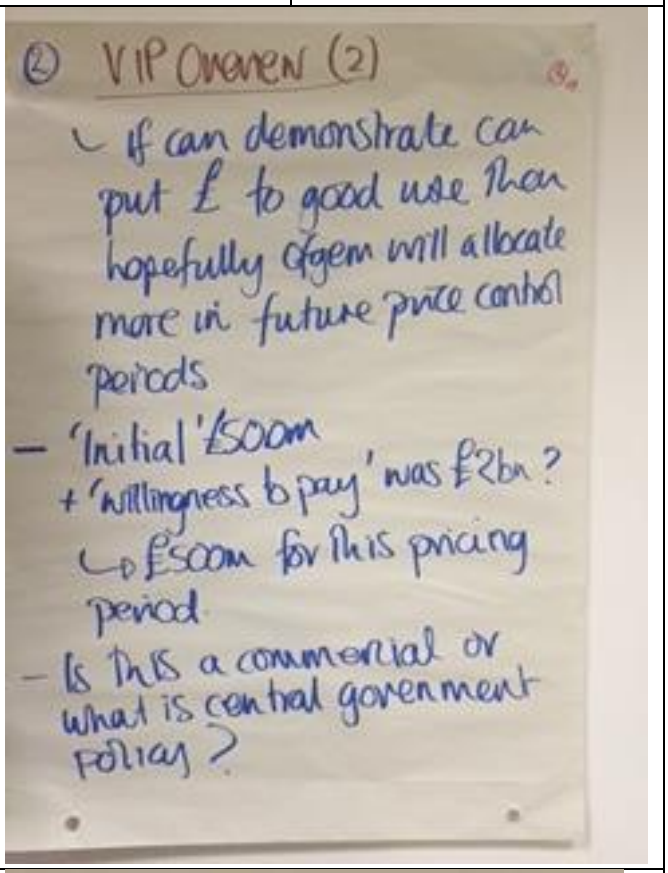


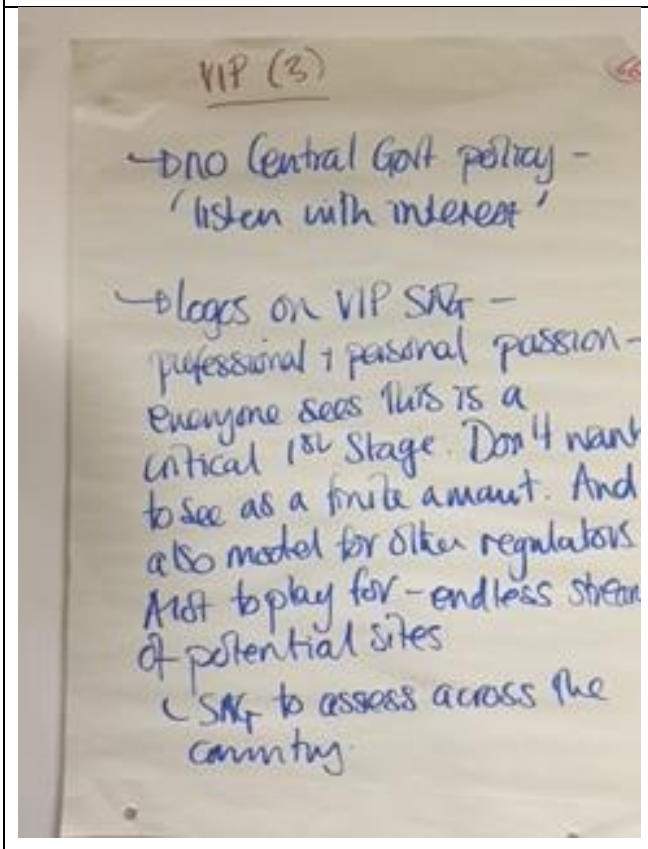


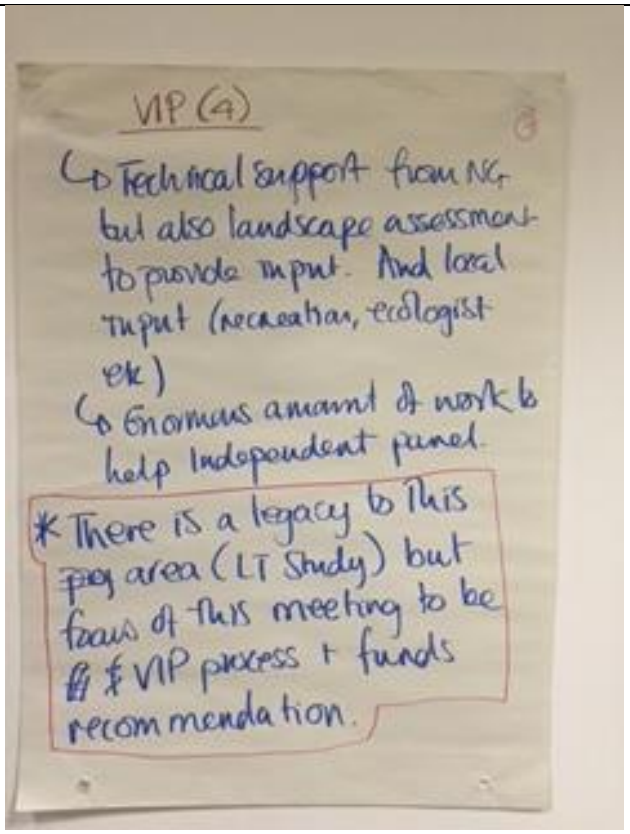


Date	24/03/15	Project	VIP – Peak District
Facilitators	Pippa Hyam and Suzannah Lansdell	Task	VIP Overview

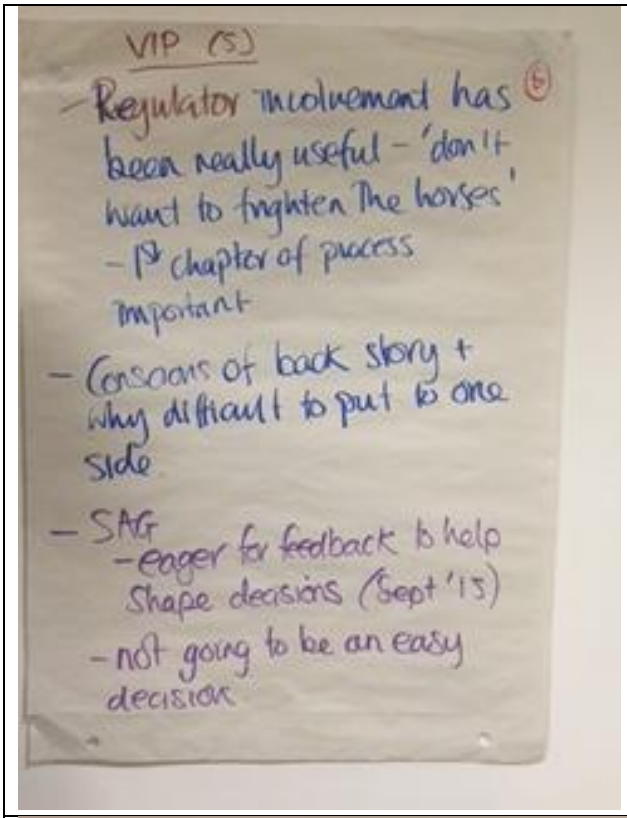


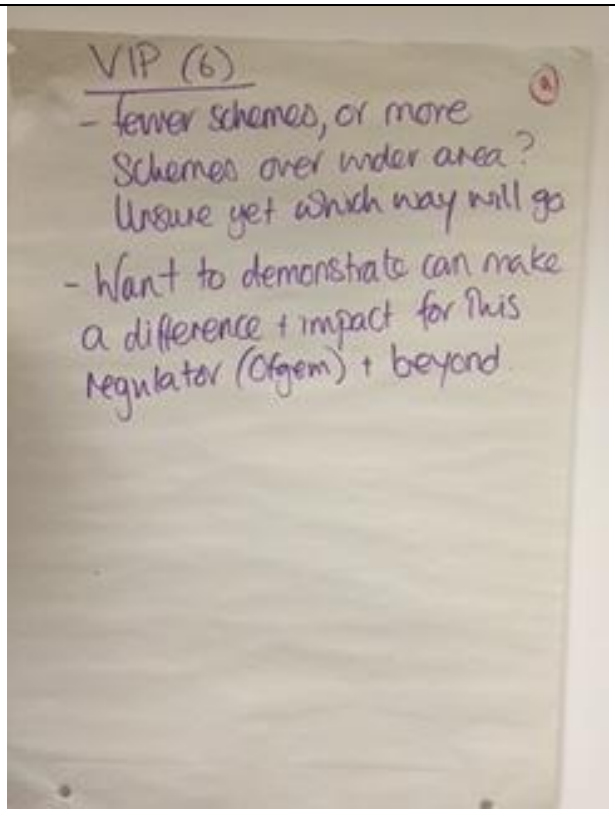


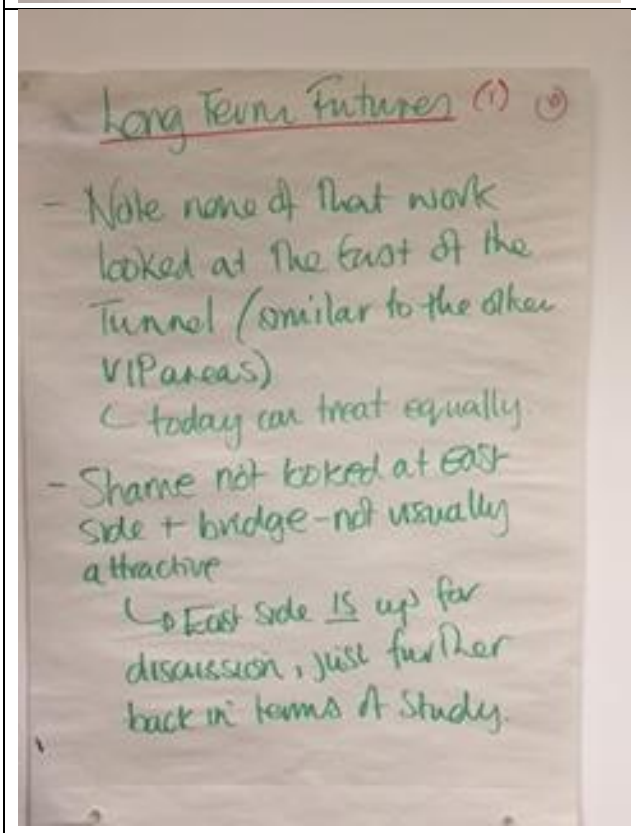


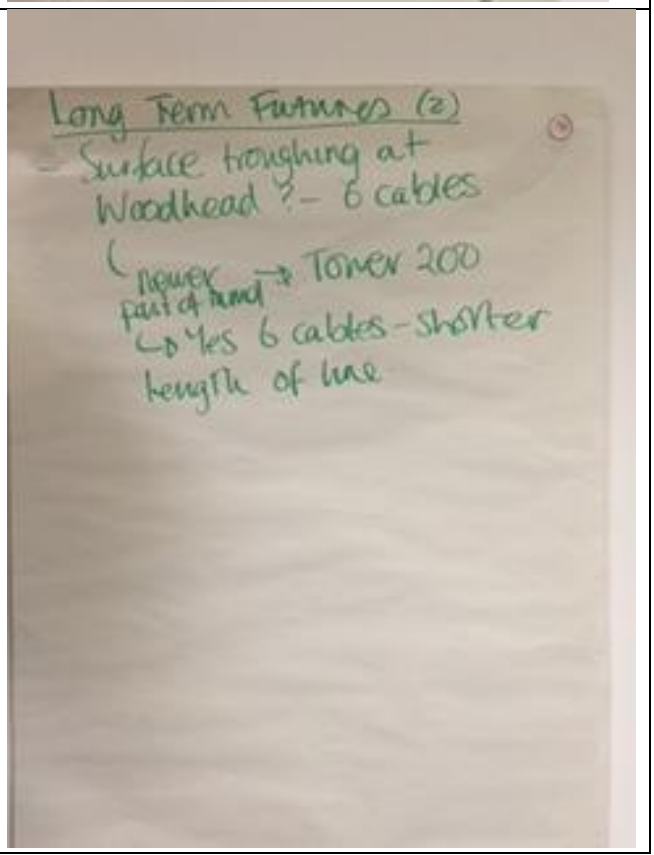


Date	24/03/15	Project	VIP – Peak District
Facilitators	Pippa Hyam and Suzannah Lansdell	Task	VIP Overview and Long Term Future Study

