

Agenda – Y Pwyllgor Cyfrifon Cyhoeddus

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|------------------------------------|--|
| Lleoliad: | I gael rhagor o wybodaeth cysylltwch a: |
| Ystafell Bwyllgora 3 – Senedd | Fay Buckle |
| Dyddiad: Dydd Llun, 31 Hydref 2016 | Clerc y Pwyllgor |
| Amser: 14.00 | 0300 200 6565 |
| | SeneddArchwilo@cynulliad.cymru |

(Cytunodd y Pwyllgor ar 17 Hydref 2015 ar gynnig o dan Reol Sefydlog 17.42 i benderfynu gwahardd y cyhoedd o'r cyfarfod hwn.)

1 Cyflwyniad, ymddiheuriadau, dirprwyon a datgan buddiannau

(14.00)

2 Papur(au) i'w nodi

(14.00)

(Tudalennau 1 – 4)

Llywodraethiant Bwrdd Iechyd GIG Cymru: Gwybodaeth ychwanegol gan

Arolygiaeth Gofal Iechyd Cymru (10 Hydref 2016)

(Tudalennau 5 – 6)

Arlwyo a Maeth Cleifion mewn Ysbytai: Llythyr gan Mike Hedges AC, Cadeirydd Y

Pwyllgor Deisebau (17 Hydref 2016)

(Tudalennau 7 – 9)

Craffu ar Gyfrifon: Rhagor o wybodaeth gan Llywodraeth Cymru (17 Hydref 2016)

(Tudalennau 10 – 23)

Craffu ar Gyfrifon: Rhagor o wybodaeth gan Gyrfa Cymru (19 Hydref 2016)

(Tudalen 24)

Llywodraethiant Bwrdd Iechyd GIG Cymru: Rhagor o wybodaeth gan Llywodraeth

Cymru (21 Hydref 2016)

(Tudalennau 25 – 26)

3 Gwasanaethau Rheilffyrdd: adroddiad Archwilydd Cyffredinol

Cymru

(14.05 – 14.20)

(Tudalennau 27 – 116)



Papur briffio gan y Gwasanaeth Ymchwil

PAC(5)-07-16 Papur 1 – Adroddiad Archwilydd Cyffredinol Cymru

PAC(5)-07-16 Papur 2 – Ymateb Llywodraeth Cymru i adroddiad Archwilydd Cyffredinol Cymru

4 Rheoli Perygl Llifogydd ac Erydu Arfordirol yng Nghymru:

Gohebiaeth

(14.20–14.30)

(Tudalennau 117 – 216)

PAC(5)-07-16 Papur 3 – Llythyr gan y Cadeirydd i Lywodraeth Cymru (26 Medi 2016)

PAC(5)-07-16 Papur 4 – Llythyr gan Lywodraeth Cymru i'r Cadeirydd (24 Hydref 2016)

5 Cymdeithasau Tai: Papur cwmpasu ynghylch ymchwiliad posibl

(14.30–14.50)

(Tudalennau 217 – 222)

PAC(5)-07-16 Papur 3 – Papur cwmpasu

6 Goblygiadau i Gymru yn sgil ymadawriad Prydain â'r Undeb

Ewropeaidd

(14.50 – 15.20)

(Tudalennau 223 – 232)

PAC(5)-07-16 Papur 4 – Papur cwmpasu

PAC(5)-07-16 Papur 5 – Gohebiaeth gyda'r Pwyllgor Materion Allanol a Deddfwriaeth Ychwanegol

T timeCofnodion cryno – Y Pwyllgor Cyfrifon Cyhoeddus

Lleoliad:

Gellir gwyllo'r cyfarfod ar [Senedd TV](#) yn:

Ystafell Bwyllgora 3 – Senedd

<http://senedd.tv/cy/3756>

Dyddiad: Dydd Llun, 17 Hydref 2016

Amser: 14.00 – 16.54

Yn bresennol

| Categori | Enwau |
|----------------------|---|
| Aelodau'r Cynulliad: | <p>Rhun ap Iorwerth AC</p> <p>Mohammad Asghar (Oscar) AC</p> <p>Neil Hamilton AC</p> <p>Mike Hedges AC</p> <p>Rhianon Passmore AC</p> <p>Lee Waters AC</p> <p>Andrew RT Davies AC (yn lle Nick Ramsay AC)</p> |
| Tystion: | <p>Dr Andrew Goodall, Llywodraeth Cymru</p> <p>Anthony Hayward, Bwrdd Iechyd Prifysgol Cwm Taf</p> <p>Rhiannon Jones, Bwrdd Iechyd Addysgu Powys (Saesneg yn unig)</p> <p>Colin Phillpott, Bwrdd Iechyd Prifysgol Aneurin Bevan</p> <p>Liz Waters, Bwrdd Iechyd Prifysgol Aneurin Bevan</p> <p>Dr Jean White, Llywodraeth Cymru</p> <p>Lynda Williams, Bwrdd Iechyd Prifysgol Cwm Taf</p> |
| Swyddfa Archwilio | <p>Huw Vaughan Thomas</p> <p>Dave Thomas</p> |



| | |
|-------------------|---|
| Cymru: | |
| Staff y Pwyllgor: | Meriel Singleton (Ail Glerc) Claire Griffiths (Dirprwy Glerc) Joanest Varney-Jackson (Cynghorydd Cyfreithiol) |

Trawsgrifiad

Gweld [trawsgrifiad](#) o'r cyfarfod (PDF 2MB) Gweld fel [HTML](#) (364KB)

1 Cyflwyniad, ymddiheuriadau, dirprwyon a datgan buddiannau

- 1.1 Gan fod rhybudd wedi ei roi ymlaen llaw am absenoldeb Cadeirydd y Pwyllgor, roedd y Pwyllgor wedi ethol Rhun ap Iorwerth fel Cadeirydd dros dro ar gyfer y cyfarfod hwn o dan Reolau Sefydlog 17.22 a 18.6 yn y cyfarfod ar 3 Hydref.
- 1.2 Croesawodd y Cadeirydd dros dro yr Aelodau i'r Pwyllgor.
- 1.3 Cafwyd ymddiheuriadau gan Nick Ramsay. Roedd Andrew R T Davies yn dirprwyo ar ei ran.
- 1.4 Datganodd Lee Waters ddiddordeb bod ei wraig yn gweithio i Fwrdd Iechyd Prifysgol Cwm Taf.

2 Papur(au) i'w nodi

2.1 Cafodd y papurau eu nodi.

- 2.1 **Craffu ar Gyfrifon: Gwybodaeth ychwanegol gan Gomisiwn y Cynulliad (28 Medi 2016)**

3 Arlwy a Maeth Cleifion mewn Ysbytai: Byrddau Iechyd

3.1 Holodd y Pwyllgor Lynda Williams, Cyfarwyddwr Nyrsio, Bwrdd Iechyd Prifysgol Cwm Taf, Anthony Hayward, Cyfarwyddwr Cyfleusterau Cynorthwyol, Bwrdd Iechyd

Prifysgol Cwm Taf, Rhiannon Jones, Cyfarwyddwr Nyrsio, Bwrdd Iechyd Addysgu Powys, Liz Waters, Nyrs Ymgynghorol a Chyfarwyddwr Nyrsio'r Gymdeithas, Bwrdd Iechyd Prifysgol Aneurin Bevan a Colin Phillpott, Rheolwr Cyfleusterau, Bwrdd Iechyd Prifysgol Aneurin Bevan ar arlwyo a maeth cleifion mewn ysbytai.

4 Arlwyo a Maeth Cleifion mewn Ysbytai: Llywodraeth Cymru

4.1 Holodd y Pwyllgor Dr Andrew Goodall, Cyfarwyddwr Cyffredinol/Prif Weithredwr y GIG a'r Athro Jean White, Prif Swyddog Nyrsio, Llywodraeth Cymru ar arlwyo a maeth cleifion mewn ysbytai.

4.2 Cytunodd Dr Goodall i ysgrifennu at y Pwyllgor ar ddiwedd mis Tachwedd gyda rhagor o wybodaeth am:

- Y cynllun prosiect diwygiedig ar gyfer y nyrs wybodeg newydd a fydd yn ymgymryd â'r swydd ar ddiwedd mis Hydref; a
- Canlyniad yr ystyriaeth ar gyfer achos busnes dros gaffael system arlwyo TG o'r cyfarfod Bwrdd Gwybodeg Cenedlaethol.

4.3 Yn ogystal, yn dilyn tystiolaeth gynharach, byddai'r Pwyllgor yn gwerthfawrogi cael eglurhad gan Lywodraeth Cymru ynghylch i bwy mae Grŵp Fframwaith Bwydlenni Ysbytai Cymru Gyfan yn atebol.

5 Cynnig o dan Reol Sefydlog 17.42 i benderfynu gwahardd y cyhoedd o'r cyfarfod ar gyfer y busnes canlynol:

5.1 Derbyniwyd y cynnig.

6 Arlwyo a Maeth Cleifion mewn Ysbytai: Trafod y dystiolaeth a ddaeth i law

6.1 Ystyriodd yr Aelodau y dystiolaeth a ddaeth i law a chytunodd i ddychwelyd at y mater ar ôl cael yr holl wybodaeth ychwanegol.

6.2 Cytunodd yr Aelodau ar y llythyr drafft yn amodol ar gynnwys un neu ddau o gwestiynau ychwanegol.

6.3 Awgrymodd Aelodau feysydd ar gyfer argymhellion posibl ar gyfer adroddiad y Pwyllgor.

Mr Nick Ramsay AC
Cadeirydd
Pwyllgor Cyfrifon Cyhoeddus
Cynulliad Cenedlaethol Cymru
Bae Caerdydd
Caerdydd
CF99 1NA

Llinell Uniongyrchol: 0300 062 8379
E-bost: Kathryn.chamberlain@wales.gsi.gov.uk

10 Hydref 2016

Annwyl Mr Ramsay

Diolch am eich llythyr wedi'i ddyddio 23 Medi 2016 yn holi ynghylch y defnydd o adolygwyr lleyg yn ein cynlluniau arolygu. Ar hyn o bryd, mae gennym 12 adolygydd lleyg gwirfoddol, a dau ohonynt wedi bod yn adolygwyr lleyg a oedd yn derbyn tâl ynghynt. Maent yn cynnwys cymysgedd o unigolion ymddeoledig a chyflogedig sy'n dod o amrywiaeth o gefndiroedd gan gynnwys iechyd, gofal cymdeithasol, addysg, yr heddlu a'r sector preifat. Mae un o'n hadolygwyr hefyd yn eiriolwr ar gyfer Gofalwyr Cymru.

Maent i gyd wedi derbyn hyfforddiant gan AGIC ac maent wedi cael y cyfle i gymryd rhan mewn sesiynau hyfforddiant iechyd meddwl pwrpasol AGIC er mwyn paratoi ar gyfer y maes gwaith hwn. Maent oll yn derbyn cymorth llawn gan ein rheolwyr arolygu wrth gymryd rhan mewn arolygiadau a darperir adborth iddynt i'w helpu gyda'u dysgu a datblygu. Yn eu tro, maent yn gallu darparu adborth am eu profiad wrth ymgymryd â'r rôl hon.

Mae adolygwyr lleyg gwirfoddol wedi bod yn rhan o'r timau arolygu ers mis Ebrill eleni a hyd yn hyn nid ydym wedi profi problemau o ran cadarnhau adolygydd lleyg gwirfoddol i fod yn rhan ohonynt. Maent yn hynod o awyddus i fod yn rhan o'n gweithgaredd ac mae rhai ohonynt wedi gwirfoddoli i fod yn rhan o arolygiadau thematig mwy o faint rydym wrthi'n eu cyflawni. Mae fy nhîm yn monitro argaeledd yr adolygwyr lleyg gwirfoddol yn agos a phe baem yn canfod bod nifer annigonol o adolygwyr lleyg gwirfoddol i gyflawni ein rhaglen waith, byddwn yn cychwyn ymgyrch recriwtio i fynd i'r afael â hyn. Rydym yn parhau i weithio'n agos â'r cynghorau iechyd cymuned, gan fod eu haelodau'n cymryd rhan yn ein rhaglen o arolygiadau meddygfeydd teulu i gael gwybod am brofiadau cleifion.

Yn olaf, gan fod AGIC wedi dechrau defnyddio adolygwyr lleyg gwirfoddol ym mis Ebrill eleni, rwyf wedi comisiynu adolygiad byr o'r newid hwn a fydd yn digwydd yn gynnar yn ystod y flwyddyn ariannol nesaf a byddaf yn hapus i'ch diweddarau chi unwaith i'r broses hon gael ei chwblhau.

Yr eiddoch yn gywir

A handwritten signature in blue ink, appearing to read 'K. Chamberlain'.

DR KATE CHAMBERLAIN
Prif Weithredwr

Nick Ramsay AC
Cadeirydd y Pwyllgor Cyfrifon Cyhoeddus
Cynulliad Cenedlaethol Cymru
Tŷ Hywel
Bae Caerdydd
CF99 1NA

17 Hydref 2016

Annwyl Nick

Deiseb P-04-663 Bwyd yn Ysbytai Cymru.

Efallai y gwyddoch fod y Pwyllgor Deisebau wedi bod yn trafod y ddeiseb uchod; mae manylion llawn y ddeiseb i'w gweld yn y linc isod:

[http://www.senedd.cynulliad.cymru/mgIssueHistoryHome.aspx?Ild=14311&O
pt=0](http://www.senedd.cynulliad.cymru/mgIssueHistoryHome.aspx?Ild=14311&O
pt=0)

Buom yn trafod y ddeiseb eto yn ein cyfarfod ar 27 Medi a chytunwyd y dylwn ysgrifennu atoch i ofyn i chi ystyried y ddeiseb fel rhan o'ch ymchwiliad arfaethedig i arlwyo a maeth cleifion mewn ysbytai. Byddem yn ddiolchgar pe gallech gyflwyno eich canfyddiadau ac unrhyw argymhellion i'r Pwyllgor Deisebau maes o law.

Byddwn yn ddiolchgar pe gallech anfon eich ymateb trwy e-bost at dîm clericio'r Pwyllgor yn SeneddDeisebau@cynulliad.cymru.

Yn gywir



Mike Hedges AC
Cadeirydd



P-04-663 Bwyd yn Ysbytai Cymru

Cyflwynwyd y ddeiseb hon gan Rachel Flint ar ôl casglu 40 Llofnod

Geiriad y ddeiseb

Rydym yn galw ar Lywodraeth Cymru i archwilio safonau bwyd yn ysbytai Cymru. Rhaid archwilio darpariaeth pob bwrdd iechyd i sicrhau ei fod yn ateb gofynion cleifion a'r rhai sydd ag anghenion dietegol a chyflyrau meddygol, a rhaid gofodi safonau ym mhob rhan o GIG Cymru. Dylid darparu bwyd maethlon a ffres mewn ysbytai fel rhan bwysig o becyn gofal y claf ac i helpu i adfer iechyd yn hytrach na gwneud pethau'n waeth. Rhaid darparu ar gyfer anghenion dietegol – a gofalu bod bwyd heb glwten neu lactos ar gael, ynghyd â bwyd i'r rhai sy'n dioddef o glefyd seliag, llysieuwyr a feganiaid – ond mae profiad yn dangos nad yw hyn yn digwydd ar hyn o bryd a bod cleifion yn aml yn teimlo'u bod yn creu trafferth os ydynt yn gofyn am fwyd gwahanol. Rhaid safoni bwyd i gleifion sy'n dioddef o gyflyrau meddygol – gan gynnwys y rhai sy'n dioddef o gyflyrau'r coluddyn neu sydd wedi cael llawdriniaeth, i sicrhau eu bod yn cael y maeth priodol bob amser. Ar hyn o bryd, mae cleifion ar rai wardiau'n cael yr un bwyd waeth beth yw eu cyflwr, eu pwysau na'u hanghenion dietegol. Nid yw hyn yn dderbyniol – gall beri gofid i gleifion a gall fod yn niweidiol iddynt. Ni ddylai ysbytai ddibynnu ar berthnasau i ddod â bwyd i'r cleifion, ni ddylent ddisgwyl i'r cleifion fwyta'r un pryd diflas bob dydd, na chaniatáu iddynt ddihoeni os na allant fwyta'r bwyd sydd ar gael. Rhaid i faeth fod yn rhan allweddol o becyn gofal pob claf. Nid ydym yn gofyn i ysbytai gynnig bwyd sy'n haeddu seren Michelin, dim ond prydau bwyd sy'n gwneud lles, yn hytrach na niwed, i gleifion.

Gwybodaeth ychwanegol

Mae fy mhrofiad i o'r bwyd y mae'r GIG yn ei ddarparu'n dangos bod y safonau'n amrywio'n ôl ward, ysbyty ac adran ac mae gwahaniaeth hefyd rhwng safonau yng Nghymru a Lloegr. Nid yng Nghymru yn unig y mae'r broblem- mae'r GIG yn gyffredinol yn cael trafferth darparu prydau bwyd i'r rhai sydd ag ymwrthedd isel neu sydd â chyflyrau dietegol. Ond mae fy mhrofiad o fwyd ysbytai Cymru yn ddiweddar yn dangos nad yw'r safon yn ddigon da. Nid oedd bwydlenni i'w cael (yn wahanol i ysbyty Caer ac ysbytai eraill Lloegr) ac roedd y cleifion i gyd yn cael yr un pryd bwyd waeth beth oedd eu cyflwr, eu pwysau neu eu hanghenion dietegol. Ar un ward, cynigiwyd cyri, cawl ffacbys a brechdanau tiwna a chorn

melys i gleifion a oedd newydd gael llawdriniaeth ar y coluddyn. Roedd y bwydydd hyn yn gwbl amhriodol – ac o bosibl yn niweidiol. Ar adegau, os nad oeddech yn gallu bwyta dim a oedd ar y troli neu os nad oeddech wrth ymyl eich gwely, nid oeddech yn bwyta, oni bai bod nyrs yn fodlon gwneud tost i chi. Rhaid i hyn newid; heb y maeth priodol, rwy'n credu bod pobl yn gorfod aros yn hirach yn yr ysbyty.

Etholaeth a Rhanbarth y Cynulliad

- De Caerdydd a Phenarth
- Canol De Cymru

Eitem 2.3

Sir Derek Jones KCB
Ysgrifennydd Parhaol
Permanent Secretary



Llywodraeth Cymru
Welsh Government

Nick Ramsay AM
Chair of the Public Accounts Committee
National Assembly for Wales
Cardiff
CF99 1NA

Dear Nick,

17th October 2016

Please pass on my thanks to the Committee for their scrutiny of the Welsh Government's Annual Accounts 2015-16. As I said briefly as I left the Committee Room, these are challenging sessions, but I do want to reemphasise my respect for the scrutiny process and how valuable and important it is to the business of Government in Wales.

The Committee has asked me some follow-up questions. In the attached annex, I have tried to answer these as clearly as possible.

I noted that the Committee focused strongly on procurement and transparency. So in addition to the responses to the questions posed, I have also described some of the work we are doing to improve procurement practices and the transparency of Government spend. I hope that the Committee will find this additional material reassuring and of use.

During the session I committed to keeping the Committee updated on possible further action related to the Fruitless Payment recorded in the 2015-16 Accounts. As the analysis work is not yet concluded, an update is not included here. I will write to the Committee on this as soon as I am able.



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Rydym yn croesawu derbyn gohebiaeth yn Gymraeg. Byddwn yn ateb gohebiaeth a dderbynnir yn Gymraeg yn Gymraeg ac ni fydd gohebu yn Gymraeg yn arwain at oedi.

Tudalen y pecyn 10

We welcome receiving correspondence in Welsh. Any correspondence received in Welsh will be answered in Welsh and corresponding in Welsh will not lead to a delay in responding

I am now looking ahead to my valedictory session with the Committee in a few weeks time. I am already aware that the Committee would like to discuss implications of the European referendum result on the Welsh Government and work that has commenced to date; as I write, I have just returned from a visit to Brussels, and will be able to update the Committee on this topic. Any other insights you could provide on areas the Committee would like to cover would be very helpful.

Yours,
Derek



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Response to questions from the Public Accounts Committee following its scrutiny of the Welsh Government's Annual Accounts 2015-16, on 03 October 2016

Procurement

1. The extent to which local authorities are recruiting people externally with appropriate procurement expertise.

During the scrutiny session the Committee asked about capacity within the civil service and local government to procure smartly, rather than just cheaply, and asked the above follow up question.

Procurement capacity and capability in Welsh public sector organisations, including local authorities, is assessed through the *Procurement Fitness Check Programme*, a commitment of the Wales Procurement Policy Statement. The assessment involves the application of a 'maturity model' which includes seven measures associated with the 'people' aspects of each organisation. The results of Fitness Checks made in 2014 are published on the Welsh Government's Procurement Route Planner website: <http://prp.gov.wales/toolkit/?lang=en>. The Fitness Check reports include recommended action plans.

Currently, the Welsh Government does not have access to data on local authority recruitment of external procurement expertise. However, the Fitness Check model for 2016 has been revised to include details of procurement qualifications held. The next round of the Fitness Checks will follow a self assessment approach, with organisations providing details of how many qualified (CIPS and other relevant qualifications) staff are in each organisation against the organisation's structure and spend.

2. Figures capturing Welsh Government and public sector spend in Wales.

As of 06 October 2016, the National Procurement Service (NPS), which is hosted by the Welsh Government, has 38 live Contracts/Frameworks awarded to 544 suppliers. Of the suppliers, 53% (287) are Wales based and 40% (218) are Welsh SMEs.

The Sell2Wales website is a procurement portal and information resource set up by the Welsh Government. Each year, billions of pounds of worth of contracts for public sector goods and services are advertised through this site; these contracts are offered by a wide range of public sector organisations in Wales, including the Welsh Government, Local Authorities and NHS bodies. 60% of the contracts awarded through the Sell2Wales website are awarded to Welsh suppliers.

Spend data for the financial year 2015-16 submitted to the NPS by Welsh public sector organisations involved in their collaborative spend analysis project suggests approximately 50% of spend by public sector organisations in Wales goes to Welsh suppliers. So we have made progress in this area, but with plenty more to do.

3. Summary of procurement practice improvement work

In October 2015 the Welsh Government's internal audit team undertook a review of corporate contract management processes within the organisation. The review examined the controls in place to ensure that frameworks and contracts were being managed effectively and aligned with corporate requirements to deliver goods and services of the right quality, at the right time and provide value for money. Alongside identifying some areas of good practice, four key recommendations were made by the review team to strengthen existing controls: provision of a contract register for Welsh Government colleagues; an overhaul of all commercial guidance; identification of, and development for, commercial colleagues; and strengthening the lessons learned processes.

In addition to the above recommendations, lessons learned from a procurement exercise which resulted in the Fruitless Payment included in the 2015-16 Annual Accounts have also fed into the work undertaken by the Commercial Governance workstream under Preparing for the Future. This work will continue up to March 2017. The improvement work to date is summarised below:

Governance

- A Commercial Governance Delivery Group was established in October 2015. The Group reviews Welsh Government procurement spend monthly looking for trends and evidence of non-compliance with required processes.
- A corporate contract database is now in place for Welsh Government wide frameworks.
- A new delegation framework is due to be introduced in November 2016. The framework defines who can purchase and to what level.
- To accompany the framework, a new procurement assurance policy is to be introduced in November 2016.
- All major procurements are carried out through an e-tendering system which is transparent - with a fully auditable view of all evaluators scoring.
- All legal challenges during standstill period are to be referred to the Director, Procurement and Director, Legal Services.

Standard processes

- A staff engagement campaign focusing on the prompt payment of suppliers took place in summer 2016, this included:

- Internal communications
- New guidance
- New training courses
- Simplification of the purchasing process
- A new contract management toolkit is now available for staff on the intranet.

Standard roles

- A questionnaire to identify all contract and framework managers in the Welsh Government was completed in January 2016.
- A procurement skills framework is now being developed.
- Standard commercial and procurement roles and job descriptions, linked to skills framework, are now being developed.

Learning and Development

- Negotiation workshops were delivered in Spring 2016.
- Commercial colleagues from the Executive Band and above have participated in the UK Government Cabinet Office procurement Assessment and Development Centre – with good results.
- A Welsh Government training programme has been developed for introduction autumn 2016 including e-learning and face to face courses at various different levels.

4. Preparing for the Future procurement savings

Overall procurement savings of £7m were identified for financial year 15/16. These were achieved by reducing the costs of goods or services either at point of contract award or through robust contract management. Each individual saving is supported by an audit trail providing evidence for how it was achieved. Savings are delivered against multiple Ministerial Expenditure Groups (EMGS) and not attributable to one central budget – as such they do not appear as a single item within the Annual Accounts. The savings are used, at the individual budget holder’s discretion, to deliver more for the same amount of money or to fund additional priorities.

Transparency

- 5. Clarification on the variances for the Health and Social Services Group underspend of £153m as detailed in the Summary of Outturn table and the impact on the HSS Ambit underspend had two of the health bodies not overspent.**

The reason for the variation in the HSS Ambit was due to a £90m underspend in Annually Managed Expenditure (AME); arising from fewer provisions and a lower

level of impairments to assets, plus £50m of cash not needed by the health bodies. As said during the session, the underspend is not taxpayer money 'lost' to Wales. Any underspends that occurred in 2015-16 were carried forward to the following financial year.

The PAC noted that the relationship between the budget received from HM Treasury and the Ambit and, therefore, the explanation for the variances reported in the annual accounts is complicated. HM Treasury control budgets throughout the public sector on a resource basis. Budgets comprise Departmental Expenditure Limits (DELs) and Annually Managed Expenditure (AME). The Ambit represents the resources (DEL and AME) consumed by the core Welsh Government, **plus** the cash paid to other organisations such as the health bodies.

This difference immediately creates anomalies when comparing variances reported by the Welsh Government - against the Ambit, and the variances reported by organisations within the wider group - whose accounts do not report Ambit, but reflect the resource position only.

The cash portion of the HSS underspend in 2015-16 is completely independent of the resource overspend reported by some health bodies. The overspend reported by health bodies would not have been altered had the AME underspend been different.

The future budgeting project is seeking to align the budgeting and accounting processes in order to remove these anomalies.

6. Direct the Committee to links for further information (previous correspondence) on the Welsh risk pool.

NHS Wales operates a risk pooling scheme which allows Health Boards and Trusts to seek reimbursement for amounts paid out in respect of negligence claims. A £25,000 excess is applied to each claim. The scheme is operated by the Welsh Risk Pool Service (WRPS) which is part of NHS Wales Shared Service Partnership, hosted by Velindre NHS Trust. Further to scrutiny of the 2014/15 Welsh Government Consolidated Resource Accounts, the Provisions disclosure (note 12 on page 68 of the accounts for 2015-16) has been enhanced to provide specific disclosure in respect of the Welsh Risk Pool. Further details of the NHS risk pool are included in the Annual Accounts of individual health boards for their individual liabilities, and in the accounts of the WRPS host entity Velindre NHS Trust.