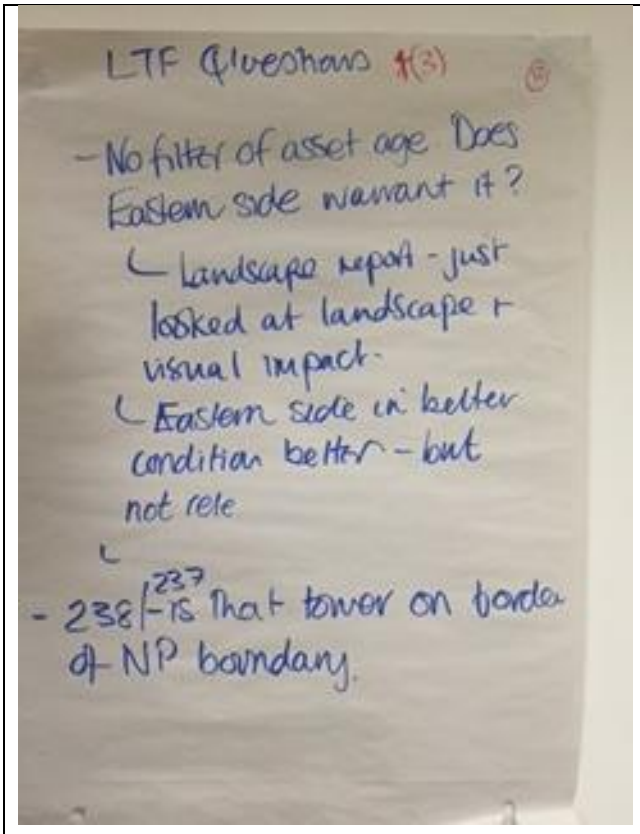


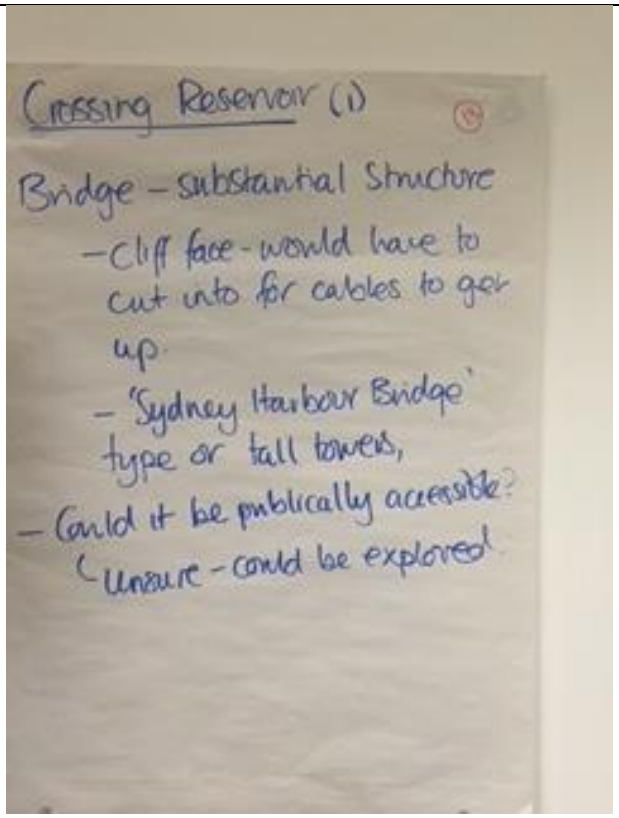


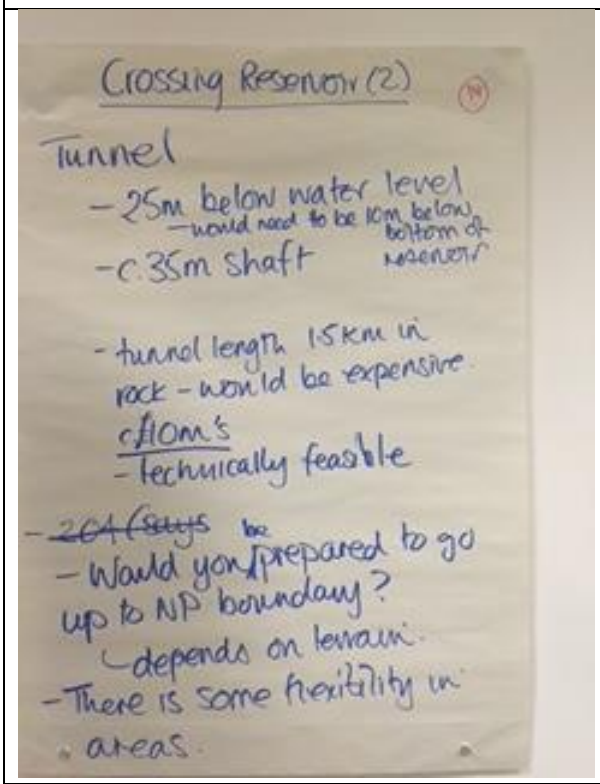


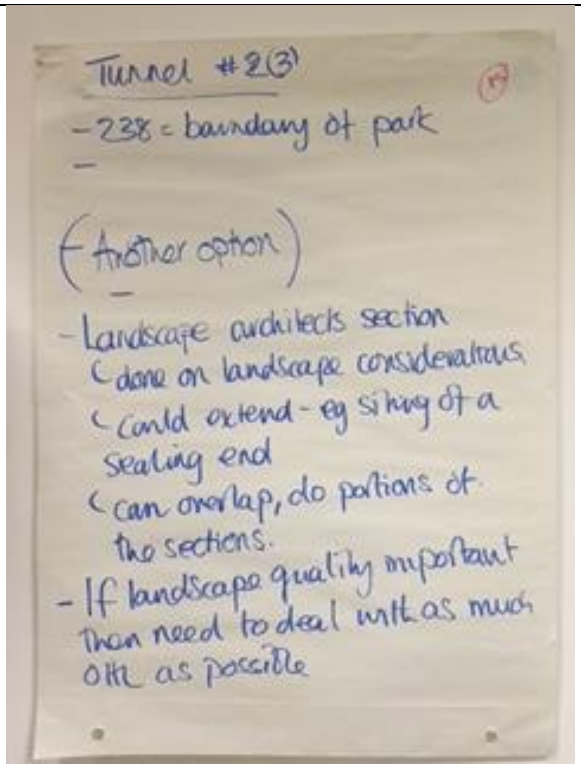


Date	24/03/15	Project	VIP – Peak District
Facilitators	Pippa Hyam and Suzannah Lansdell	Task	Long Term Future and Options Overview

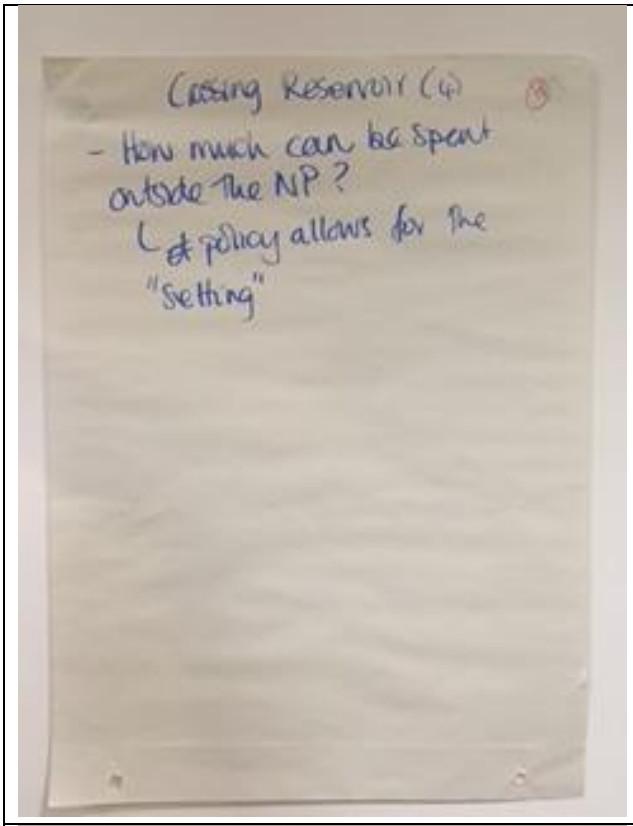


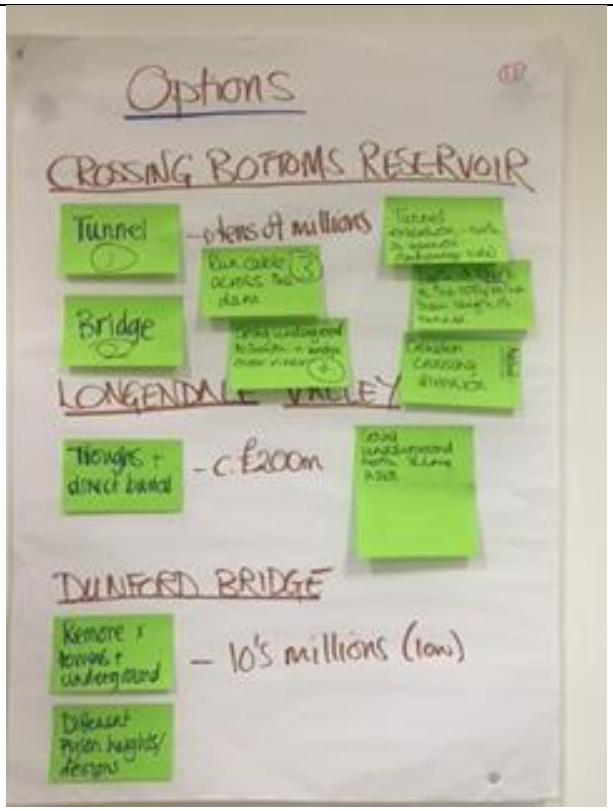


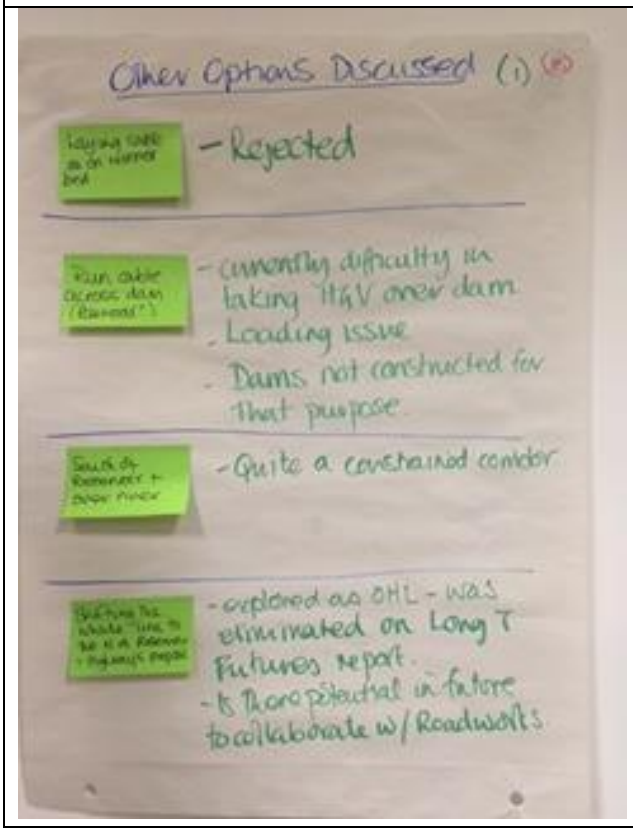


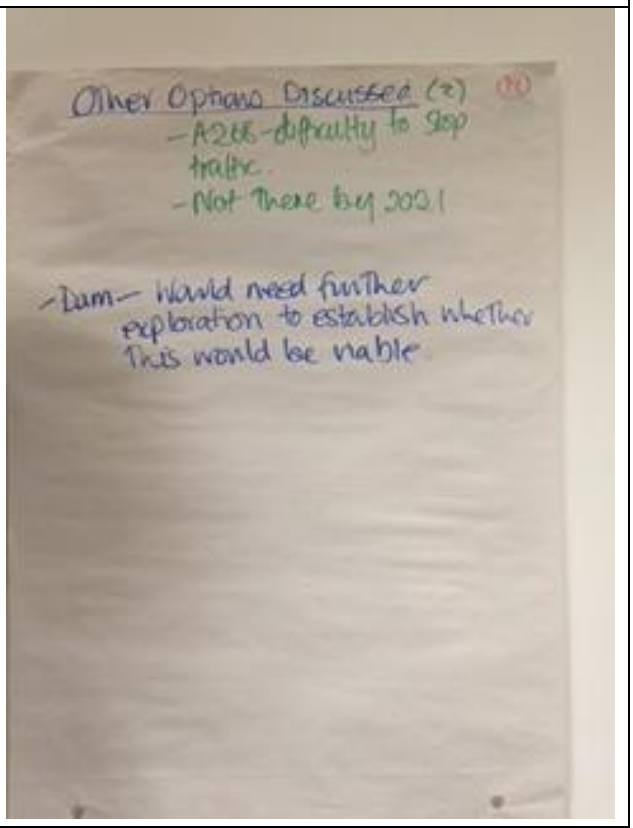


Date	24/03/15	Project	VIP – Peak District
Facilitators	Pippa Hyam and Suzannah Lansdell	Task	VIP Options