The Welsh Risk Pool Provision as at 31 March 2016 was £682m. This is an increase of £8m from 31 March 2015 when the balance was £674m. This relatively small increase of 1.2% reflects a stabilisation in the growth of this provision compared to previous years, for example growth of £80m in 2014/15. It is considered that this slowing of growth is due to a slight 'levelling off' in the volume of claims being dealt

with from the start to the end of the financial year as the volumes remain high but largely stable, combined with an increase in the churn of cases settled in volume terms to more or less equate to cases opened. However due to the nature of the claims which can vary year to year, the provision for future liabilities remains a volatile financial balance, which is reflected in its budgetary treatment as Annually Managed Expenditure for which budget is secured annually from HM Treasury.

The Welsh Risk Pool fully utilised its Revenue budget allocation for claims settlements made in year of £75m in 2015/16. Details of the WRP provisions are shown in note 24.3 of the Velindre NHS Trust accounts.

Please find attached previous correspondence with the Committee on the Welsh Risk Pool.

7. How restricted and unquantified potential liabilities are accounted for in terms of clarity.

Unquantified or contingent liabilities represent potential future liabilities where there is uncertainty over the nature, timing and value. As such they are not accounted for against the budget but simply noted in the accounts in the same way as an organisation discloses details of guarantees. These potential liabilities are actively managed:

- New projects are appraised and any financial implications, including future contingent liabilities, are considered and advice provided as appropriate.
- Where liabilities are identified through the initial approval process, these will be monitored within individual business areas.
- Business areas also monitor for any additional unanticipated liabilities arising after the approval process, although the frequency with which these occur is low.
- Any changes to liabilities and new liabilities, and their impacts, are communicated to finance support teams who will maintain these records for future reporting, including year-end account.
- Potentially, any significant liabilities may be identified as risks and reported as part of the Risk Register reporting to the Welsh Government's Audit and Risk Committees (ARCs).

For the financial year 2015-16, no significant issues related to potential liabilities were reported to the Central Finance Team.

We propose that, in future years, the Welsh Government writes to the Committee in confidence with details of any potential liabilities when we are preparing the Annual Accounts.

8. Confirm plans for the online presentation of the Accounts.

The online version of the 2015-16 annual accounts will be published on the Welsh Government website later this month. The online version will include an appendix with links to other relevant sites such as the accounts for local health bodies and local government. This is in response to a suggestion arising from discussion with the previous PAC concerning the ability of the reader to 'follow the money'. The appendix will also provide a link to a document that provides further details on staff numbers and salary costs within the Welsh Government, following consideration of the question of senior pay transparency in the public sector in Wales. This information goes beyond the disclosure requirements of the Financial Reporting Manual.

9. Publication of expenditure details for Welsh Procurement Card (WPC) transactions and invoice spend over £25k.

Details of all invoiced costs in excess of £25,000 are published monthly on the Welsh Government web site. In addition, the Welsh Government has released details of all Welsh Procurement Card transactions (WPC) for the last 5 years - also available on the web site. We are in discussion with Ministers over the proactive, regular release of WPC data in the future.

10. Adding a further table to the Accounts on outturn in section one.

The Permanent Secretary will recommend to his successor that the introduction to the Annual Accounts provides more information on the outturn position and variances.

Sir Derek Jones KCB
Ysgrifennydd Parhaol
Permanent Secretary



Llywodraeth Cymru
Welsh Government

Darren Millar AM
Chair of the Public Accounts Committee
National Assembly for Wales
Cardiff Bay
Cardiff
CF99 1NA

Dear Darren,

06 October 2014

**ACTION POINTS FROM THE PUBLIC ACCOUNTS COMMITTEE ON
22 SEPTEMBER 2014
WELSH GOVERNMENT ACCOUNTS 2013-14**

I hope that you and Committee members found the session on the 2013-14 Annual Accounts to be helpful. I promised to write on a number of points, covered below.

A. Severance Packages and Increase in Staff Numbers

Severance Packages. During 2013-14 there were 4 members of staff that received severance packages in excess of £100,000. The table below provides details of the total severance, annual pay and payback period for each individual.

| | Severance £ | Salary £ | Payback Period |
|---------|----------------|-------------|----------------|
| FY13-14 | 129,000 | 88,176 | 17 months |
| | 138,000 | 94,606 | 17 months |
| | 119,000 | 81,780 | 17 months |
| | 162,000 | 111,615 | 17 months |

I am satisfied that, with payback periods of this kind, the departures represent good value for money.



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Staff Numbers. The table below details those areas of the business that have seen the main increase in staff numbers over the period 2012-13 and 2013-14 (286 additional staff).

| Reason for increase in staff numbers | Total |
|--|--------------|
| Transfers into the Welsh Government following the creation of the Welsh Language Commission and Natural Resources Wales. | 75 |
| Rural development; introduction of Glas Tir scheme | 32 |
| Increase in overall number of secondees within Departments | 31 |
| Legal services; including the Office of the Legislative Counsel and the Counsel General | 29 |
| Creation of the National Procurement Service | 29 |
| European Funding area (WEFO); including staff for the new Energy Team (Horizon 2020) | 24 |
| Planning Division; legislation and casework | 17 |
| Cabinet Division including staff to support additional Ministers | 13 |
| Care Standards Inspectorate for Wales | 11 |

The increase in overall staff numbers also reflects the ongoing commitment to our Apprenticeship Programme. Over the past two years, some 158 young people have completed, or are still engaged in, the programme although this commitment to young people has impacted total staff numbers within the Welsh Government. As many as 72 of the apprentices have successfully gained employment with the Welsh Government.

B. The Welsh Risk Pool

NHS Wales operates a risk pooling scheme which allows Health Boards and Trusts to seek reimbursement for amounts paid out in respect of negligence claims. A £25,000 excess is applied to each claim. The scheme is operated by the Welsh Risk Pool Service (WRPS) which is part of NHS Wales Shared Service Partnership. In order to better align the governance and financial management arrangements, the budget for the Welsh Risk Pool reimbursement of claims transferred as of 1 April 2014 from the Welsh

Government to NHS Wales Shared Services Partnership (hosted by Velindre NHS Trust).

In recent years, and in common with other nations, NHS Wales has experienced a growth in the number of legal claims. For example in 2012/13 the NHS Litigation Authority in England reported a 10.8% increase in clinical negligence claims from 2011/12. The reasons for the increase in claims are multifactorial and it is not possible to say with any certainty what the primary driver for the increase is. It is known that there has been a general upward trend in claims over recent years both in terms of number and value.

Recent changes to funding rules for legal claims which came into effect on 1st April 2013 are considered to have had an impact on the registration of claims before this date and, therefore, upon the subsequent submitted case volumes being experienced in 2013/14. It is also considered that increased public awareness of clinical redress options is contributing to claim volumes.

The cost of claims has also increased, especially for settlements involving long term care packages. The reason for this increase is that care needs are becoming more complex and it is necessary to ensure that any care packages are fully compliant with applicable legislation such as Health and Safety and Working Time Directives.

NHS Wales takes a pro-active approach to learning from claims to reduce the risk of recurrence. Before reimbursement is made by the WRPS, Health Boards and Trusts are required to outline the key weaknesses which gave rise to the claim and outline the steps taken to reduce the risk of recurrence. Claims are reviewed internally within the WRPS for efficacy of action and then considered by an All Wales Executive Level multidisciplinary group with representation from Medical Directors, Directors of Nursing, Chief Executives, Directors of Finance, Chairman of a Health Board, Directors of Governance and the Welsh Government. Where there is evidence of risks which may be relevant to other NHS bodies, or evidence of good practice, a more detailed claim review can be requested.

Where all Wales issues are evident from claims, the WRPS undertakes themed work. This involves the clinical assessment of high risk areas including those of maternity, emergency departments and the surgical pathway. The findings of the reviews are

shared with the individual Health Boards with a composite report being shared with the Welsh Government and Chief Executives. In addition, specific themed work has been undertaken to further consider specific risks associated with claims.

C. Renewable/Non Renewable Energy

The Annual Accounts report a reduction in the amount of renewable energy consumed by the Welsh Government since 2012-13. Information on the proportion of electricity derived from renewable sources is provided by our electricity supply companies. For 2013-14 they advised consumers, including the Welsh Government, that the basis for calculating the renewable proportion had changed in line with DEFRA guidelines. This means that the proportion for 2013-14 can not be compared to previous years.

Nevertheless, the Welsh Government is implementing a carbon reduction programme across the whole of our administrative estate and, as a result, a 27% reduction in carbon emissions has been achieved since 2010-11. This puts us well on course to meet the Government's overarching target of a 30% reduction by 2020.

D. Business Travel and CRC and Energy Expenditure

Business travel. The Welsh Government is unable to provide a total cost for business travel without a significant amount of manual investigation by departments. Although the financial systems record hire car charges and accommodation separately, the majority of the travel costs continue to be booked to a single travel and subsistence cost code. It is also possible to charge travel costs to a Welsh Procurement Card (WPC). As a result, we would have to scrutinise many hundreds of individual claims and Welsh Procurement Card (WPC) transactions as well as the invoices paid to travel related suppliers such as Eurocar and Arriva Wales in order to extract the correct total cost for business travel only. We will consult with the Financial Reporting advisory board (FRab) to determine whether other departments are able to comply.

CRC allowance. The CRC allowances total for 2013-14 was 0.191.

Energy expenditure. Total energy expenditure for the Welsh Government administrative estate for 2013-14 was £2.17m.

Unfortunately the 2013-14 information for CRC allowances and energy expenditure (detailed above) was not available in time for the preparation of the accounts. The online Accounts for 2013-14 will be amended.

E. Breakdown of Expenditure for Travel, Subsistence and Hospitality

The table detailed below provides a breakdown by cost category (used within the Welsh Government financial systems) for travel, subsistence and hospitality for 2013-14. Due to the reasons outlined in D above, it has not been possible to compile a total for travel and a separate total for subsistence.

| | 2013-14 £K |
|-----------------------------------|---------------|
| Travel & Subsistence | 3,439 |
| Travel | 892 |
| Accommodation | 359 |
| Car Hire | 295 |
| Hospitality | 16 |
| Total as detailed in the accounts | 5,001 |

F. Non cash overspend in DfES

The supplementary budget process enables departments to submit and agree adjustments to in-year budgets with HM Treasury. Any requests; typically for non cash and AME, must be submitted at the end of November each year. During 2013-14, the Welsh Government successfully negotiated an increase in non cash (£326m) to reflect the impact of changing the student loans model used by DfES. The change in model followed a similar decision by BIS for student loans in England. However, unfortunately the subsequent error in the new model (£26m) was not identified until after the supplementary budget deadline and, therefore, we were unable to request further changes. Nevertheless, on this occasion, the Welsh Government was able to absorb the increase within the overall Ambit and given that the error impacted non cash, it had no bearing on the cash resources available to be spent on policy delivery.

A lessons learned exercise was conducted and a copy of the report presented to the DfES Corporate Governance Committee is attached.

Yours,
Derek



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Public Accounts Committee

PAC(5)-07-16 31 October 2016

Scrutiny of Accounts 2015-16

Additional Information from Careers Wales

Careers Wales have submitted additional evidence following their evidence session on 26 September 2016.

Clarification on why the former West Glamorgan County Council is not included in the list following the historical merger of the regional careers companies.

When the West Glamorgan Careers Company and Dyfed Careers Company merged in April 2001 to become Careers Wales West, the company was able to merge the staff into one pension scheme based on the lowest employer contribution rate. This resulted in the West Glamorgan staff joining the Dyfed Pension Fund from the Swansea Pension Fund.

The number of contacts made through the medium of Welsh and also the number of contacts made through non-English and non-Welsh languages.

Data for the period 1/4/2015 – 31/3/2016:

- Careers Wales Connect (telephone service) - Welsh calls received = 1,694
- Webchats started in Welsh through our bilingual website careerswales.com = 177
- Individual interaction, group and/or written service in Welsh = 2,448.

Careers Wales do not currently collect data on requests for services to be delivered in other languages but confirm, however, that they have an annual licence with Language Line which provides the service to support clients through other languages by phone.

Careers Wales

19 October 2016



Nick Ramsay AC
Cadeirydd
Y Pwyllgor Cyfrifon Cyhoeddus

Our Ref: AG/JM/SB

21 Hydref 2016

Annwyl Mr Ramsay AC

Materion ehangach sy'n deillio o'r adolygiad llywodraethu o Fwrdd Iechyd Prifysgol Betsi Cadwaladr

Diolch ichi am eich llythyr dyddiedig 23 Medi yn codi cwestiynau a phryderon y Pwyllgor ynghylch ymateb Llywodraeth Cymru i adroddiad blaenorol y Pwyllgor am faterion ehangach sy'n deillio o'r adolygiad llywodraethu o Fwrdd Iechyd Prifysgol Betsi Cadwaladr.

O ran argymhelliad pedwar, mae Llywodraeth Cymru eisoes wedi anfon neges sy'n atgoffa byrddau iechyd i rannu â ni ganlyniadau ynglŷn â'r holl waith sy'n cael ei gomisiynu, yn sgil y pryderon difrifol sy'n deillio o gŵynion. Lle y bo'n briodol, byddwn ninnau hefyd yn ymrwymo i rannu canlyniadau â byrddau iechyd eraill er mwyn hyrwyddo dysgu o fewn y GIG. Byddwn hefyd yn rhoi adroddiad ar gynnydd i'r pwyllgor (bob chwe mis) am yr adolygiad o'r canllawiau Gweithio i Wella. Byddwn yn anfon y diweddariad cyntaf yn ystod yr wythnos sy'n dechrau 28 Tachwedd, 2016.

O ran eich cais mewn perthynas ag argymhelliad 25, rwy'n deall bod Dr Chamberlain wedi ymateb ichi'n uniongyrchol ynghylch rôl bresennol adolygwyr lleyg mewn cysylltiad â chynlluniau adolygu AGIC. Mae AGIC wedi comisiynu adolygiad o'r newid a fydd yn digwydd yn gynnar yn y flwyddyn ariannol nesaf. Ar ôl i'r adroddiad gael ei gwblhau byddwn yn gofyn i AGIC am yr wybodaeth ddiweddaraf sy'n dangos bod manteision gweithio'n agosach a defnyddio aseswyr lleyg yn cael eu gwireddu gan gynnwys cynyddu nifer yr aseswyr a chynaliadwyedd.



Edrychaf ymlaen at fynychu cyfarfod y Pwyllgor ar 7 Tachwedd i drafod cynnydd o ran argymhellion Llywodraeth Cymru a dderbyniwyd a materion iechyd eraill yr ydych yn dymuno eu trafod.

Yn gywir



Dr Andrew Goodall

Mae cyfyngiadau ar y ddogfen hon

Archwilydd Cyffredinol Cymru
Auditor General for Wales

Buddsoddiad Llywodraeth Cymru mewn gwasanaethau trên a seilwaith y rheilffyrdd



WALES AUDIT OFFICE
SWYDDFA ARCHWILIO CYMRU



Rwyf wedi paratoi a chyhoeddi'r adroddiad hwn yn unol â
Deddf Llywodraeth Cymru 2006.

Roedd tîm astudio Swyddfa Archwilio Cymru yn cynnwys Emma Giles,
Gareth Jones, Jeremy Morgan, Nigel Blewitt ac Andy Phillips
o dan gyfarwyddyd Matthew Mortlock.

Huw Vaughan Thomas
Archwilydd Cyffredinol Cymru
Swyddfa Archwilio Cymru
24 Heol y Gadeirlan
Caerdydd
CF11 9LJ

Mae'r Archwilydd Cyffredinol yn annibynnol o'r Cynulliad Cenedlaethol ac o lywodraeth. Mae'n archwilio ac yn ardystio cyfrifon Llywodraeth Cymru a'r cyrff cyhoeddus a noddir ganddi ac sy'n gysylltiedig â hithau gan gynnwys cyrff y GIG yng Nghymru. Mae ganddo'r pŵer statudol i gyflwyno adroddiadau i'r Cynulliad Cenedlaethol ar economi, effeithlonrwydd ac effeithiolrwydd y defnydd a wna'r sefydliadau hynny o'u hadnoddau wrth gyflawni eu swyddogaethau, a sut y gallent wella'r defnydd hwnnw.

Mae'r Archwilydd Cyffredinol, ynghyd ag archwilwyr penodedig, hefyd yn archwilio cyrff llywodraeth leol yng Nghymru, mae'n cynnal astudiaethau gwerth am arian mewn llywodraeth leol ac yn arolygu cydymffurfiaeth gydag anghenion Mesur Llywodraeth Leol (Cymru) 2009.

Mae'r Archwilydd Cyffredinol yn ymgymryd â'i waith gan ddefnyddio staff ac adnoddau eraill a ddarperir gan Swyddfa Archwilio Cymru, sydd yn fwrdd statudol wedi'i sefydlu ar gyfer y nod hwnnw ac i fonitro a chynghori'r Archwilydd Cyffredinol.

Am ragor o wybodaeth ysgrifennwch at yr Archwilydd Cyffredinol yn y cyfeiriad uchod, ffôn 02920 320500, e-bost: [e-bost post@archwilio.cymru](mailto:post@archwilio.cymru), neu gweler y wefan www.archwilio.cymru.

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Cewch aildefnyddio'r cyhoeddiad hwn (heb gynnwys y logos) yn rhad ac am ddim mewn unrhyw fformat neu gyfrwng. Rhaid i chi ei aildefnyddio'n gywir ac nid mewn cyd-destun camarweiniol. Rhaid cydnabod y deunydd fel hawlfraint Archwilydd Cyffredinol Cymru a rhaid rhoi teitl y cyhoeddiad hwn. Lle nodwyd deunydd hawlfraint unrhyw drydydd parti bydd angen i chi gael caniatâd gan ddeiliaid yr hawlfraint dan sylw cyn ei aildefnyddio.

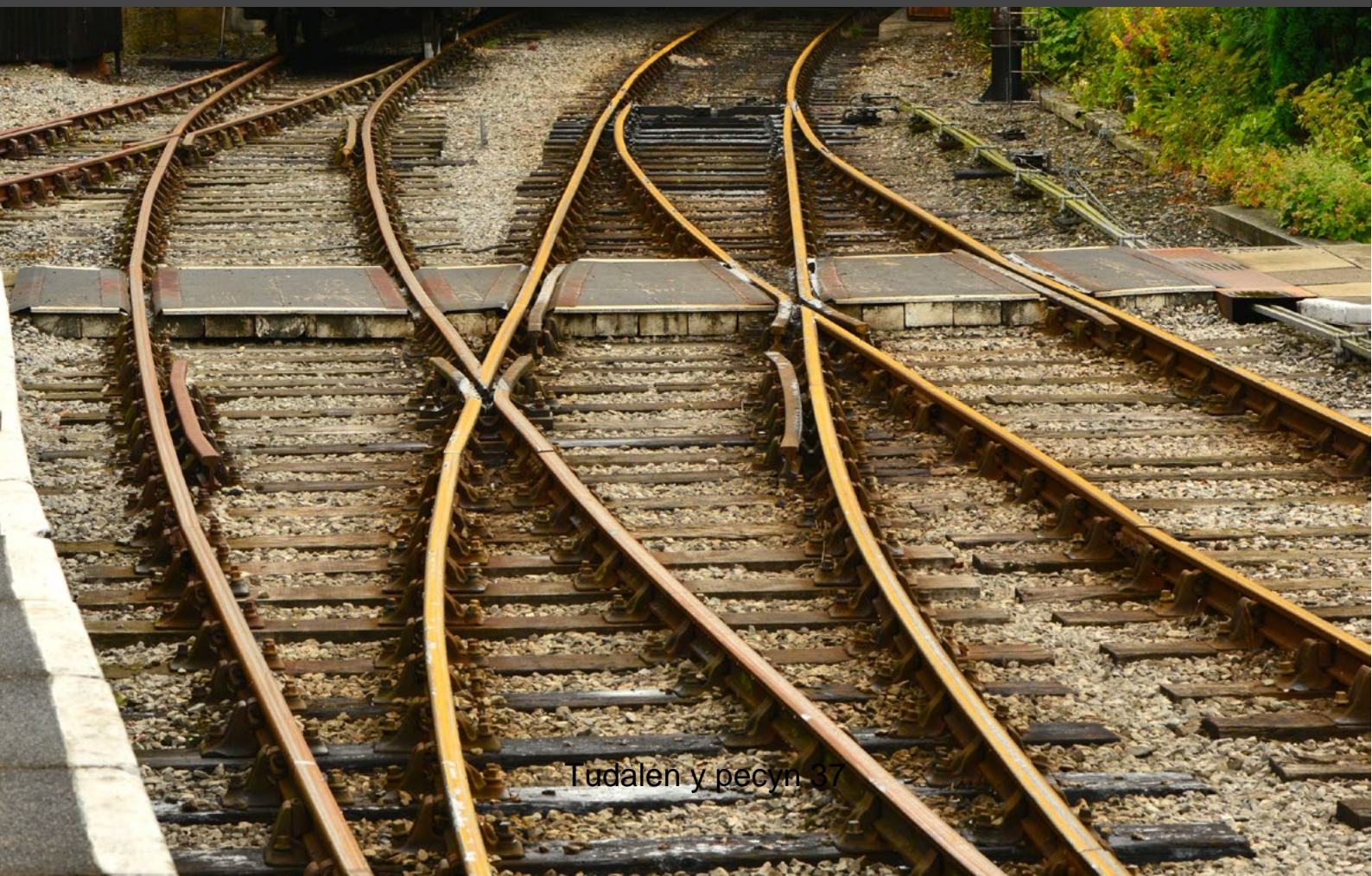
Os ydych angen unrhyw un o'n cyhoeddiadau mewn ffurf ac/neu iaith wahanol cysylltwch â ni gan ddefnyddio'r manylion canlynol: Ffôn 029 2032 0500, e-bost post@archwilio.cymru

Cynnwys

| | | |
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| | Crynodeb | 6 |
| | Argymhellion | 14 |
| 1 | Bu Llywodraeth Cymru yn ceisio ymestyn ei phwerau a'i dylanwad strategol cyfyngedig dros wasanaethau trên yng Nghymru | 16 |
| | Yn ystod 2017, mae Llywodraeth Cymru yn disgwyl cael pwerau i gaffael masnachfaint nesaf Cymru a'r Gororau, y mae'n disgwyl iddi helpu i sicrhau bod y fasnachfaint yn diwallu anghenion hirdymor Cymru | 17 |
| | Nid oes gan Lywodraeth Cymru yr un pwerau i benderfynu ar brosiectau seilwaith rheilffyrdd ag sydd gan lywodraethau'r DU a'r Alban | 19 |
| | Mae Llywodraeth Cymru yn cymryd camau priodol i ddylanwadu ar brosesau gwneud penderfyniadau ynghylch buddsoddi yn seilwaith y rheilffyrdd, er y gallai fod wedi gweithredu ynghynt i atgyfnerthu ei threfniadau goruchwyllo a'i threfniadau cytundebol ar gyfer prosiectau a ariennir ganddi | 21 |
| 2 | Rhwng mis Ebrill 2011 a mis Mawrth 2016, cyfrannodd Llywodraeth Cymru tua £362 miliwn at wariant sector cyhoeddus ehangach ar reilffyrdd yng Nghymru, ond ni wnaeth ddigon i werthuso'r buddiannau sydd wedi deillio o'i buddsoddiad | 29 |
| | Buddsoddodd Network Rail £1.4 biliwn yn seilwaith rheilffyrdd Cymru rhwng mis Ebrill 2011 a mis Mawrth 2016 | 30 |
| | Rhwng mis Ebrill 2011 a mis Mawrth 2016, buddsoddodd Llywodraeth Cymru £109 miliwn mewn gwell gwasanaethau yn ychwanegol at fasnachfaint graidd Cymru a'r Gororau ac roedd yn ofynnol iddi dalu £27 miliwn mewn taliadau cymell perfformiad cytundebol, net o daliadau cosb | 31 |
| | Rhwng 2011 a 2016, buddsoddodd Llywodraeth Cymru £226 miliwn mewn prosiectau i wella seilwaith rheilffyrdd | 32 |
| | Mae Llywodraeth Cymru wedi adeiladu ar waith arfaethedig gan Network Rail er mwyn helpu i wella'r seilwaith a gwasanaethau ymhellach | 35 |
| | Nid oedd Llywodraeth Cymru wedi mabwysiadu dull systematig o werthuso gwerth am arian ei buddsoddiad mewn gwasanaethau trên ac mae wrthi'n atgyfnerthu'r trefniadau hyn | 37 |
| | Fel y nodir yn y Cynllun Cyllid Trafnidiaeth Cenedlaethol, ar hyn o bryd mae Llywodraeth Cymru yn bwriadu canolbwyntio ei buddsoddiad ei hun yn seilwaith y rheilffyrdd yn y tymor canolig ar brosiectau Cam 2 Metro De Cymru | 40 |