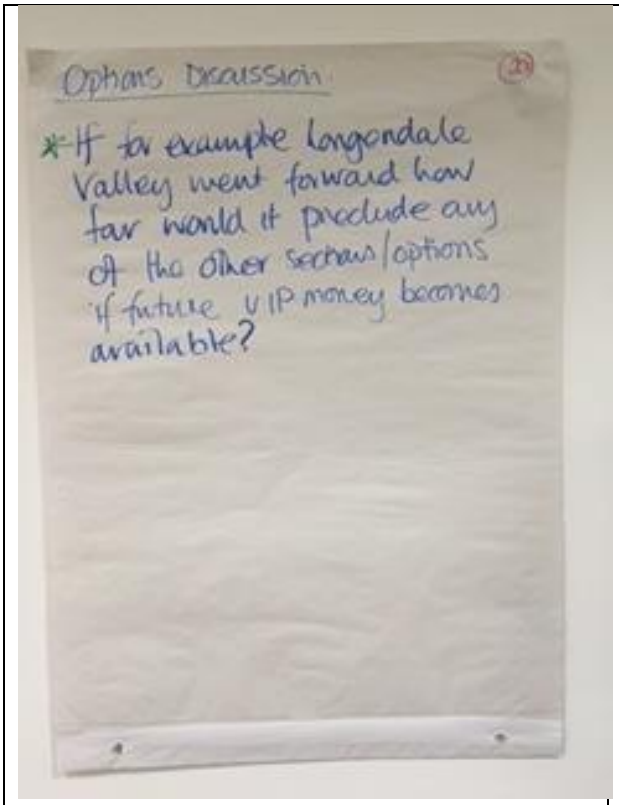


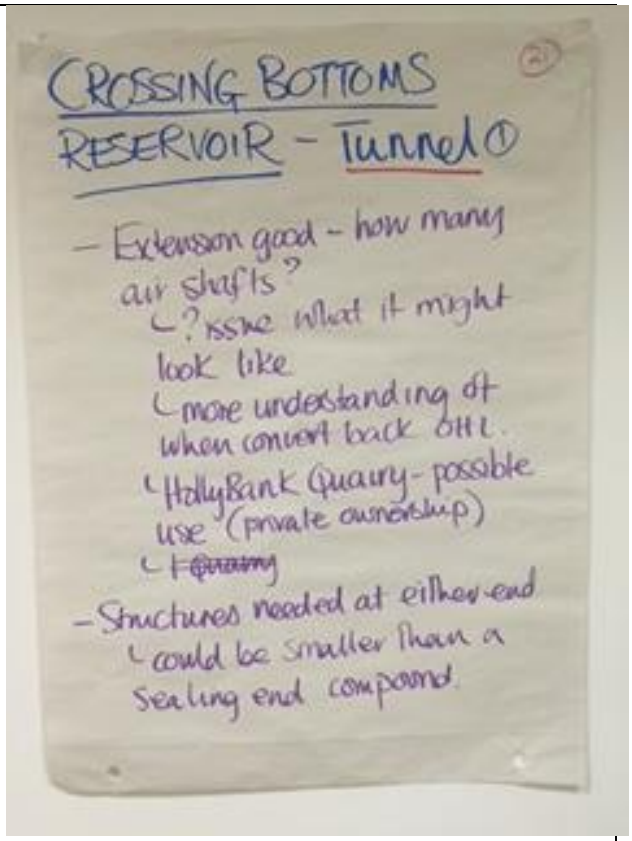


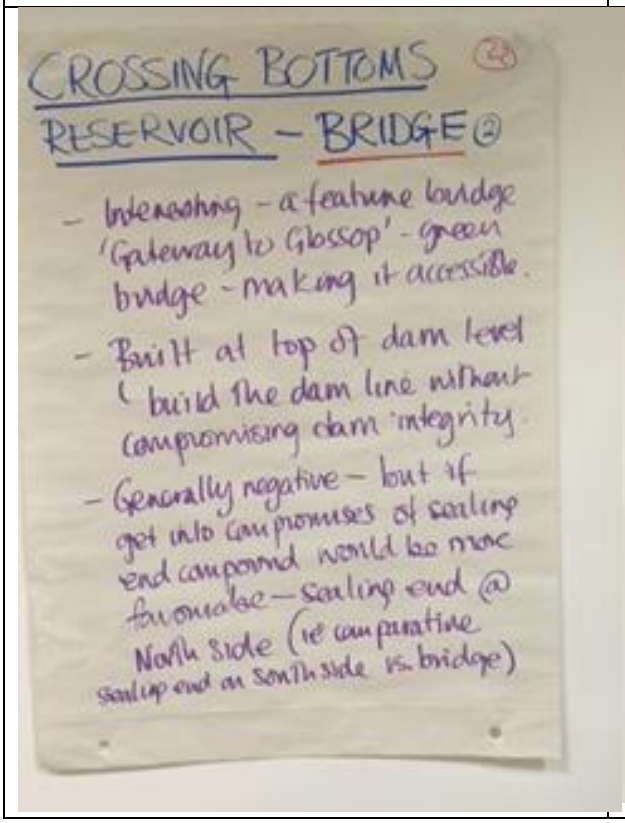


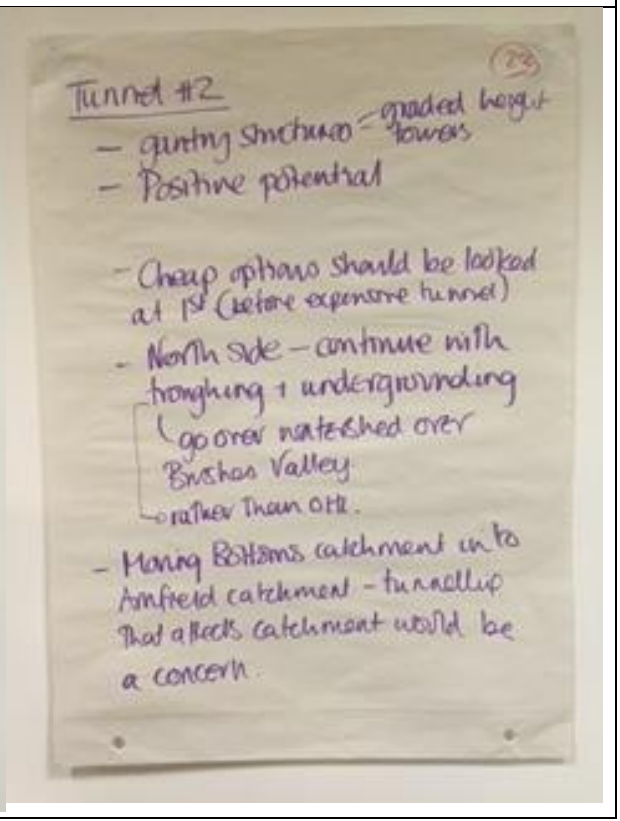


Date	24/03/15	Project	VIP – Peak District
Facilitators	Pippa Hyam and Suzannah Lansdell	task	Options Feedback

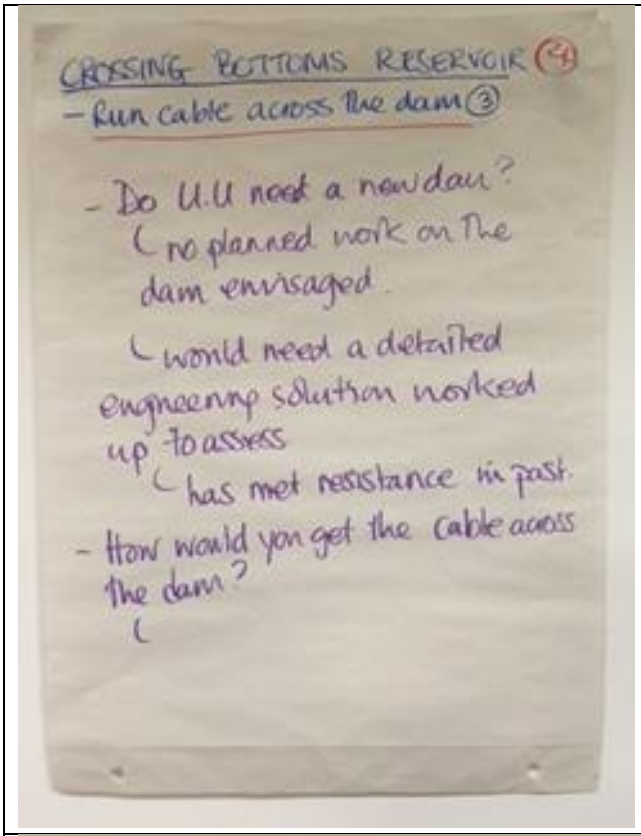


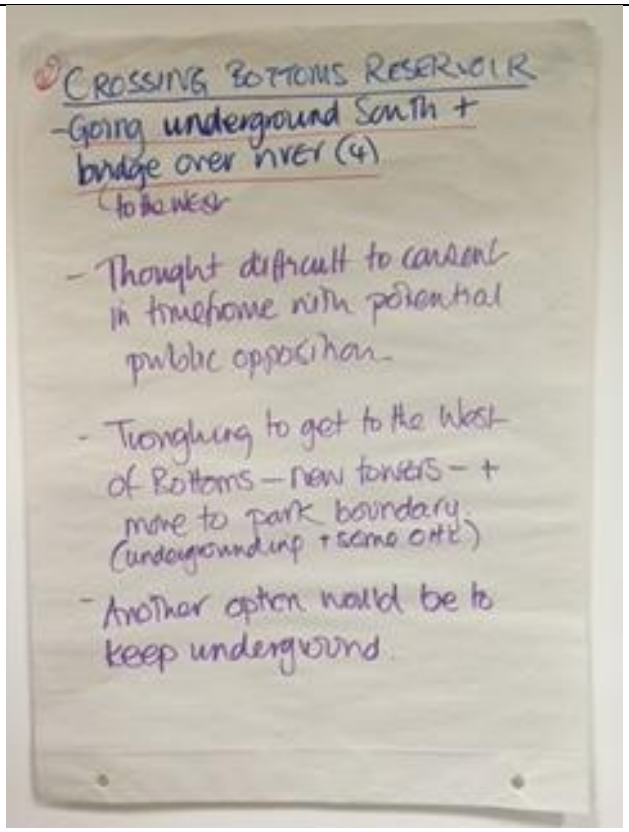


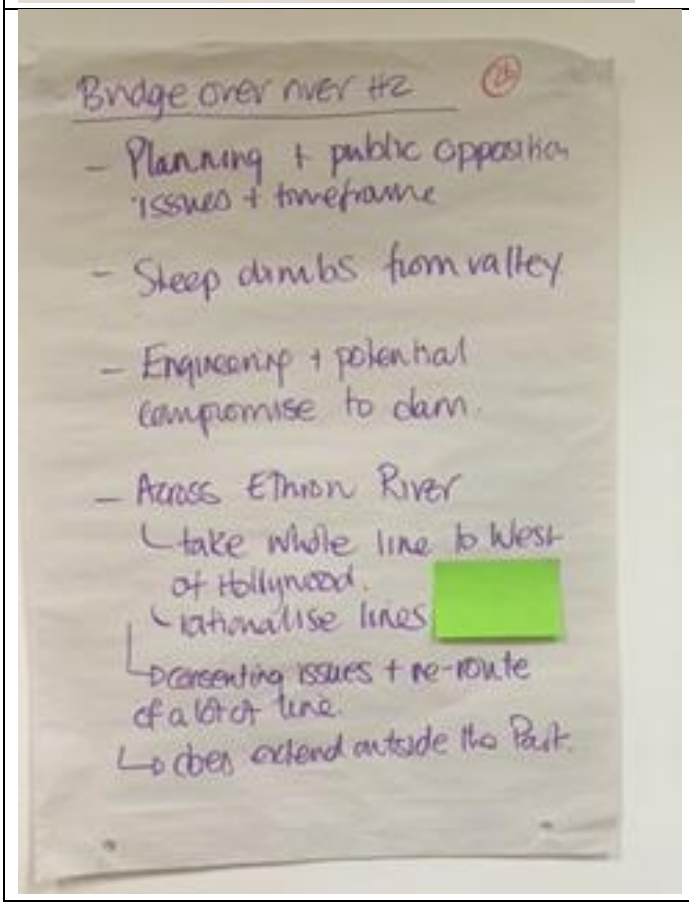


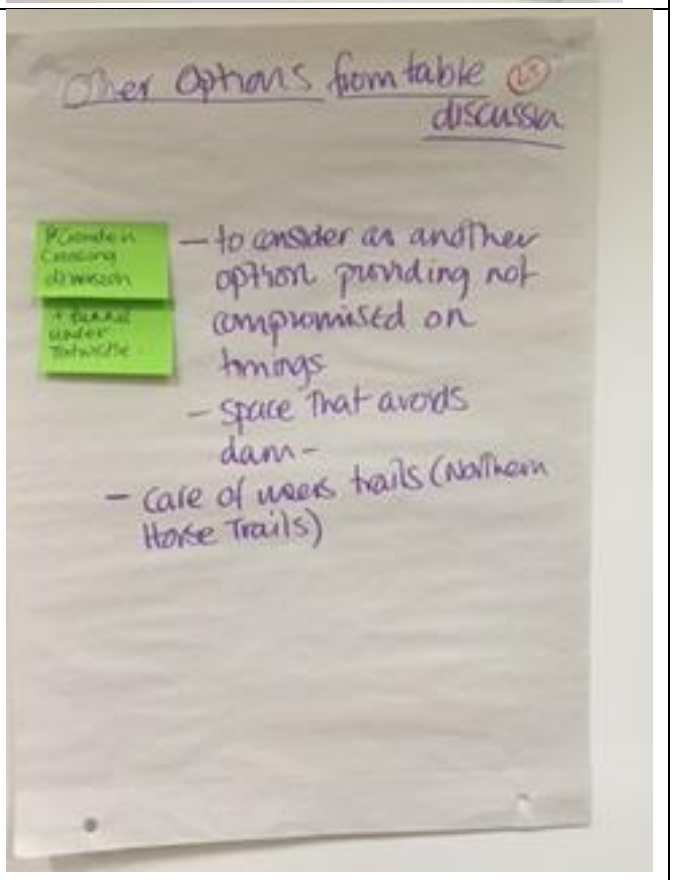


Date	24/03/15	Project	VIP – Peak District
Facilitators	Pippa Hyam and Suzannah Lansdell	Task	Options Feedback