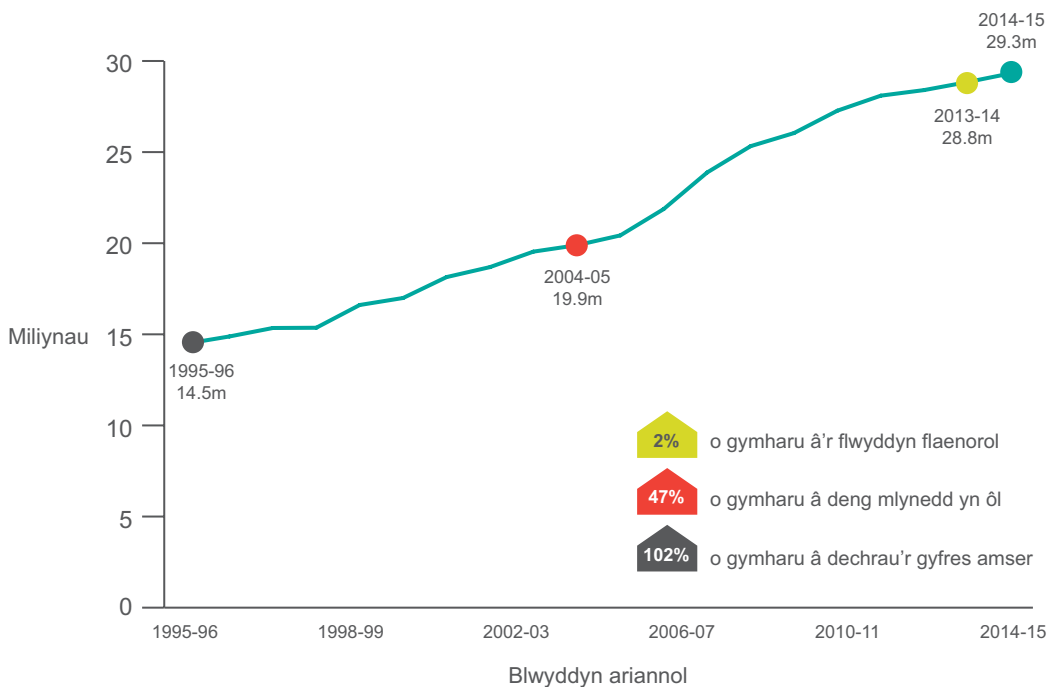
| | | |
|---|---|----|
| 3 | Ers 2006, mae gwasanaethau ar fasnachfaint Cymru a'r Gororau wedi gwella, er bod cymariaethau â gwasanaethau trên eraill yn y DU yn dangos perfformiad cymysg | 44 |
| | Trenau Arriva Cymru a gafodd y trydydd cymhorthdal mwyaf fesul cilomedr teithiwr o blith yr holl gwmnïau trên yn y DU rhwng 2011-12 a 2014-15, er nad yw cymhorthdal mawr yn anghyffredin ar gyfer masnachfreintiau rhanbarthol sy'n darparu gwasanaethau gwledig | 45 |
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| | Mae boddhad teithwyr â Trenau Arriva Cymru wedi gwella i ryw raddau, ond mae cymariaethau â chwmnïau trên eraill yn dangos perfformiad cymysg | 51 |
| 4 | Mae nifer o risgiau, heriau a chyfleoedd i Lywodraeth Cymru yn gysylltiedig â chaffael gwasanaethau Cymru a'r Gororau o 2018, ac mae rhai penderfyniadau allweddol i'w gwneud o hyd | 55 |
| | Mae enghraifft ddiweddar masnachfaint InterCity West Coast yn tynnu sylw at rai o'r risgiau sy'n gysylltiedig â'r broses gaffael ar gyfer gwasanaethau newydd Cymru a'r Gororau | 56 |
| | Mae Llywodraeth Cymru wedi sefydlu cwmni trafniadaeth a bwrdd cynghori strategol er mwyn cynyddu ei adnoddau i gaffael gwasanaethau newydd Cymru a'r Gororau | 57 |
| | Mae Llywodraeth Cymru am gael model gweithredu gwahanol ar gyfer y fasnachfaint nesaf, ond nid yw wedi nodi eto beth yw'r model gweithredu hwnnw | 59 |
| | Nod Llywodraeth Cymru yw gosod contract integredig ar gyfer Cymru a'r Gororau a'r Metro yn 2017 yr amcangyfrifir ei fod yn werth £3.5 biliwn, drwy broses deialog gystadleuol | 60 |
| | Nid yw Llywodraeth Cymru a Llywodraeth y DU wedi cytuno ar rai o fanylion y setliad ariannol ar gyfer masnachfaint nesaf Cymru a'r Gororau eto | 63 |
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| | Atodiad 4 – Prosiectau seilwaith rheilffyrdd a gwblhawyd yn ddiweddar ac sy'n mynd rhagddynt a ariannwyd yn rhannol gan Lywodraeth Cymru | 73 |

Crynodeb



- Mae'r rhwydwaith rheilffyrdd cludo teithwyr yng Nghymru yn cynnwys tua 1,700 o gilomedrau o reilffordd a 221 o orsafoedd. Dengys nifer o fetrigau gwahanol boblogrwydd cynyddol teithio ar drenau. Er enghraifft, ar gyfer Cymru mae cyfanswm y teithiau wedi mwy na dyblu ers 1995-96 a chyrhaeddodd 29.3 miliwn yn 2014-15 (Ffigur 1)¹.

Ffigur 1 – Teithiau gan deithwyr rheilffordd yng Nghymru, rhwng 1995-96 a 2014-15



Noder: Diffinnir teithiau teithwyr fel, 'A passenger journey ... is based on the origin and destination named on the ticket. For example, a journey from London to Halifax would be classed as one journey despite the need to change trains.'

Ffynhonnell: Y Swyddfa Rheilffyrdd a Ffyrdd, **Regional Rail Usage (Passenger Journeys) 2014-15 Annual Statistical Release**, Ionawr 2016.

- Yn yr hyn sydd mewn gwirionedd yn set gymhleth o drefniadau, mae nifer o sefydliadau yn rhannu cyfrifoldebau am wasanaethau trên yng Nghymru, gan gynnwys Llywodraeth y DU, Network Rail, Y Swyddfa Rheilffyrdd a Ffyrdd fel y rheoleiddiwr annibynnol a chwmnïau trên perthnasol (Ffigur 2)². Mae Deddf Rheilffyrdd 2005 yn rhoi rhai pwerau i Lywodraeth Cymru dros fasnachfaint rheilffyrdd a seilwaith rheilffyrdd Cymru a'r Gorau, er bod y pwerau hynny'n gyfyngedig. Mae masnachfaint rheilffyrdd Cymru a'r Gorau yn cynnwys llwybrau cymudo i mewn i brif ddinasoedd a threfi, llwybrau mwy gwledig, a llwybr sy'n cysylltu Gogledd Cymru a De Cymru gan redeg ar hyd llinell y Gororau ar y ffin rhwng Cymru a Lloegr (Atodiad 2). Mae'r cytundeb masnachfaint 15 mlynedd presennol, â Threnau Arriva Cymru, yn para tan 2018.

¹ Mae'r Swyddfa Rheilffyrdd a Ffyrdd hefyd yn coladu amcangyfrifon o nifer y teithwyr sy'n teithio i bob gorsaf ac oddi yno (mynediadau ac ymadawiadau). Dengys y data hynny fod defnydd teithwyr yng Nghymru wedi cynyddu bob blwyddyn ers 2005-06 ac amcangyfrifir bod gorsafodd wedi gweld 49 o filiynau o fynediadau ac ymadawiadau yn 2014-15.

² Ceir rhagor o fanylion am rolau a chyfrifoldebau Network Rail yn **A short guide to Network Rail**, a gyhoeddwyd gan y Swyddfa Archwilio Genedlaethol ym mis Gorffennaf 2015. Ceir gwybodaeth am rolau a chyfrifoldebau Network Rail ac eraill sy'n ymwneud â chynllunio, megis yr Adran Drafnidiaeth, yn **Planning and delivery of the 2014-2019 rail investment programme**, a gyhoeddwyd gan y Swyddfa Archwilio Genedlaethol ym mis Medi 2015.

Ffigur 2 – Crynodeb o gyfrifoldebau sefydliadol ar gyfer cynllunio, ariannu a darparu gwasanaethau trên a phrosiectau seilwaith

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| <p>Adran Drafnidiaeth Llywodraeth y DU</p> | <p>Mae'n goruchwyllo cyfeiriad strategol gwasanaethau trên ac yn ariannu'r rhan fwyaf o'r prosiectau seilwaith, ledled y rhwydwaith rheilffyrdd yng Nghymru a Lloegr.</p> <p>Yn y Fanyleb Allbwn Lefel Uchel, mae'r Ysgrifennydd Gwladol dros Drafnidiaeth yn nodi'r blaenoriaethau o ran buddsoddi mewn rheilffyrdd dros y 'cyfnod rheoli' o bum mlynedd. Ym mis Gorffennaf 2012, cyhoeddodd yr Adran Drafnidiaeth y Fanyleb Allbwn Lefel Uchel bresennol sy'n cwmpasu Cymru a Lloegr ar gyfer y cyfnod rheoli rhwng 1 Ebrill 2014 a 31 Mawrth 2019. Yn y Datganiad o'r Cyllid sydd ar Gael, mae'r Ysgrifennydd Gwladol yn nodi'r arian cyhoeddus sy'n debygol o fod ar gael er mwyn sicrhau y cyflawnir y prosiectau hyn. Er mai'r Adran Drafnidiaeth sy'n gyfrifol yn y pen draw am lunio'r Fanyleb Allbwn Lefel Uchel, mae eraill, megis y Swyddfa Rheilffyrdd a Ffyrdd, hefyd yn cymryd rhan yn y broses o'i datblygu.</p> |
| <p>Network Rail</p> | <p>Mae Network Rail yn berchen ar rwydwaith rheilffyrdd Prydain, gan gynnwys traciau, signalau, pontydd, twneli a 18 o orsafoedd allweddol, yn ei gynnal a'i gadw ac yn ei ddatblygu. Ariennir Network Rail drwy grantiau gan yr Adran Drafnidiaeth a Transport Scotlent, o incwm o eiddo masnachol ac o daliadau mynediad i draciau gan gwmnïau trên a chludo nwyddau.</p> <p>Yn gyfreithiol, Network Railway yw ymgwymerwr statudol y rhwydwaith rheilffyrdd a dim ond i wneud gwaith penodol a darparu gwasanaethau diogelu asedau y mae ganddo hawliau cyfreithiol.</p> <p>Ym mis Tachwedd 2011, crëwyd Network Rail Cymru i reoli seilwaith y rheilffyrdd yng Nghymru; galluogi Network Rail i fod yn fwy ymatebol i anghenion Cymru a sicrhau mwy o atebolrwydd lleol.</p> |
| <p>Y Swyddfa Rheilffyrdd a Ffyrdd</p> | <p>Y Swyddfa Rheilffyrdd a Ffyrdd yw'r rheoleiddiwr diogelwch ac economaidd annibynnol ar gyfer rheilffyrdd Prydain. Mae'r sefydliad yn sicrhau bod y rhwydwaith yn gweithredu'n ddiogel ac yn ddibynadwy ac yn cynnig gwerth am arian i drethdalwyr a chwsmeriaid, yn dal Network Rail i gyfrif ac yn sicrhau bod gan gwmnïau trên a chludo nwyddau fynediad teg i'r rhwydwaith rheilffyrdd a bod y farchnad yn gystadleuol ac yn deg.</p> |

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| <p>Llywodraeth Cymru</p> | <p>Cyn i Lywodraeth Cymru fynd yn gyfrifol am reoli masnachfaint Cymru a'r Gororau yn 2006, llofnododd Llywodraeth Cymru a'r Adran Drafnidiaeth Gydgytundeb rhwng Partion a gynhwysai ddiffiniadau o wasanaethau Cymru yn unig, gwasanaethau i Gymru a gwasanaethau Lloegr. Mae gwasanaeth i Gymru yn wasanaeth sy'n dechrau ac yn gorffen yng Nghymru neu sy'n stopio o leiaf unwaith yng Nghymru. Mae'r Cydgytundeb rhwng Partion yn rhestru pedwar llwybr fel rhai sy'n wasanaethau i Loegr: Henffordd i'r Amwythig; Yr Amwythig i Crewe; Birmingham New Street i'r Amwythig; a Crewe i Gaer. Mae'r Adran Drafnidiaeth yn talu cymhorthdal i Trenau Arriva Cymru am wasanaethau Lloegr.</p> <p>O'i grant bloc a ddarperir gan Drysorlys y DU, mae Llywodraeth Cymru yn talu cymhorthdal i Drenau Arriva Cymru am Wasanaethau Cymru yn unig a Gwasanaethau i Gymru. Trosglwyddodd yr Adran Drafnidiaeth arian ychwanegol i Lywodraeth Cymru yn 2006-07 a 2007-08 ac ar ôl hynny cyfunwyd yr arian hwn i greu'r grant bloc blynyddol.</p> <p>Ar gyfer holl wasanaethau'r fasnachfaint, gan gynnwys gwasanaethau Lloegr, mae Llywodraeth Cymru hefyd yn gyfrifol am wneud unrhyw daliadau cymell perfformiad cymwys. Pan drosglwyddodd arian ychwanegol i Lywodraeth Cymru yn 2006-07, ni ddarparodd yr Adran Drafnidiaeth ar gyfer unrhyw lefel o daliadau cymell perfformiad.</p> <p>Mae Llywodraeth Cymru hefyd yn gallu addasu cytundeb masnachfaint Cymru a'r Gororau er mwyn darparu gwasanaethau sy'n ychwanegol at fanyleb y fasnachfaint ar ei thraul ei hun.</p> <p>Ym mis Tachwedd 2014, daeth Llywodraeth Cymru a Llywodraeth y DU i gytundeb mewn egwyddor i ddirprwyo swyddogaethau masnachfreinio rheilffyrdd gweithredol i Lywodraeth Cymru o fis Ionawr 2017. Fodd bynnag, mae'r dyddiad targed gwreiddiol wedi'i ddisodli drwy gytundeb i drosglwyddo swyddogaethau masnachfreinio yn nes ymlaen yn 2017. Mae'r ddwy lywodraeth yn cydweithio i alluogi Llywodraeth Cymru i gaffael masnachfaint nesaf Cymru a'r Gororau yn llwyddiannus o fis Hydref 2018.</p> <p>O dan Ddeddf Rheilffyrdd 2005, gall Llywodraeth Cymru gyfrannu arian er mwyn helpu i gyflawni prosiectau arfaethedig Network Rail a chomisiynu ei phrosiectau ei hun i'w cyflawni gan Network Rail neu, o bosibl, gan contractwyr eraill.</p> |
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| Cwmnïau Trên | <p>Yn ogystal â Threnau Arriva Cymru, sy'n gweithredu masnachfaint Cymru a'r Gororau, mae tri chwmni trên arall yn gweithredu masnachfreintiau sydd â llwybrau yng Nghymru (yn ychwanegol at eu gwasanaethau yn Lloegr):</p> <ul style="list-style-type: none"> • Rheilffordd y Great Western (Paddington Llundain i Abertawe a Chaerfyrddin, Caerdydd i Dde-orllewin Cymru); • Virgin (Euston Llundain i Gaerdydd, yr Amwythig a Wrecsam); a • CrossCountry (Nottingham i Gaerdydd drwy Birmingham). <p>Mae'r masnachfreintiau hyn yn cynnwys gwasanaethau yng Nghymru ac, felly, mae'n rhaid i'r Ysgrifennydd Gwladol dros Ddrafnidiaeth ymgynghori â Llywodraeth Cymru ynghylch y trefniadau masnachfaint hyn. Nid oes gan Lywodraeth Cymru unrhyw rôl ffurfiol arall o ran y masnachfreintiau sy'n cwmpasu'r llwybrau hyn. Erys pob pŵer a chyfrifoldeb gyda'r Adran Ddrafnidiaeth. Fodd bynnag, gall Llywodraeth Cymru gomisiynu gwaith seilwaith er mwyn helpu i wella gwasanaethau ar y rhannau o'r llwybrau hyn a leolir yng Nghymru sydd hefyd yn gwasanaethu masnachfaint Cymru a'r Gororau. Er enghraifft, mae Llywodraeth Cymru yn ariannu gwelliannau i orsafoedd yng ngogledd Cymru a wasanaethir gan lwybr Euston Llundain i Gaerdydd a redir gan gwmni Virgin (y Fflint, Cyffordd Llandudno a'r Rhyl) a gorsaf Parkway Port Talbot a wasanaethir gan lwybr Paddington Llundain i Abertawe a redir gan Rheilffordd y Great Western.</p> |
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Ffynhonnell: Swyddfa Archwilio Cymru

- 3 Mae Llywodraeth Cymru wedi cyhoeddi nifer o ddogfennau sy'n nodi sut mae'n bwriadu gwella gwasanaethau trên, seilwaith a threfniadau cyflawni i weithredu'r nodau a nodir yn strategaeth ddrafnidiaeth 2008³. Yn fwy diweddar, nododd y **Cynllun Cyllid Trafnidiaeth Cenedlaethol**, a gyhoeddwyd ym mis Gorffennaf 2015, gynlluniau buddsoddi Llywodraeth Cymru ar gyfer pob dull o deithio ar gyfer y cyfnod o bum mlynedd o 2015, ac mae'n cynnwys amrywiaeth o ymyriadau i wella gwasanaethau trên ledled Cymru. Mewn rhai achosion, mae'r terfyn amser ar gyfer cyflawni yn ymestyn y tu hwnt i gyfnod y cynllun.
- 4 O fewn y fframwaith cyffredinol a nodir gan strategaeth 2008, mae blaenoriaethau Llywodraeth Cymru o ran rheilffyrdd wedi newid dros amser. Yn ddiweddar, mae polisi wedi canolbwyntio ar hyrwyddo cysylltedd rhwng gwahanol leoliadau allweddol er mwyn ysgogi'r economi a chreu swyddi. Yn flaenorol, canolbwyntiwyd ar gysylltiadau rhwng y dwyrain a'r gorllewin a, chyn hynny, gysylltiadau rhwng y gogledd a'r de. Ym mis Mawrth 2016, cyhoeddodd Pwyllgor Menter a Busnes y Cynulliad Cenedlaethol adroddiad ar y **Blaenoriaethau ar gyfer Dyfodol Seilwaith Rheilffyrdd Cymru**. Nododd yr adroddiad farn y Pwyllgor ynghlân â blaenoriaethau ar gyfer buddsoddi yn y dyfodol, er mwyn dylanwadu ar brosesau gwneud penderfyniadau yn y dyfodol.

3 Llywodraeth Cymru, **Cymru'n Un: Cysylltu'r Genedl – Strategaeth Trafnidiaeth Cymru**, Mai 2008.

- 5 Ar ran yr Archwilydd Cyffredinol, mae staff Swyddfa Archwilio Cymru wedi ystyried a yw Llywodraeth Cymru wedi rhoi trefniadau effeithiol ar waith er mwyn helpu i ddatblygu a darparu seilwaith a gwasanaethau rheilffyrdd yng Nghymru. Mae'r adroddiad hwn yn ystyried materion sy'n ymwneud â phwerau a dylanwad ehangach Llywodraeth Cymru mewn perthynas â seilwaith a gwasanaethau rheilffyrdd a buddsoddiad cysylltiedig gan Lywodraeth Cymru. Mae'r adroddiad hefyd yn ystyried perfformiad gwasanaethau ar fasnachfaint Cymru a'r Gororau a chynlluniau ar gyfer caffael gwasanaethau Cymru a'r Gororau o 2018. Mae **Atodiad 1** yn rhoi rhagor o fanylion am gwmpas ein gwaith a'n dulliau archwilio.
- 6 **Daethom i'r casgliad, o fewn terfynau ei phwerau cyfyngedig, fod Llywodraeth Cymru wedi bod yn rhagweithiol wrth geisio dylanwadu ar benderfyniadau ariannu gan eraill ac wedi gwneud buddsoddiad sylweddol i wella seilwaith a gwasanaethau rheilffyrdd dros y blynyddoedd diwethaf. Mae Lywodraeth Cymru o'r farn y bydd y pwerau ychwanegol y mae'n disgwyl eu cael yn 2017 i gaffael masnachfaint nesaf Cymru a'r Gororau yn ei helpu i sicrhau y bydd y fasnachfaint nesaf yn cyflawni ei blaenoriaethau ac yn gwella perfformiad gwasanaethau ymhellach. Fodd bynnag, mae nifer o risgiau, heriau a chyfleoedd i Lywodraeth Cymru yn gysylltiedig â chaffael y fasnachfaint, ac mae rhai penderfyniadau allweddol i'w gwneud o hyd.** Mae'r paragraffau canlynol yn rhoi trosolwg byr o'n canfyddiadau allweddol.
- 7 **Bu Llywodraeth Cymru yn ceisio ymestyn ei phwerau a'i dylanwad strategol cyfyngedig dros wasanaethau trên yng Nghymru.** Cyn i'r fasnachfaint nesaf ddechrau yn 2018, yn ystod 2017 mae Llywodraeth Cymru yn disgwyl cael pwerau i gaffael masnachfaint nesaf Cymru a'r Gororau, y mae'n disgwyl iddynt ei helpu i sicrhau bod y fasnachfaint yn diwallu anghenion hirdymor Cymru. Mae Llywodraeth Cymru yn gobeithio y bydd y fasnachfaint newydd yn cyflawni nifer o ganlyniadau cadarnhaol i deithwyr, yr economi a'r amgylchedd.
- 8 Mae Llywodraeth Cymru wedi ceisio'r un pwerau i benderfynu ar brosiectau seilwaith rheilffyrdd ag sydd gan lywodraethau'r DU a'r Alban, ond nid oes ganddi'r pwerau hynny ar hyn o bryd. Serch hynny, mae Llywodraeth Cymru yn cymryd rhan weithredol yn y broses gynllunio ar gyfer y cylch buddsoddi mewn seilwaith nesaf ledled Cymru a Lloegr rhwng 2019 a 2024.
- 9 At hynny, mae gan Lywodraeth Cymru lai o bŵer dros Network Rail nag sydd gan lywodraethau'r DU a'r Alban o ran y camau y gall eu cymryd os bydd problemau yn codi o ran cyflawni prosiectau. Serch hynny, gallai Llywodraeth Cymru fod wedi gweithredu ynghynt i atgyfnerthu ei threfniadau goruchwyllo a'i threfniadau cytundebol ar gyfer y prosiectau a ariennir ganddi, er bod sefydlu Bwrdd Rheoli Prosiectau a Rhaglenni ar y cyd rhwng Network Rail a Llywodraeth Cymru wed bod yn ddatblygiad cadarnhaol. Mae Llywodraeth Cymru wedi ariannu dau brosiect seilwaith gan ddefnyddio contractwyr heblaw am Network Rail ond mae'n gobeithio cymhwyso'r dull hwn o weithredu'n ehangach, yn arbennig er mwyn gwneud y gwaith seilwaith ar gyfer Metro De Cymru.

- 10 **Rhwng mis Ebrill 2011 a mis Mawrth 2016, cyfrannodd Llywodraeth Cymru tua £362 miliwn at wariant sector cyhoeddus ehangach ar reilffyrdd yng Nghymru, ond ni wnaeth ddigon i werthuso'r buddiannau sydd wedi deillio o'i buddsoddiad.** Yn ystod y cyfnod hwn, buddsoddodd Llywodraeth Cymru £109 miliwn mewn gwell gwasanaethau ar ben cost graidd masnachfaint Cymru a'r Gororau, sef £617 miliwn. Bu'n ofynnol i Lywodraeth Cymru dalu £27 miliwn i Trenau Arriva Cymru mewn taliadau cymell perfformiad cytundebol, net o daliadau cosb.
- 11 At hynny, buddsoddodd Llywodraeth Cymru £226 miliwn mewn prosiectau i wella seilwaith rheilffyrdd, gan gynnwys arian gan gronfeydd strwythurol yr Undeb Ewropeaidd. Heb gynnwys yr arian hwn gan Lywodraeth Cymru a'r Undeb Ewropeaidd, buddsoddodd Network Rail £1.4 biliwn yn seilwaith rheilffyrdd Cymru rhwng mis Ebrill 2011 a mis Mawrth 2016. Buddsoddodd Network Rail yr arian hwn yn bennaf mewn prosiectau i adnewyddu'r seilwaith presennol (£882 miliwn) a gwaith cynnal a chadw (£301 miliwn), gyda £235 miliwn yn cael ei fuddsoddi mewn gwelliannau. Mae Llywodraeth Cymru wedi adeiladu ar waith arfaethedig gan Network Rail er mwyn helpu i wella'r seilwaith a gwasanaethau ymhellach.
- 12 Nid oedd Llywodraeth Cymru wedi mabwysiadu dull systematig o werthuso gwerth am arian ei buddsoddiad mewn gwasanaethau trên. Mae nifer o adolygiadau blaenorol wedi nodi cyfleoedd i atgyfnerthu prosesau monitro a gwerthuso ac mae Llywodraeth Cymru wrthi'n atgyfnerthu'r trefniadau hyn.
- 13 Fel y nodir yn y **Cynllun Cyllid Trafnidiaeth Cenedlaethol**, ar hyn o bryd mae Llywodraeth Cymru yn bwriadu canolbwyntio ei rhaglen tymor canolig ei hun ar gyfer buddsoddi yn seilwaith y rheilffyrdd yn y dyfodol ar brosiectau Cam 2 Metro De Cymru. Pwysleisiodd swyddogion Llywodraeth Cymru i ni fod y Cynllun yn ddogfen 'fyw' ac y caiff ei diweddaru'n rheolaidd. Mae cynllun Cam 2 y Metro yn adeiladu ar gynllun Trydaneiddio Llinellau'r Cymoedd ac amcangyfrifir y bydd yn costio tua £734 miliwn. Mae Llywodraeth Cymru yn bwriadu gwneud cais am £125 miliwn o arian yr Undeb Ewropeaidd sydd ar gael drwy Gronfa Datblygu Rhanbarthol Ewrop i ategu ei buddsoddiad ei hun, yr amcangyfrifwyd y bydd yn costio £609 miliwn yn ôl prisiau 2018, ar ben cyfraniad Llywodraeth y DU, sef £125 miliwn. Ers canlyniad y refferendwm ar aelodaeth o'r Undeb Ewropeaidd, mae'r Prif Weinidog wedi ceisio cadarnhad y dylai Cymru allu parhau i hawlio'r arian hwn neu allu cael arian cyfatebol gan Lywodraeth y DU.
- 14 **Ers 2006, mae perfformiad masnachfaint Cymru a'r Gororau wedi gwella, er bod cymariaethau â gwasanaethau trên eraill yn y DU yn dangos perfformiad cymysg.** Trenau Arriva Cymru a gafodd y trydydd cymhorthdal mwyaf o blith yr holl gwmnïau trên yn y DU i weithredu masnachfaint bresennol Cymru a'r Gororau rhwng 2011-12 a 2014-15, er nad yw cymhorthdal mawr yn anghyffredin ar gyfer masnachfreintiau rhanbarthol sy'n darparu gwasanaethau gwledig. Mae Trenau Arriva Cymru, i raddau helaeth, wedi cyflawni'r targedau blynyddol ar gyfer

perfformiad a nodwyd o dan y cytundeb masnachfaint, er bod y targed wedi dod yn fwy heriol. Mae boddhad teithwyr â Trenau Arriva Cymru wedi gwella i ryw raddau. Fodd bynnag, dengys cymariaethau â gwasanaethau trên eraill yn y DU berfformiad cymysg.