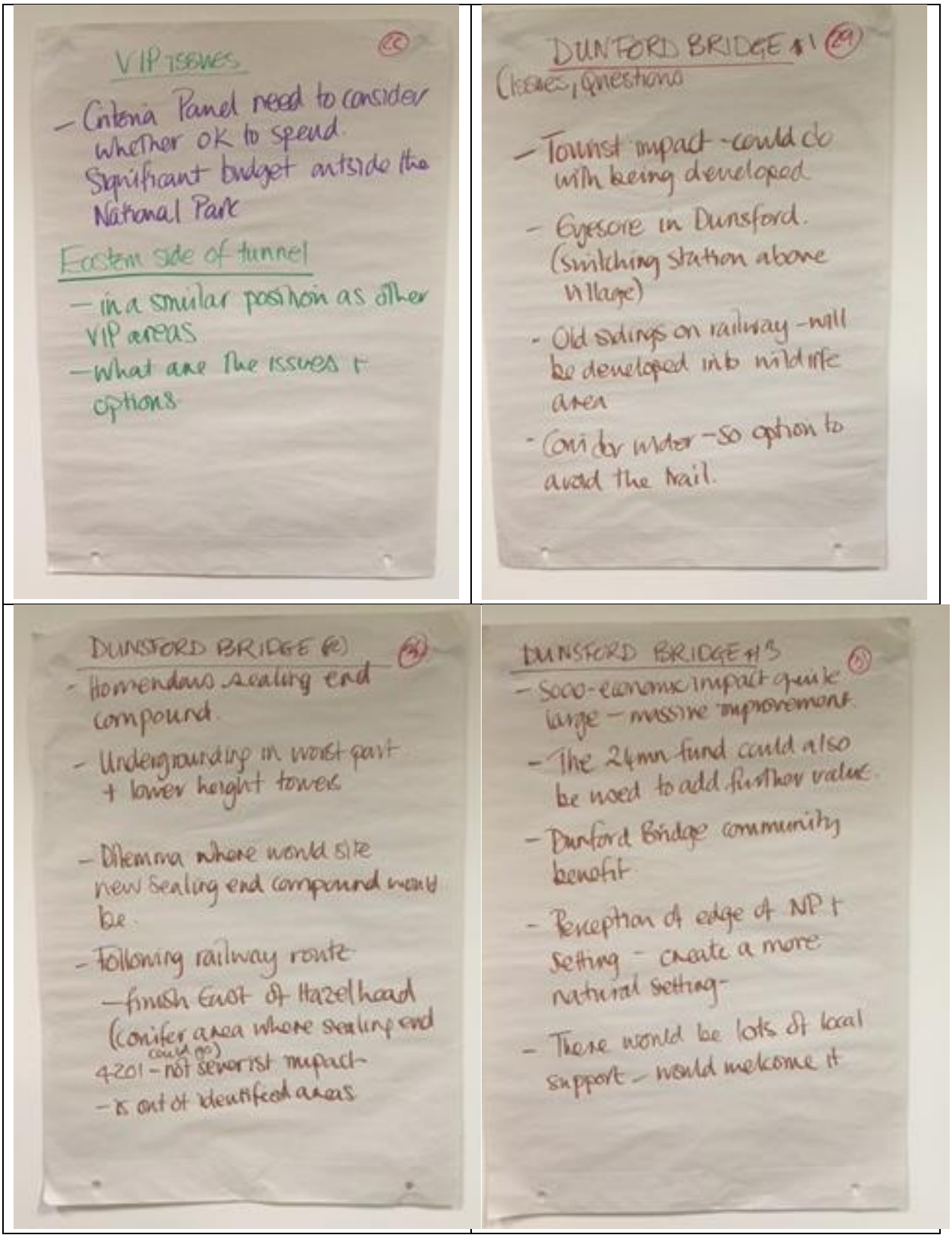




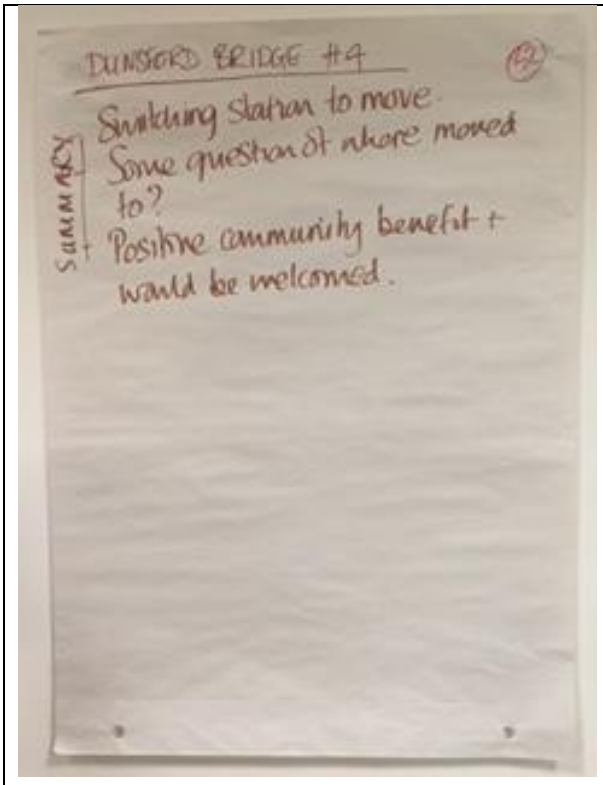


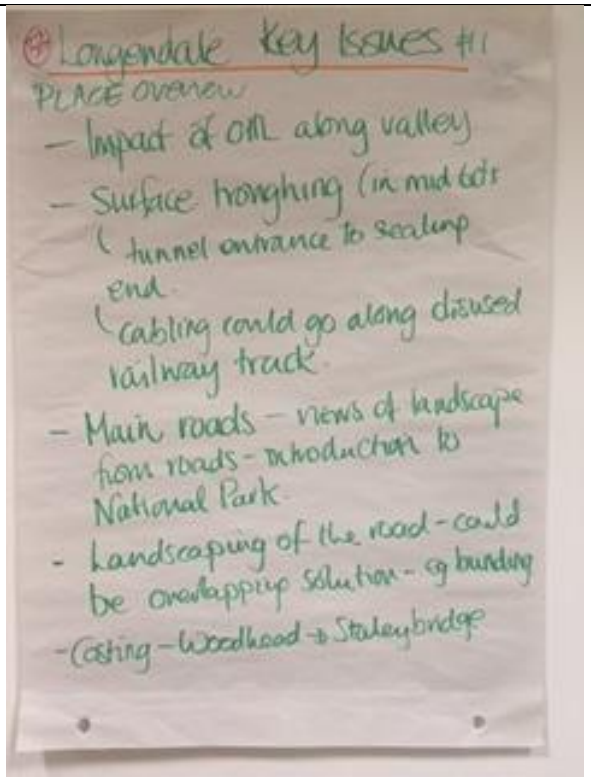


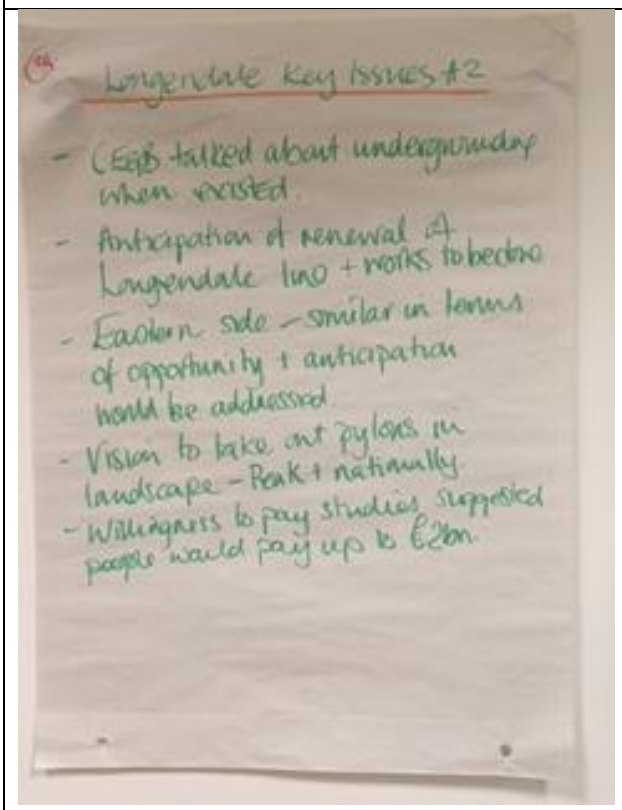
Date	24/03/15	Project	VIP – Peak District
Facilitators	Pippa Hyam and Suzannah Lansdell	Task	Options Feedback

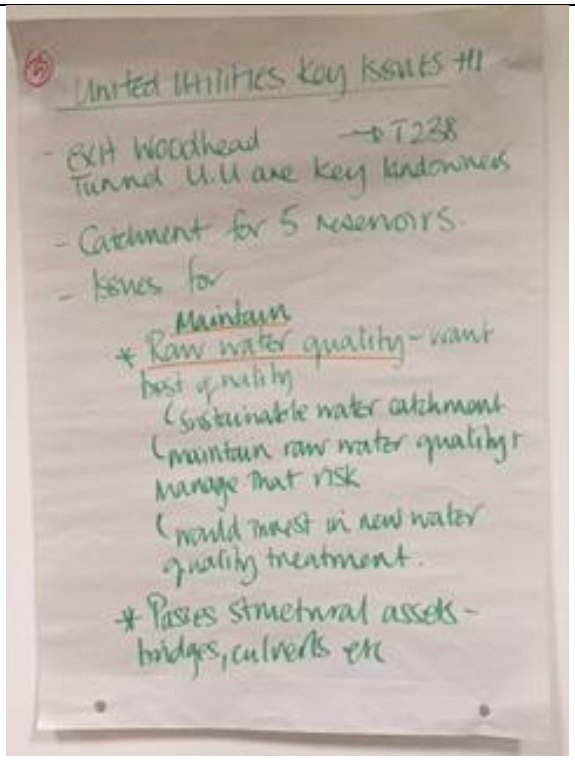


Date	24/03/15	Project	VIP – Peak District
Facilitators	Pippa Hyam and Suzannah Lansdell	Task	Options Feedback and PLACE & United Utilities key issues









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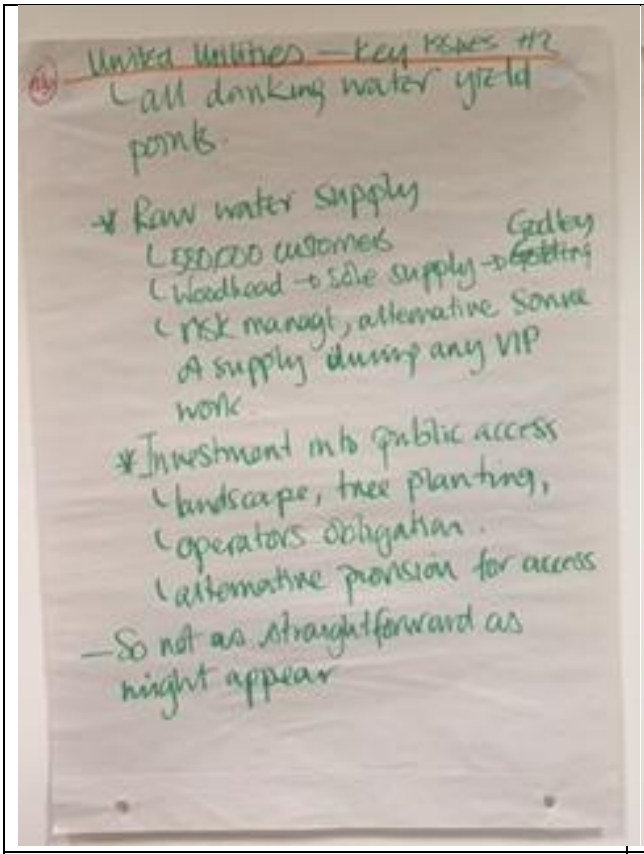
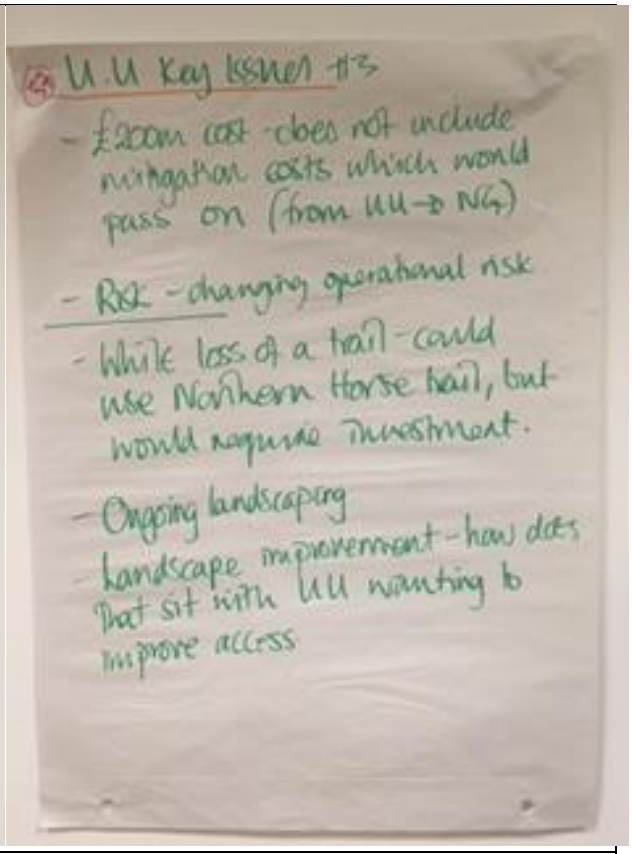
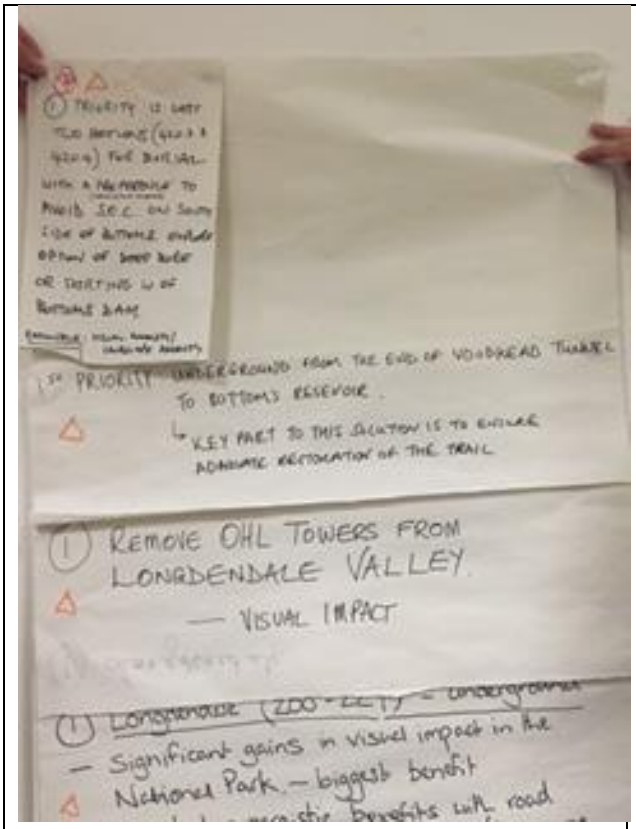
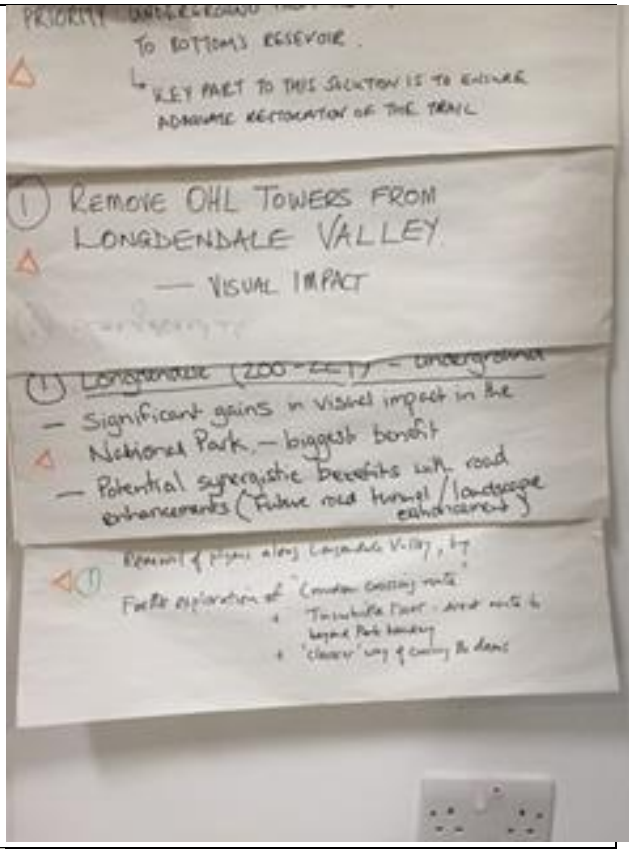
Facilitators	Pippa Hyam and Suzannah Lansdell	Task	United Utilities Key Issues

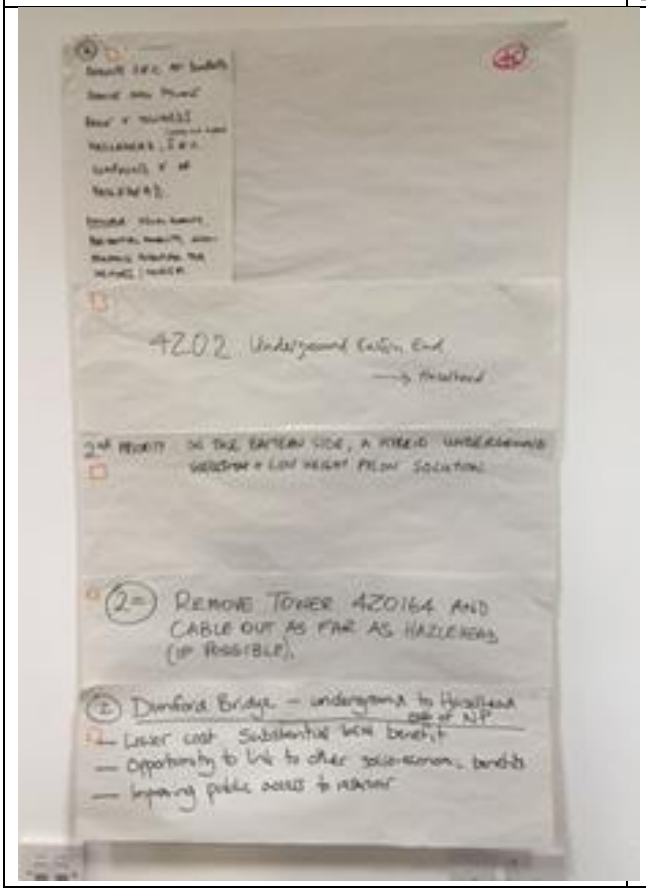




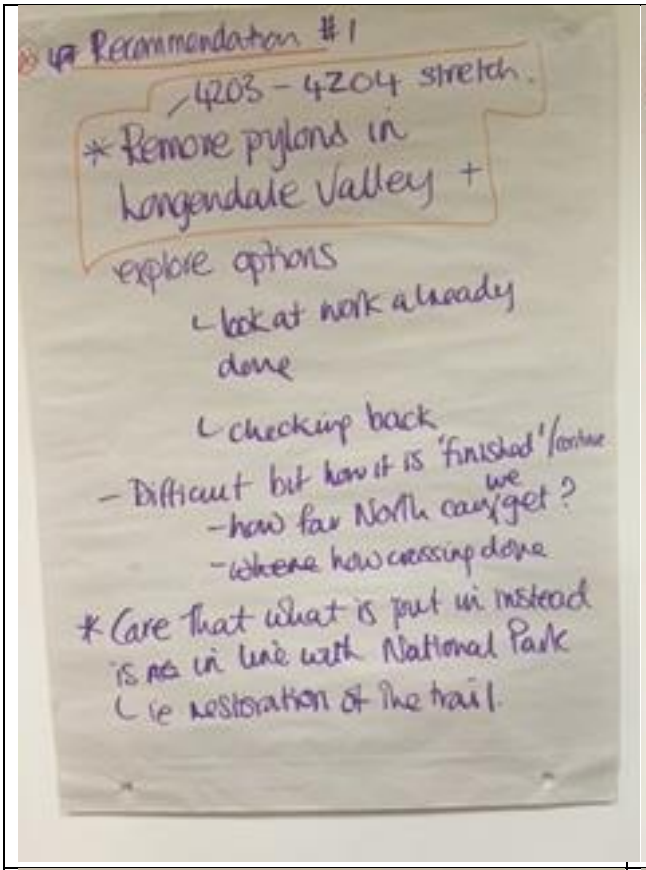
Date	24/03/15	Project	VIP – Peak District
Facilitators	Pippa Hyam and Suzannah Lansdell	Task	Table Recommendations