- 15 **Mae nifer o risgiau, heriau a chyfleoedd i Lywodraeth Cymru yn gysylltiedig â chaffael gwasanaethau Cymru a'r Gororau o 2018, ac mae rhai penderfyniadau allweddol i'w gwneud o hyd.** Nod Llywodraeth Cymru yw gosod contract integredig ar gyfer Cymru a'r Gororau a'r Metro yn 2017 yr amcangyfrifir ei fod yn werth tua £3.5 biliwn. Ar ôl iddo gael ei gaffael, hwn fydd y contract integredig cyntaf o'i fath yn y DU. Mae Llywodraeth Cymru o'r farn y dylai caffael contract integredig gynnig cyfle iddi reoli rhyngddibyniaethau rhwng caffael cerbydau, gwaith seilwaith a darparu gwasanaethau o dan y fasnachfaint yn well. Mae hefyd yn credu y bydd contract integredig yn gwella ansawdd yn sylweddol, gan gynnwys amseroedd teithio cyflymach, gwasanaethau mwy dibynadwy a lleddfu problem gorlenwi. Fodd bynnag, mae enghraifft ddiweddar masnachfaint InterCity West Coast yn Lloegr yn nodi rhai o'r risgiau sydd ynghlwm wrth y broses gaffael ar gyfer gwasanaethau newydd Cymru a'r Gororau. Mae hyd y fasnachfaint – sy'n debygol o bara 15 mlynedd – yn golygu ei bod yn arbennig o bwysig bod Llywodraeth Cymru yn cael manyleb y contract yn iawn.
- 16 Mae Llywodraeth Cymru wedi sefydlu cwmni Trafnidiaeth Cymru a bwrdd cynghori strategol i roi cyngor ar y broses gaffael a'i rheoli. Mae'r dull deialog gystadleuol a fabwysiadwyd gan Lywodraeth Cymru yn golygu nad yw wedi nodi'r ateb ymlaen llaw, yn hytrach mae'n gweithio gyda'r diwydiant i lunio ateb ymarferol sy'n addas at y diben. Nid yw Llywodraeth Cymru wedi penderfynu ar y model gweithredu ar gyfer y gwasanaethau newydd eto.
- 17 Nid yw Llywodraeth Cymru a Llywodraeth y DU wedi penderfynu eto ar rai o fanylion y setliad ariannol ar gyfer masnachfaint Cymru a'r Gororau ac mae'n anochel y bydd cyfyngiadau cyllidebol ehangach yn ystyriaeth mewn penderfyniadau ynghylch fforddiadwyedd a blaenoriaethu gwell gwasanaethau yn gyffredinol yn y tymor canolig. Penderfynir ar y dull o reoli a chaffael cerbydau fel rhan o'r broses deialog gystadleuol ar gyfer caffael y fasnachfaint. Mae cerbydau yn fater penodol oherwydd rheoliadau, a elwir yn gyffredin yn 'Persons with Reduced Mobility Regulations', sy'n golygu bod yn rhaid i bob trên fod yn hygyrch erbyn 1 Ionawr 2020.

Argymhellion

Mewn ymateb i adolygiadau blaenorol, mae Llywodraeth Cymru eisoes yn cymryd camau i fynd i'r afael â gwendidau yn ei threfniadau ar gyfer gwerthuso effaith ei buddsoddiad mewn gwasanaethau trên a seilwaith y rheilffyrdd. Ym mis Mawrth 2015, cyhoeddodd Llywodraeth Cymru brotocol ar gyfer gwerthuso ei rhaglen buddsoddi mewn rheilffyrdd a'r Metro ar ôl i'r prosiectau ddod i ben. Wrth lunio ein hargymhellion ein hunain, rydym hefyd wedi ystyried yr argymhellion a wnaed gan Bwyllgor Menter a Busnes y Cynulliad Cenedlaethol yn ei adroddiadau blaenorol ar faterion sy'n ymwneud â rheilffyrdd.

- A1 Mae gan gysylltiadau cytundebol Llywodraeth Cymru â Network Rail rai cyfyngiadau, am eu bod yn seiliedig ar contractau templed a luniwyd yn bennaf i reoli'r gydberthynas rhwng Network Rail ac arianwyr yn y sector preifat. Fodd bynnag, gall Llywodraeth Cymru roi mwy o sicrwydd ynghylch ariannu ei chontractau nag y gall buddsoddwyr yn y sector preifat ei wneud (**paragraffau 1.33-1.39**). **Argymhellwn, os bydd Llywodraeth Cymru am i Network Rail gyflawni prosiect y mae'n ei ariannu, y dylai geisio datblygu contractau pwrpasol. Dylai contractau pwrpasol ddiogelu buddiant Llywodraeth Cymru yn well drwy gydnabod y ffaith y gall roi mwy o sicrwydd ynghylch ariannu contractau yn ogystal ag adlewyrchu amgylchiadau a risgiau prosiectau unigol.**
- A2 Mae Llywodraeth Cymru yn awyddus i gyflawni mwy o brosiectau drwy contractwyr heblaw am Network Rail am ei bod o'r farn y bydd y dull hwn o weithredu yn ei galluogi i sicrhau gwell gwerth am arian yn enwedig wrth ddatblygu ei chynlluniau ar gyfer Metro De Cymru. Yn ddiweddar, lluniodd Llywodraeth Cymru Femorandwm Cyd-ddealltwriaeth â Network Rail er mwyn helpu i gaffael masnachfaint newydd Cymru a'r Gororau a'r Metro (**paragraffau 1.40-1.47**). **Argymhellwn, wrth i'r broses gaffael fynd rhagddi, y dylai Llywodraeth Cymru adolygu effeithiolrwydd y Memorandwm Cyd-ddealltwriaeth a sicrhau bod unrhyw wersi yn cael eu cymhwyso at ei chydberthynas barhaus â Network Rail.**
- A3 Mae Cam 2 Metro De Cymru yn adeiladu ar gynllun Trydaneiddio Llinellau'r Cymoedd ac, ar hyn o bryd, amcangyfrifir y bydd yn costio cyfanswm o tua £734 miliwn yn ôl prisiau 2018 (**paragraffau 2.32-2.37**). **Yn gyson â'r argymhellion yn yr Adroddiad ar Brosiectau Trafnidiaeth Mawr, a gyhoeddwyd gan yr Archwilydd Cyffredinol ym mis Ionawr 2011, argymhellwn y dylai Llywodraeth Cymru wneud y canlynol:**
- a **cofnodi gwybodaeth a fydd yn olrhain perfformiad prosiectau cam 2 y Metro ar gamau cyflawni allweddol;**
 - b **cynnwys y wybodaeth sydd ei hangen i hwyluso meincnodi perfformiad prosiect yn erbyn prosiectau mewn rhannau eraill o'r DU;**
 - c **cofnodi'r holl newidiadau yng nghostau'r prosiect ar bob cam o gylch oes y prosiect; a**
 - ch **chofnodi a rhannu'r rhesymau dros unrhyw gynnydd mewn costau ac oedi er mwyn llywio prosiectau trafndiaeth eraill Llywodraeth Cymru.**

- A4 Yn 2017, nod Llywodraeth Cymru yw gosod contract integredig ar gyfer prosiectau Cymru a'r Gororau a'r Metro yr amcangyfrifir ei fod yn werth £3.5 biliwn. Mae Llywodraeth Cymru wedi sefydlu cwmni Trafnidiaeth Cymru i bennu a chaffael y contract integredig. Mae enghraifft ddiweddar masnachfaint InterCity West Coast yn Lloegr yn nodi rhai o'r risgiau sydd ynghlwm wrth y broses gaffael ([paragraffau 4.4-4.5](#)). **Argymhellwn y canlynol:**
- a **Dylai Pwyllgor Archwilio a Risg perthnasol Llywodraeth Cymru graffu ar drefniadau llywodraethu'r Cwmni Trafnidiaeth a'r cynnydd y mae'n ei wneud o ran caffael contract integredig Cymru a'r Gororau a Metro a'r gwaith cysylltiedig o ddatblygu'r dull o reoli a chaffael cerbydau er mwyn ei alluogi i gydymffurfio â'r gofyniad i sicrhau bod pob trên yn hygyrch i bobl sy'n cael trafferth symud o gwmpas erbyn 2020. Bydd hyn yn cynnwys y Pwyllgor Archwilio a Risg yn sicrhau ei hun bod Llywodraeth Cymru yn mynd i'r afael ag argymhellion adolygiad Gateway, a gynhaliwyd ym mis Mawrth 2016, yn amserol.**
 - b **Dylai Llywodraeth Cymru sicrhau bod ei threfniadau rheoli prosiect a risg ar gyfer y broses gaffael wedi rhoi sylw llawn i wersi perthnasol ac argymhellion o adroddiadau diweddar y Swyddfa Archwilio Genedlaethol ynglŷn â rhaglenni masnachfreinio rheilffyrdd a seilwaith rheilffyrdd, ac adroddiadau cysylltiedig gan Bwyllgor Cyfrifon Cyhoeddus Senedd y DU.**
 - c **Dylai Llywodraeth Cymru hefyd weithio gyda swyddogion yr Adran Drafnidiaeth i weithredu'r gwersi o brosesau caffael masnachfaint llyyddiannus a'r rhai a fu'n fwy heriol.**
 - ch **Ochr yn ochr â'r broses gaffael, dylai Llywodraeth Cymru ddatblygu system sy'n ei galluogi i ddangos y gwerth am arian y mae'r elfen masnachfaint o'r contract newydd yn ei gynnig, o'i chymharu â'r fasnachfaint bresennol a masnachfreintiau eraill.**
- A5 Yn ei adroddiad, **Dyfodol Masnachfaint Rheilffyrdd Cymru a'r Gororau**, a gyhoeddwyd ym mis Rhagfyr 2013, gwnaeth Pwyllgor Menter a Busnes Cynulliad Cenedlaethol Cymru nifer o argymhellion ynghylch y broses fasnachfreinio. Yn ei hymateb i nifer o'r argymhellion, nododd Llywodraeth Cymru nad hi oedd yr awdurdod masnachfreinio ([paragraff 4.28](#)). Gan fod Llywodraeth Cymru yn disgwyl cael pwerau i gaffael masnachfaint nesaf Cymru a'r Gororau yn ystod 2017, **argymhellwn y dylai gwaith cynllunio Llywodraeth Cymru ar gyfer y fasnachfaint ystyried yr argymhellion a wnaed gan ymchwiliad y Pwyllgor Menter a Busnes i Ddyfodol Masnachfaint Rheilffyrdd Cymru a'r Gororau a gynhaliwyd yn 2013.**

Rhan 1

Bu Llywodraeth Cymru yn ceisio ymestyn ei phwerau a'i dylanwad strategol cyfyngedig dros wasanaethau trên yng Nghymru



- 1.1 Yn y rhan hon o'r adroddiad, rydym yn nodi'r pwerau newydd y mae Llywodraeth Cymru yn disgwyl eu cael dros fasnachfaint rheilffyrdd Cymru a'r Gororau, cyn i'r fasnachfaint nesaf ddechrau yn 2018. Rydym hefyd yn ystyried rôl Llywodraeth Cymru o ran sicrhau y buddsoddir yn seilwaith y rheilffyrdd.

Yn ystod 2017, mae Llywodraeth Cymru yn disgwyl cael pwerau i gaffael masnachfaint nesaf Cymru a'r Gororau, y mae'n disgwyl iddi helpu i sicrhau bod y fasnachfaint yn diwallu anghenion hirdymor Cymru

- 1.2 Ym mis Ebrill 2006, o dan delerau cytundeb â'r Adran Drafnidiaeth, daeth Llywodraeth Cymru yn gyfrifol am reoli'r fasnachfaint o ddydd i ddydd. Mae Llywodraeth Cymru yn gyfrifol am reoli cyllid a pherfformiad gwasanaethau i deithwyr a gwmpesir gan y cytundeb masnachfaint.
- 1.3 Ym mis Mehefin 2011, roedd **Rhaglen Lywodraethu** Llywodraeth Cymru yn cynnwys ymrwymiad i geisio sicrhau bod rhagor o bwerau dros reilffyrdd yn cael eu datganoli. Ym mis Tachwedd 2014, cytunodd Llywodraeth y DU a Llywodraeth Cymru mewn egwyddor i ddatganoli swyddogaethau masnachfreinio rheilffyrdd o fis Ionawr 2017, gan alluogi Llywodraeth Cymru i gymryd cyfrifoldeb llawn am ragnodi a chaffael masnachfreintiau rheilffordd Cymru a'r Gororau yn y dyfodol. Er mwyn helpu i gwblhau'r broses hon yn unol â'r amserlen ddeddfwriaethol, dechreuodd Llywodraeth Cymru a Llywodraeth y DU ddatblygu gorchymyn Trosglwyddo Swyddogaethau er mwyn trosglwyddo pwerau a dyletswyddau statudol ar gyfer gwasanaethau trên perthnasol i Weinidogion Cymru.
- 1.4 Yn fwy diweddar, mae'r ddwy lywodraeth wedi cytuno y caiff swyddogaethau eu trosglwyddo yn nes ymlaen yn 2017. Er mwyn i hyn ddigwydd bydd angen i'r ddwy lywodraeth gytuno yn gyntaf ar ddull o ymdrin â gwasanaethau trawsffiniol, hynny yw, a fydd y gwasanaethau hyn yn aros o fewn masnachfaint Cymru a'r Gororau neu'n dod yn rhan o fasnachfreintiau eraill (gweler hefyd [baragraff 4.26](#)). Mae'r ddwy lywodraeth yn cydweithio i ddod i gytundeb a galluogi Llywodraeth Cymru i gaffael masnachfaint nesaf Cymru a'r Gororau yn llwyddiannus o fis Hydref 2018.
- 1.5 Mae Llywodraeth Cymru yn bwriadu llofnodi'r contract ar gyfer y fasnachfaint newydd yn ystod 2017, gyda'r fasnachfaint yn dod yn weithredol ym mis Hydref 2018, yn amodol ar gystadleuaeth llwyddiannus. Rydym yn nodi rhagor o fanylion am amserlen y broses gaffael yn [Rhan 4](#) o'r adroddiad hwn.