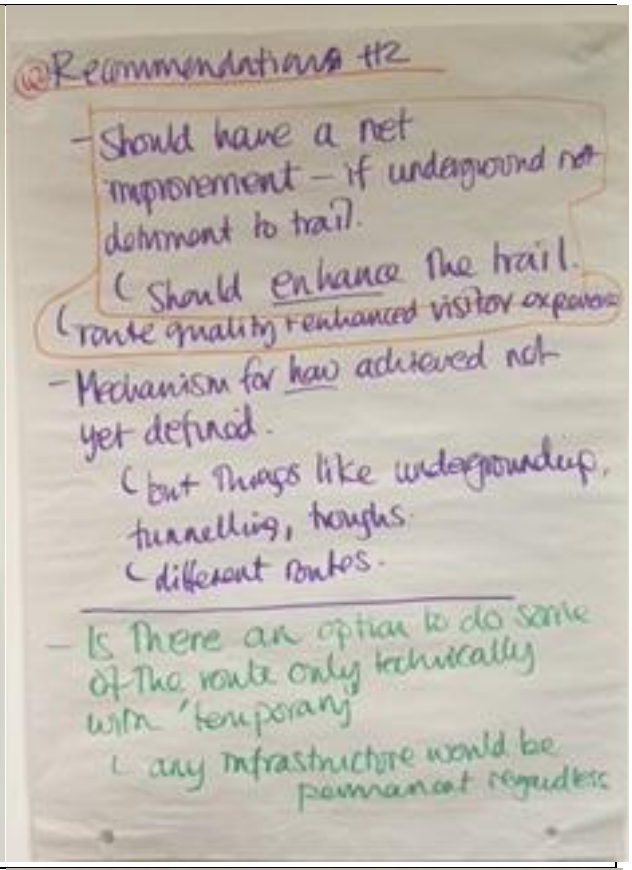


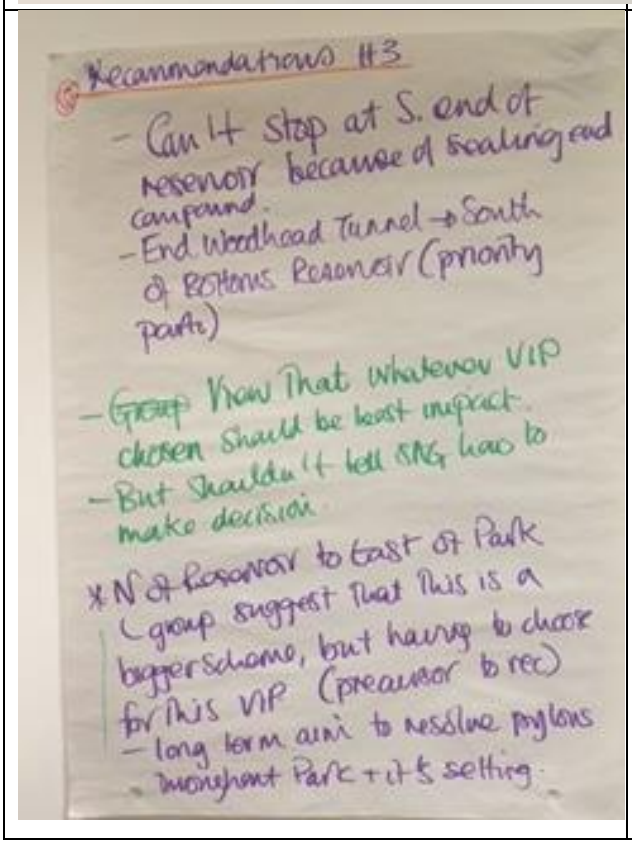


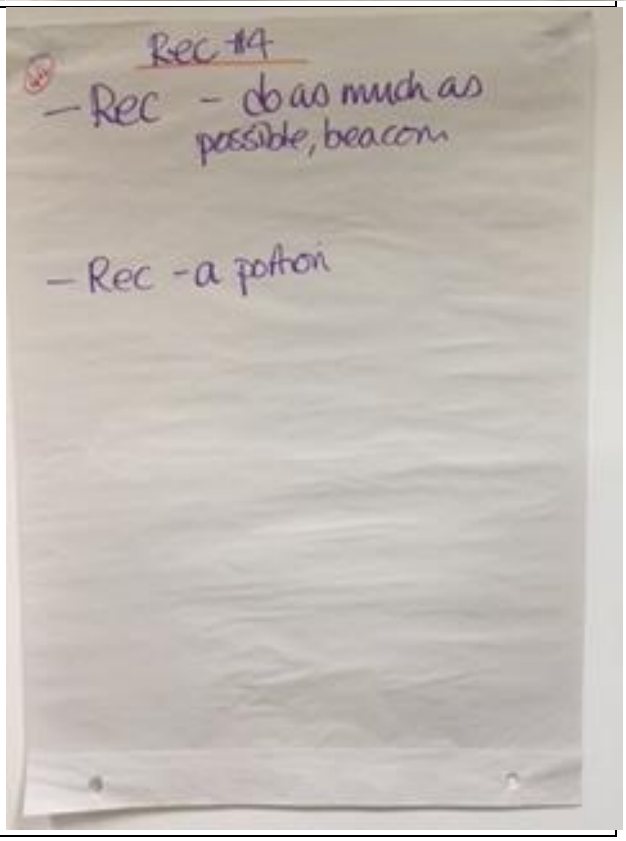


Date	24/03/15	Project	VIP – Peak District
Facilitators	Pippa Hyam and Suzannah Lansdell	Task	Recommendations Discussion

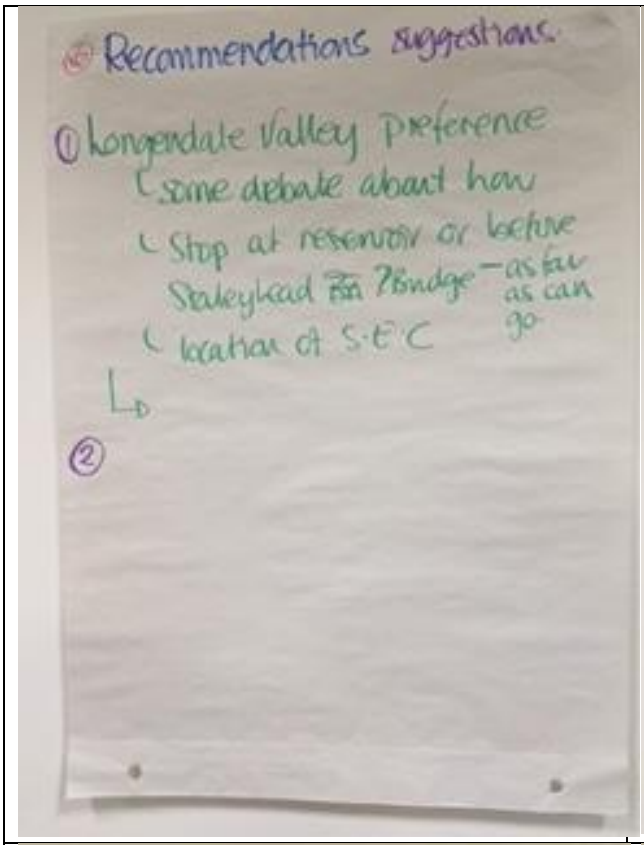


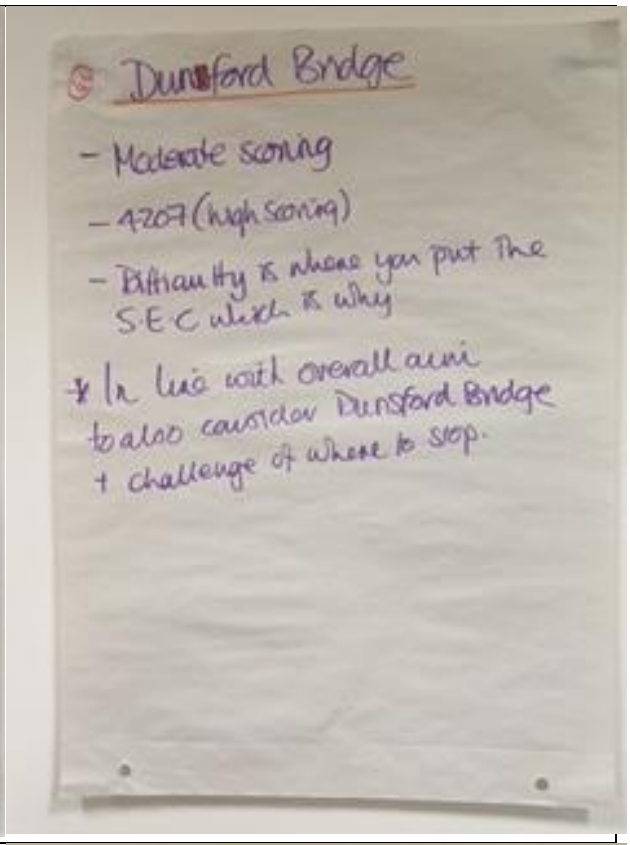


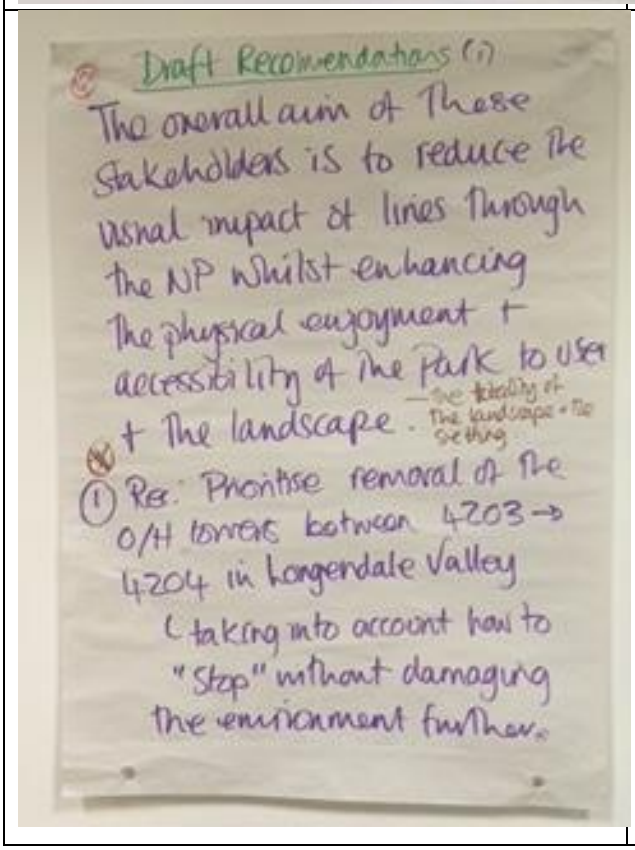


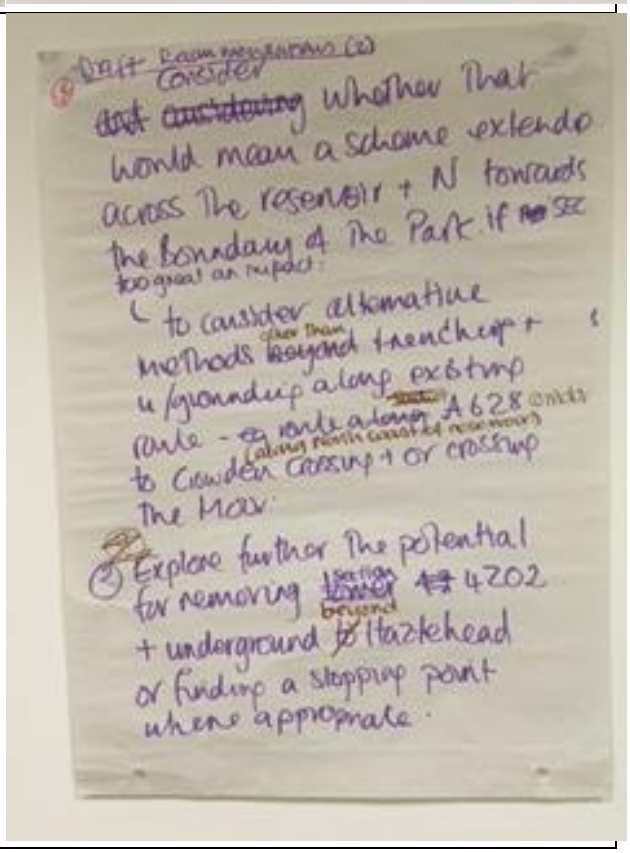


Date	24/03/15	Project	VIP – Peak District
Facilitators	Pippa Hyam and Suzannah Lansdell	Task	Recommendations Discussion & Draft Recommendation Text

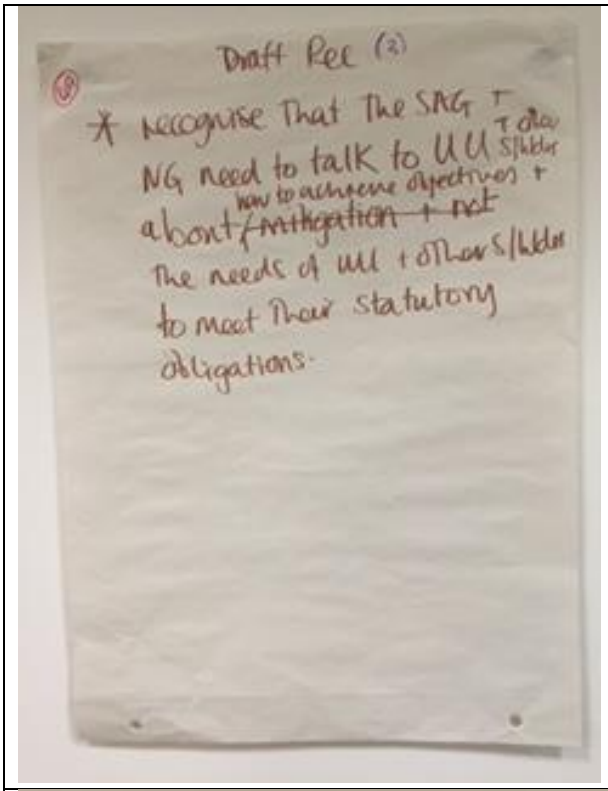


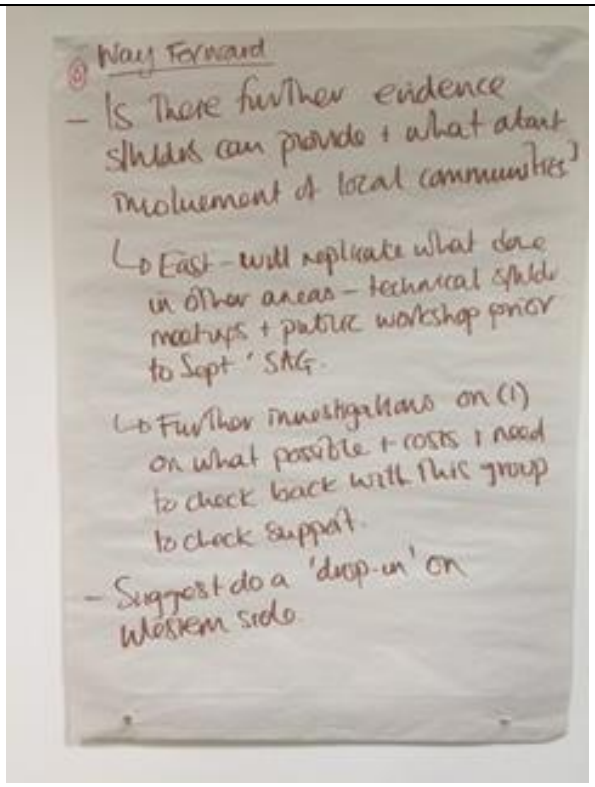


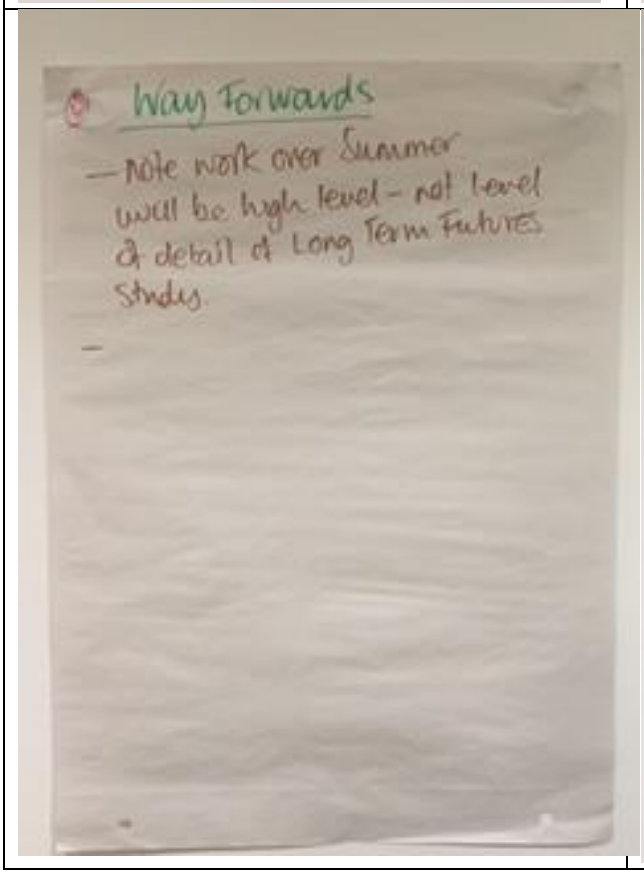


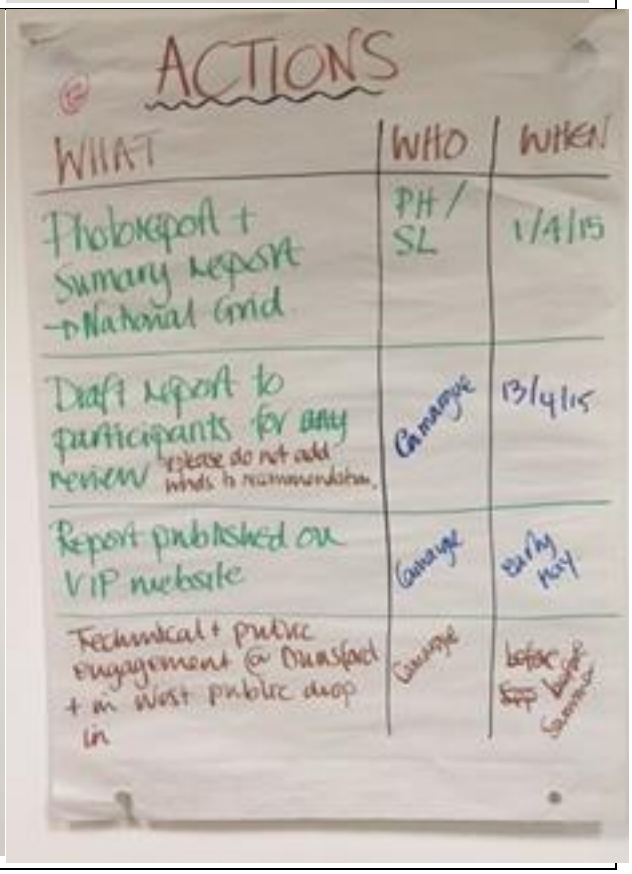


Date	24/03/15	Project	VIP – Peak District
Facilitators	Pippa Hyam and Suzannah Lansdell	Task	Draft Recommendation Text, Way Forward & Actions

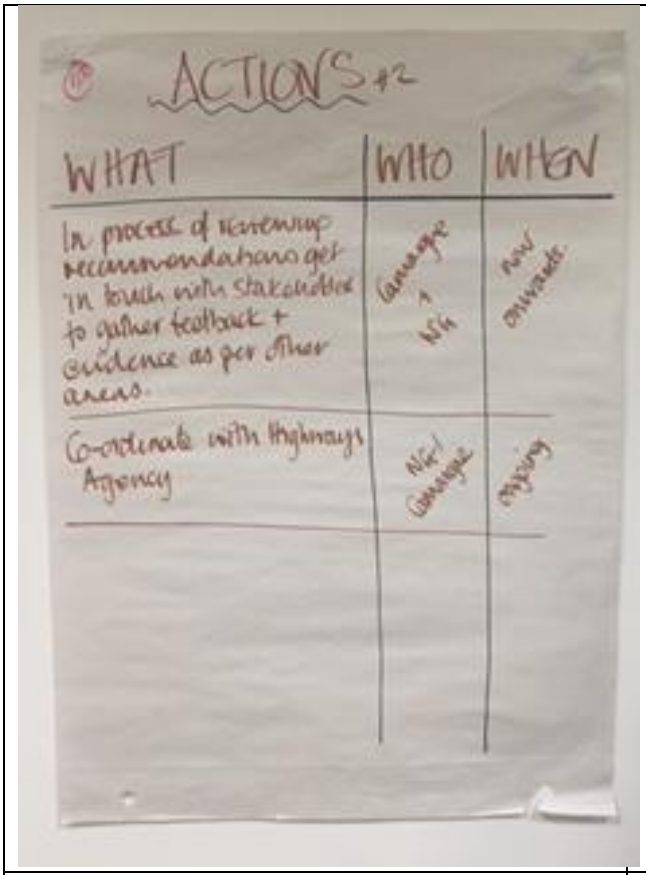








Date	24/03/15	Project	VIP – Peak District
Facilitators	Pippa Hyam and Suzannah Lansdell	Task	Actions



Appendix 2: Presentation Slides

Hector Pearson, National Grid

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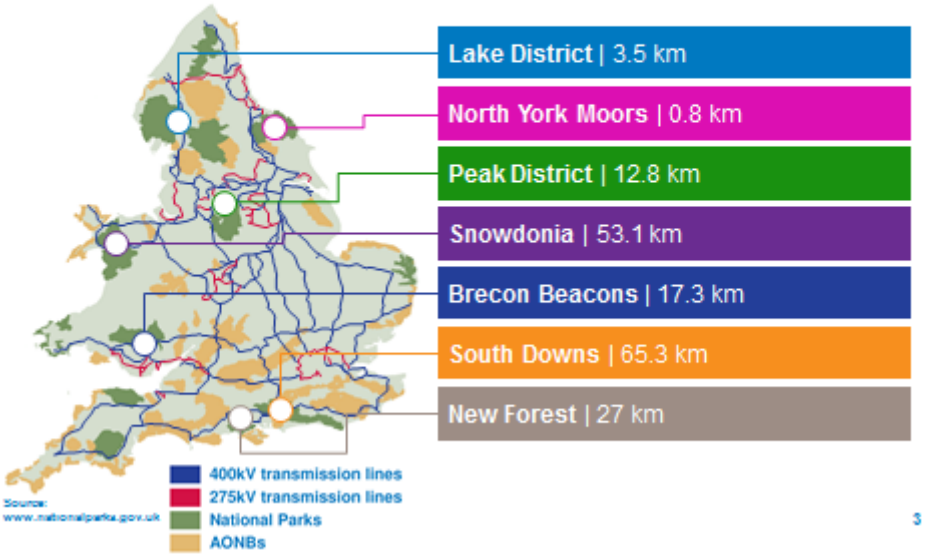
Our lines in National Parks



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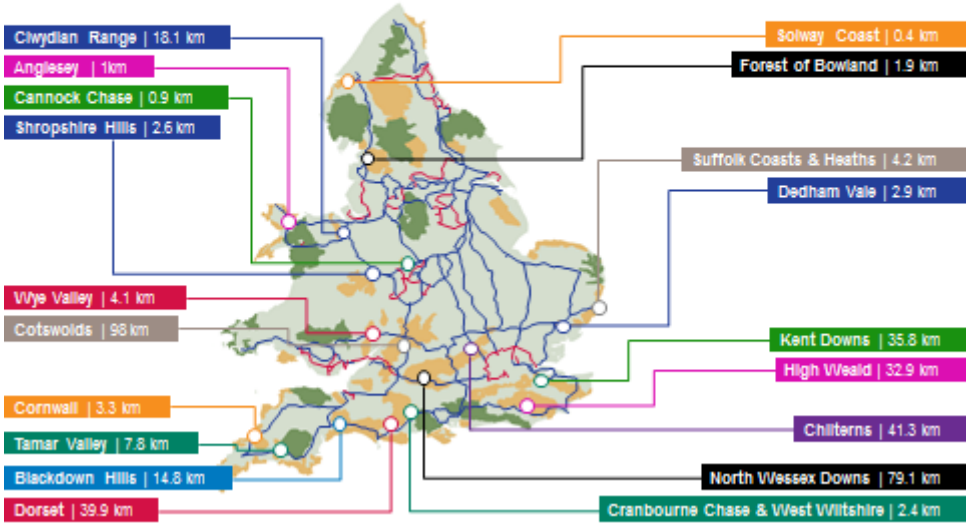
Our lines in AONBs



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Lines in National Parks and AONBs

National Park	OHL (km)	Cables (km)
Brecon Beacons	17.3	-
Dartmoor	-	-
Exmoor	-	-
Lake District	3.5	-
New Forest	27	-
North York Moors	0.8	-
Northumberland	-	-
Peak District	12.8	5
Pembrokeshire Coast	-	-
Snowdonia	53.1	-
South Downs	65.26	-
The Broads	-	-
Yorkshire Dales	-	-
TOTAL	179.76	5

AONB	OHL (km)	Cables (km)
Anglesey	1	-
Arnside and Silverdale	-	-
Blackdown Hills	14.8	-
Cannock Chase	0.9	-
Chichester Harbour	-	-
Chilterns	41.3	-
Clwydian Range / Bryniau Clwyd	18.1*	-
Cornwall	3.3	-
Cotswolds	98	-
Cranbourne Chase & W Wilts	2.4	-
Dedham Vale	2.9	-
Dorset	30.9	-
East Devon	-	-
Forest of Bowland	1.9	-
Gower (Gwyr)	-	-
High Weald	32.9	-
Howardian Hills	-	-
Isle of Wight	-	-
Isles of Scilly	-	-
Kent Downs	35.8	6.2
Lincolnshire Wolds	-	-
Llyn (Lleyn)	-	-
Malvern Hills	-	-
Mendip Hills	-	-
Nidderdale	-	-
Norfolk Coast	-	-
North Devon	-	-
North Pennines	-	-
North Wessex Downs	79.1	2.85
Northumberland Coast	-	-
Quantock Hills	-	-
Shropshire Hills	2.6	-
Solway Coast	0.4	-
South Devon	-	-
Suffolk Coasts & Heaths	4.2	-
Surrey Hills	-	-
Tamar Valley	7.8	-
Wye Valley	4.1	2.5
TOTAL	391.40	11.55

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Our Approach

Our Policy

The policy document sets out our plans for using the allowance. These include:

- setting up an independently chaired Stakeholder Advisory Group to help National Grid set the priorities for spending the £500m;
- substantial engagement with organisations and communities not on the advisory group; and
- decision making based on a series of Guiding Principles.

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Guiding principles

Prioritise proposals which...

Result in the greatest landscape enhancement	Result in the greatest opportunities to conserve and enhance natural beauty, wildlife and cultural heritage	Result in the greatest opportunities to encourage public understanding and enjoyment of the protected landscapes	Are technically feasible in context of the wider transmission system	Are economical and efficient
landscape sensitivity; impact of lines	*ecology; historic environment; water; local air quality; noise and vibration; soils and geology*	*local socio-economic impact;*	*network performance; technical complexity; construction / project delivery issues etc.*	*Value-for-money; early asset write-off*

7

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The Stakeholder Advisory Group

Landscapes for life

National Parks England

NATIONAL PARKS WALES
Britain's breathing spaces

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ofgem

ENGLISH HERITAGE

NATURAL ENGLAND

CPRE Campaign to Protect Rural England

Landscape Institute
Inspiring great places

Cyfoeth Naturiol Cymru
Natural Resources Wales

Cadw

ramblers

VisitEngland

YDCW CPRW

National Trust

Campaign for National Parks

Visit Wales
Croeso Cymru

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Landscape Assessment Methodology

Alongside the policy, we published a Landscape and Visual Assessment methodology.

Used as a basis for prioritising landscape.

A shortlist of the worst affected areas will be taken forward for further assessment, to look at the potential for undergrounding or other mitigation.

For the rest, less intrusive mitigation options such as tree screening will be considered.

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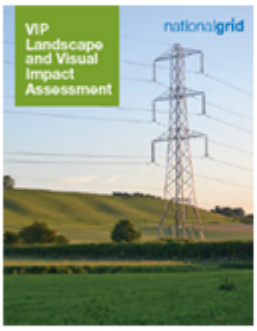
What have we been doing?



- Completed the landscape and visual impact assessment on 571km of overhead line during the summer of 2014.
- Published the findings of the study on the 10th November 2014
- A major media pick up of the 12 shortlisted sections
- Engaged with all 8 shortlisted designations
- Announced the Landscape Enhancement Initiative

Sections of line with the highest landscape and visual impact

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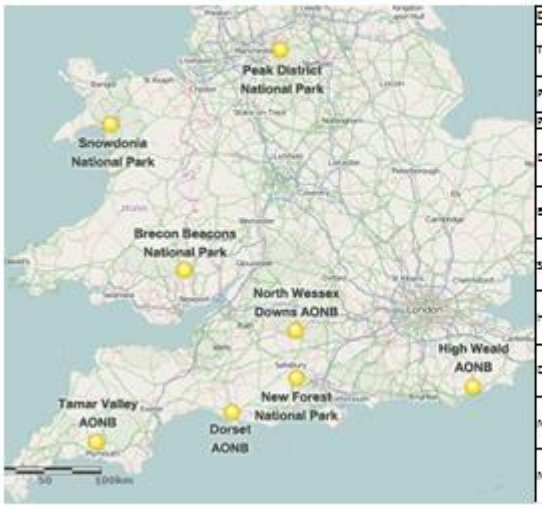

Designation	Substations	Tower numbers
Tamar Valley	Landulph to Langage	004 - 0019
Peak District (West)	Stalybridge to Thorpe Marsh	211 - 255
		200 - 210
Peak District (East)		256-264
Dorset (LUC)	Chickerell to Exeter	170 - 177
		195 - 210
Brecon Beacons (GH)	Pembroke to Waltham	183-199
Snowdonia (GH)	Penbir to Trawsfynydd	004-052
High Weald (LUC)	Dungeness to Ninfield	116 - 155
Dorset (LUC)	Chickerell to Mannington	025 - 059
New Forest (LUC)	Fawley to Mannington	056 - 066
North Wessex Downs	Bramley to Walkham	82-104

11

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What next?

Capital-intensive mitigation

Further work to assess shortlisted areas

Tamar Valley taken forward to more detailed options – template for others

Landscape enhancement initiative

Mechanism in development

£24m over six years

Open to all 30 AONBs / NPAs

Launch in summer 2015

Innovation projects

Project looking into innovative ideas – new ways of reducing visual impact?

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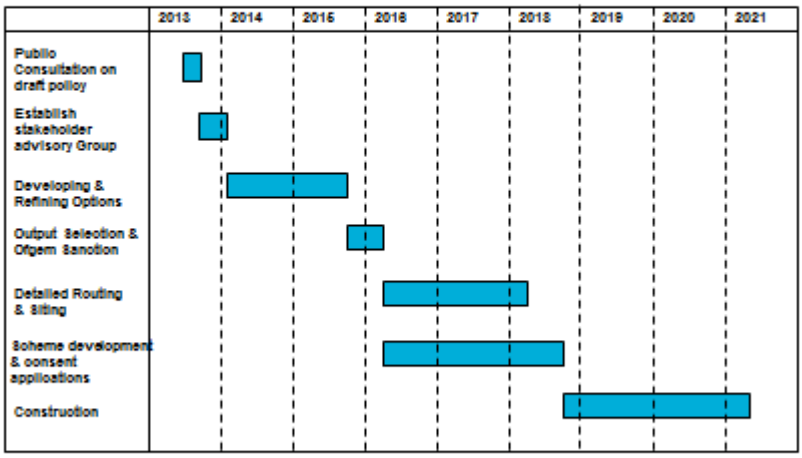
Long term programme



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Process

- We will progress options for each site, testing these with local Stakeholder Reference Groups
- Preferred options will be taken to the VIP Stakeholder Advisory Group meeting in September, for decisions to be made on which schemes to progress.
- Preferred schemes will progress through:
  - Design
  - Public consultation
  - EIA if appropriate
  - Planning and environmental consents
- Local input / support is critical. We would prefer to work in partnership with the National Park Authority / AONB.

Steve Knight-Gregson, National Grid

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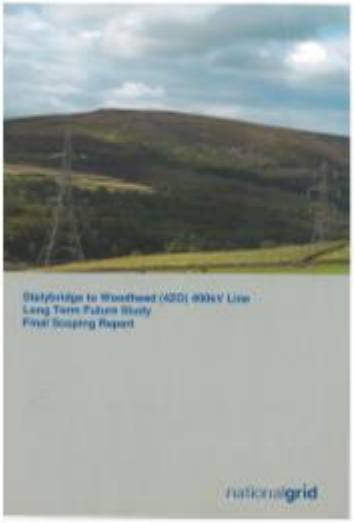
Re-cap

- Study context
- 2008 scoping
- 2009 interim update
  - Underground option
  - Overhead option
- 2010 construction feasibility
- 2011 draft report
  - Findings
  - Further work
- 2012 pause



17

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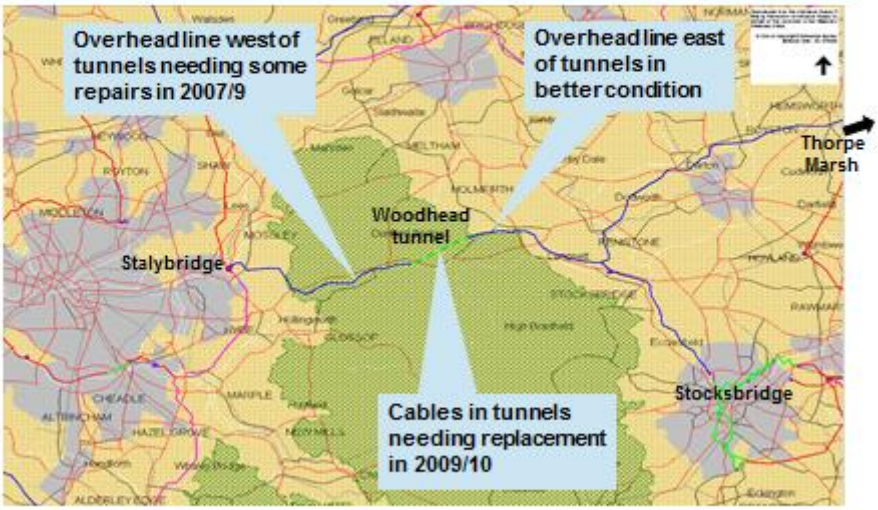
Study context (~2006)



18

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2008 scoping

- Draft scoping report issued for comment (July 2008)
- Stakeholder meeting to discuss scoping (Sept 2008)
- Final scoping report issued (March 2009)
- **Purpose**
  - Assist consideration of long-term future options for Stalybridge to Woodhead route
  - Identify/evaluate issues and relative pros & cons of alternatives:

(i) physical, planning & environmental; (ii) technical, engineering & design-related; (iii) health & safety; (iv) potential social impacts; & (v) economic/cost

  - Inform & assist discussions with key stakeholders
  - Inform & assist decision about option to take forward

19

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Stakeholders consulted

- Peak District National Park Authority
- High Peak District Council
- Derbyshire County Council
- Tameside Metropolitan Borough Council
- Oldham Borough Council
- Kirklees Council
- Barnsley Metropolitan Borough Council
- Campaign for the National Parks
- Natural England (Derbyshire, West Yorks & South Yorks)
- English Heritage (Derbyshire, Greater Manchester & Yorkshire)
- Environment Agency
- Friends of the Peak District
- Department for Transport
- Network Rail
- The Northern Way
- PLACE
- Charlesworth & Tintwistle Parish Councils
- United Utilities
- Trans Pennine Trail Officers
- Ramblers Association

20

Options considered & 2009 Interim Update

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1. Replacement of existing towers in situ
2. Temporary direct overhead line from Woodhead Tunnel to boundary of Peak District National Park to facilitate in-situ permanent overhead line replacement
3. Permanent replacement overhead line from Woodhead Tunnel to boundary of Peak District National Park & dismantle existing
4. Direct buried underground cable installation
5. Surface mounted trough cable installation
6. Combined submarine (via public water supply reservoirs) & terrestrial underground cable
7. Direct deep tunnel from Woodhead Tunnel to boundary of Peak District National Park
8. Overhead line north around Peak District National Park
9. Rising bore from Woodhead then direct bury across moor (10km)

21

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2010 construction feasibility

- Topic based workshops for stakeholders (November 2009) – overhead lines and underground cables
  - Options 4 and 5 discussed in more detail – constructability checks needed for both and thermal resistivity of backfill material needed for option 5
- Site walkover with stakeholders (October 2009)
- Construction feasibility completed Feb 2010, looking at:

i. routeing options
ii. available width on Longdendale Trail
iii. bridge and road crossings
iv. land features (old rail bed, cuttings, embankments, slopes, etc)
v. water features (longitudinal water flow on many stretches and two ponds along the route)

22

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2010 construction feasibility

Main findings

- Only practical to direct bury cables along about 50% of the route (lack of available width key constraint)
- Surface troughs feasible for remaining 50% of the route
- Considerable further work necessary to 'finalise' a route including:
  - Development of a cable construction methodology for the Longdendale Trail covering trench spoil haulage and storage, construction traffic and access, sequence of works, site storage, crossing designs, further geotechnical studies, mitigation options, etc
  - Feasibility study and a construction methodology required for the route from the Longdendale Trail to north of Bottoms Reservoir. Agreement from United Utilities would be required. Technical issues (induced voltages, high circulating currents and reduced current ratings).

23

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2010 construction feasibility

Main findings (continued)

- Width restrictions on Longdendale Trail (down to 9m in extremely constrained places) mean that reduced swathe widths would be required
- Indicative swathes from 26m down to 9m were considered
- Negative impacts on construction speed, cost and traffic movements (both on and off site) increase as swathe width is reduced
- Hybrid underground solution emerged - direct bury where practical with surface troughs elsewhere
- Assume Bottoms reservoir can be crossed by directional drilling but considerable further engineering required and if not possible, an alternative would need to be found

24

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2010 construction feasibility

- 12 cables would have to be connected to the 6 cables in the Woodhead Tunnel (which have the benefit or air cooling)
- Existing Woodhead tunnel cable sealing end compound would be replaced
- An indoor, above-ground building would be required to house the specialised bifurcating joints required to connect the two cables into one at this transition joint
- Transition joint building footprint ~18 m(L) x 24 m(W) x 5 m(H)...considerably less than that occupied by the existing sealing end compound and 4ZO200 terminal tower at the Woodhead Tunnel
- Joint bays at 750m. Joint positions difficult with width constraints
- Sealing end compound locations need evaluating

25

2010 construction feasibility – environmental impacts

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- Construction of the cable route would require the removal of vegetation along the Longdendale Trail and north of the reservoir to the point where the cable connects back with the 4ZO line
- Removal of semi-mature to mature trees and scrub will impact on potential habitat for bats and nesting habitat for birds (mid-February to August)
- Removal of heather, grassland and bracken will impact on potential habitat that supports reptile species
- There are four areas of open water (ponds) along the Trail that would need to be drained/filled in. Whilst these provide habitat for amphibians there are no records of any protected amphibian species

26

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2011 draft report

- **Overhead line rebuild Woodhead to Stalybridge**
  - Replacement in situ feasible using predominantly single circuit outages. Indicative capital cost (including dismantling) - £55M.
- **Underground cable Woodhead to National Park boundary then overhead to Stalybridge**
  - Direct buried in combination with surface mounted troughs (at constrained places) feasible. Not possible to avoid the Longdendale Trail. Indicative capital cost (including overhead line from National Park to Stalybridge) - £184M to £203M
  - Surface mounted troughs feasible, but two cores per phase. Not possible to avoid the Longdendale Trail. Indicative capital cost - £208M to £238M

27

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2011 draft report

- Draft report issued for comment (Aug 2011)
- Stakeholder feedback meeting (Sept 2011)
- Meetings with PDNPA and PLACE (October 2011)
- Walk with PLACE to Bleaklow on Dark Peak (November 2011)
- Further areas of work discussed
  - HDD at Bottoms reservoir - more work necessary, but starting to look unlikely
  - Other options...
    - Cable to SEC south east of 4ZO227 and cross reservoir overhead
    - Cable bridge – major structure (weight of cables and span length)
    - Tunnel from south east of 4ZO227 to north of A628 and cable to one of the SEC locations north of Arnfield Reservoir
  - 'Before' and 'after' visualisations
    - Locations for photomontage fixed viewpoints discussed

28

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2012 pause

- Long Term Future Study on hold pending outcome of RIIO process
- If there are monies available under RIIO for undergrounding...revisit LTF taking account of monies available

29

Schematic overview of sections and initial options