1.6 Mae Llywodraeth Cymru yn ystyried mai hi yw'r corff mwyaf priodol i bennu masnachfrait a fydd yn cyflawni ei blaenoriaethau a diwallu anghenion hirdymor Cymru. Mae Llywodraeth Cymru wedi nodi'r canlyniadau gofynnol y mae'n rhaid i'r fasnachfrait newydd eu cyflawni, sef:



Nid oes gan Lywodraeth Cymru yr un pwerau i benderfynu ar brosiectau seilwaith rheilffyrdd ag sydd gan lywodraethau'r DU a'r Alban

- 1.7 Mae'r Adran Drafnidiaeth yn pennu'r amcanion lefel uchel ar gyfer rheilffyrdd a'r prosiectau seilwaith mawr sydd eu hangen i gyflawni'r amcanion hyn drwy lunio 'Manyleb Allbwn Lefel Uchel' sy'n cwmpasu Cymru a Lloegr. Mae'r Fanyleb Allbwn Lefel Uchel yn nodi blaenoriaethau o ran buddsoddi mewn rheilffyrdd ar gyfer 'cyfnod rheoli' o bum mlynedd a'r arian cyhoeddus sy'n debygol o fod ar gael er mwyn sicrhau y cyflawnir y prosiectau hyn. Ysgrifennydd Gwladol dros Drafnidiaeth Llywodraeth y DU sy'n gwneud y penderfyniad terfynol ynghylch yr hyn y dylid ei gynnwys yn y Fanyleb Allbwn Lefel Uchel.
- 1.8 Yn wahanol i Lywodraeth yr Alban, nid oes gan Lywodraeth Cymru y pwerau i lunio ei Manyleb Allbwn Lefel Uchel ei hun y gallai ei defnyddio i orfodi Network Rail i fabwysiadu ei blaenoriaethau. Mae'r trefniadau presennol yn golygu mai dim ond ceisio dylanwadu ar yr Adran Drafnidiaeth i gynnwys prosiectau yn ei Manyleb Allbwn Lefel Uchel y gall Llywodraeth Cymru ei wneud. Mae Llywodraeth Cymru o'r farn, heb ei Manyleb Allbwn Lefel Uchel ei hun, ei bod yn cael ei rhwystro rhag cyflawni ei blaenoriaethau strategol lefel uchel ar gyfer rheilffyrdd a thrafnidiaeth yn fwy cyffredinol⁴.
- 1.9 Mae'r Fanyleb Allbwn Lefel Uchel bresennol yn cynnwys dau brosiect yng Nghymru, y mae'r ddau ohonynt yn ffrwyth gwaith a wnaed ar y cyd gan Lywodraeth Cymru a Llywodraeth y DU, sef:
 - a Trydaneiddio Prif Linell y Great Western (Paddington Llundain i Abertawe)⁵; a
 - b Trydaneiddio Llinellau'r Cymoedd, sydd bellach wedi'i ymgorffori ym mhrosiect Metro De Cymru Llywodraeth Cymru (**Blwch 1** ar dudalen 41)⁶.
- 1.10 Datblygodd Llywodraeth Cymru Raglen Gwella Hygyrchedd Gorsafoedd Cymru fel darpar brosiect i'w gynnwys ym Manyleb Allbwn Lefel Uchel 2014-2019, ond penderfynodd yr Adran Drafnidiaeth beidio â chynnwys y prosiect. Mae Llywodraeth Cymru wedi bwrw ati i gyflawni'r gwelliannau hyn i orsafoedd fel rhan o'i Rhaglen Gwella Gorsafoedd Cymru. Mae **Atodiad 4** yn nodi'r gorsafoedd a gwmpesir gan Raglen Gwella Gorsafoedd Cymru a'r gwahanol ffynonellau ariannu - Llywodraeth Cymru (gan gynnwys arian yr Undeb Ewropeaidd) a Network Rail - ar gyfer y rhaglen hon⁷.

4 Nodir manylion am flaenoriaethau Llywodraeth Cymru yn ei **Chynllun Trafnidiaeth Cenedlaethol**, Mawrth 2010 a **Chynllun Cyllid Trafnidiaeth Cenedlaethol 2015**, Gorffennaf 2015.

5 Y bwriad o hyd yw y caiff y gwaith o drydaneiddio'r llinell i Gaerdydd ei chwblhau o fewn cyfnod rheoli 5. Fodd bynnag, mae prosiect trydaneiddio'r llinell rhwng Caerdydd ac Abertawe wedi'i aildrefnu ac ni ddisgwyliar i'r gwaith gael ei gwblhau tan gyfnod rheoli 6 (2019-24) o leiaf.

6 Arweiniodd y Fanyleb Allbwn Lefel Uchel flaenorol i Gymru a Lloegr ar gyfer y cyfnod rheoli rhwng 1 Ebrill 2009 a 31 March 2014 ar un prosiect mawr yng Nghymru – sef y cynllun Adnewyddu Signalau yn Ardal Caerdydd, sy'n dal i fynd rhagddo, a drafodir yn Astudiaeth Achos 3 ar dudalen 36.

7 Mae'r Adran Drafnidiaeth wedi ariannu rhai gwelliannau i orsafoedd yng Nghymru drwy ei rhaglen Mynediad i Bawb. Mae gwelliannau i orsafoedd a wnaed o dan raglen Mynediad i Bawb hefyd yn cynnwys elfen o arian Llywodraeth Cymru (Atodiad 4).

- 1.11 Ym mis Mawrth 2016, ysgrifennodd Gweinidog yr Economi, Gwyddoniaeth a Thrafnidiaeth ar y pryd at Ysgrifennydd Gwladol y DU dros Drafndiaeth yn mynegi pryderon Llywodraeth Cymru ynghylch lefel buddsoddiad Network Rail mewn gwella seilwaith y rheilffyrdd yng Nghymru. Mae Llywodraeth Cymru wedi amcangyfrif, ers 2011, fod Llwybr Cymru wedi cael 1 y cant o'r arian a wariwyd gan Network Rail ar wella'r seilwaith rheilffyrdd yng Nghymru a Lloegr. Mae o'r farn bod y lefel hon o arian yn annigonol am nifer o resymau, er enghraifft, mae Llwybr Cymru yn cyfrif am tua 11 y cant o gyfanswm y rhwydwaith rheilffyrdd yng Nghymru a Lloegr.
- 1.12 Yn yr un llythyr, nododd Llywodraeth Cymru hefyd, pe bai fformiwla Barnett yn cael ei chymhwyso at gyfanswm yr arian gwella sydd ar gael, y câi Llwybr Cymru 5 y cant o'r arian sydd ar gael, ond yn ei barn hi roedd dadleuon cryf y dylai Llwybr Cymru gael cyfran lawer mwy o'r arian na 5 y cant (er enghraifft dibynadwyedd Llwybr Cymru). Mae natur fformiwla Barnett yn golygu nad yw'n gymwys yn hyn o beth. Fodd bynnag, mae Llywodraeth Cymru wedi pwysleisio i ni ei bod yn gwneud pwynt ynglŷn â'r ganran briodol o gyfanswm gwariant Network Rail pe câi ei chyfrifo fesul pen o'r boblogaeth.
- 1.13 Galwodd Llywodraeth Cymru ar yr Ysgrifennydd Gwladol i sefydlu cronfa wedi'i chlustnodi i ddatblygu gwelliannau i'r seilwaith ar Lwybr Cymru. Nid yw'r Ysgrifennydd Gwladol dros Drafndiaeth wedi ymateb i'r pwyntiau a godwyd gan Lywodraeth Cymru eto. Fodd bynnag, mae swyddogion yr Adran Drafndiaeth wedi pwysleisio i ni mai'r ffordd fwyaf effeithlon o ddyrannu arian ar gyfer gwella'r rhwydwaith rheilffyrdd strategol yw canolbwyntio buddsoddiad ar bwyntiau straen ar y rhwydwaith lle y disgwyliar i'r galw fod yn uwch na chapasiti, yn hytrach na dyrannu arian ar sail pro-rata.
- 1.14 Ym mis Mawrth 2014, argymhellodd y Comisiwn ar Ddatganoli yng Nghymru⁸ y dylai Llywodraeth y DU ddatganoli ariannu Network Rail mewn perthynas â rhwydwaith Cymru. Gan nad oedd consensws trawsbleidiol ar lefel y DU, ni chynhwyswyd trosglwyddo pwerau dros seilwaith y rheilffyrdd yng 'Nghytundeb Dydd Gŵyl Dewi' 2015 rhwng Llywodraeth y DU a Llywodraeth Cymru. Mewn tystiolaeth i Bwyllgor Menter a Busnes y Cynulliad Cenedlaethol ym mis Medi 2015, nododd Adran Drafndiaeth Llywodraeth y DU nad oedd yn bwriadu aildechrau trafodaethau ynghylch datganoli cyllid Network Rail.

8 Y Comisiwn ar Ddatganoli yng Nghymru, **Grymuso a Chyfrifoldeb Pwerau Deddfwriaethol i Gryfhau Cymru**, Mawrth 2014.

Mae Llywodraeth Cymru yn cymryd camau priodol i ddylanwadu ar brosesau gwneud penderfyniadau ynghylch buddsoddi yn seilwaith y rheilffyrdd, er y gallai fod wedi gweithredu ynghynt i atgyfnerthu ei threfniadau goruchwylio a'i threfniadau cytundebol ar gyfer prosiectau a ariennir ganddi

Mae Llywodraeth Cymru yn cymryd rhan weithredol yn y broses gynllunio ar gyfer y cylch buddsoddi mewn seilwaith nesaf ledled Cymru a Lloegr rhwng 2019 a 2024

1.15 Mae'r broses o gynllunio buddsoddi yn seilwaith y rheilffyrdd yng Nghymru a Lloegr yn un gymhleth⁹. Mae dwy brif elfen yn ategu'r broses o gyhoeddi'r Fanyleb Allbwn Lefel Uchel, sef: 'Proses Gynllunio Hirdymor' Network Rail; ac 'Adolygiad Cyfnodol' y Swyddfa Rheilffyrdd a Ffyrdd a gynhelir bob pum mlynedd (Ffigur 3). Mae'r Broses Gynllunio Hirdymor yn llywio'r Adolygiad Cyfnodol.

Ffigur 3 – Elfennau allweddol y broses cynllunio buddsoddi yn seilwaith y rheilffyrdd ar gyfer Cymru a Lloegr

| Y broses gynllunio hirdymor – Network Rail | | Network Rail a'r diwydiant rheilffyrdd | Yr Adran Drafnidiaeth – Y Fanyleb Allbwn Lefel Uchel | Adolygiad Cyfnodol – Y Swyddfa Rheilffyrdd a Ffyrdd |
|--|--|--|---|---|
| Mae Network Rail yn gweithio gyda'i randdeiliaid i ragfynegi'r galw am wasanaethau trên yn y dyfodol, cytuno ar flaenoriaethau o ran defnyddio'r capasiti sydd ar gael ac asesu opsiynau ar gyfer buddsoddi. | Mae Network Rail yn llunio strategaethau llwybrau sy'n nodi bylchau yn y ddarpariaeth ac opsiynau i fynd i'r afael â'r bylchau hynny (gan gynnwys astudiaeth benodol o lwybrau Cymru). | Mae Cyngor y Diwydiant yn nodi sut y gall y diwydiant rheilffyrdd ddarparu system reilffyrdd fwy effeithlon sy'n cynnig gwell gwerth am arian a sut y gall y system reilffyrdd chwarae rôl allweddol wrth lywio twf economaidd cynaliadwy. Caiff Cyngor y Diwydiant ei lywio gan y strategaethau llwybrau. | Mae'n nodi blaenoriaethau o ran buddsoddi mewn rheilffyrdd ar gyfer 'cyfnod rheoli' o bum mlynedd a'r arian cyhoeddus sy'n debygol o fod ar gael er mwyn sicrhau y cyflawnir y prosiectau hyn. Caiff y Fanyleb Allbwn Lefel Uchel ei llywio gan Gyngor y Diwydiant. | Mae'n pennu'r cyllid sydd ei angen er mwyn i Network Rail gyflawni'r prosiectau, yn annog arbedion ac enillion effeithlonrwydd ac yn pennu'r cymhellion sydd eu hangen er mwyn annog cyflawni a pherfformiad. |

Noder

Er mwyn adlewyrchu argymhellion yr **Adroddiad ar Adolygiad Bowe o'r modd y cynlluniwyd rhaglen wella Network Rail 2015-2019** a gyhoeddwyd ym mis Tachwedd 2015 (Atodiad 1), mae'r Ysgrifennydd Gwladol dros Drafnidiaeth wedi cyhoeddi rhai newidiadau i fanylion y broses cynllunio buddsoddi.

Ffynhonnell: Swyddfa Archwilio Cymru

⁹ I gael gwybodaeth fanylach am rai o'r trefniadau cynllunio ar gyfer buddsoddi yn seilwaith y rheilffyrdd, gweler y Swyddfa Archwilio Genedlaethol, **Planning and delivery of the 2014-2019 rail investment programme**, Medi 2015.

- 1.16 Grŵp Cynllunio o fewn y Diwydiant Rheilffyrdd sy'n bennaf cyfrifol am lywodraethu'r Broses Gynllunio Hirdymor. Mae Llywodraeth Cymru yn mynd i gyfarfodydd y grŵp hwn ac roedd hefyd yn aelod o weithgor a luniodd y ddogfen ymgynghori ar gyfer Astudiaeth Llwybrau Cymru. Cyhoeddodd Network Rail fersiwn derfynol **Astudiaeth Llwybrau Cymru** ym mis Mawrth 2016 gan nodi 14 o opsiynau i fynd i'r afael â bylchau yn y ddarpariaeth bresennol. Mae'r Astudiaeth yn cynnwys opsiynau i ateb y galw ychwanegol o ran teithio yng Nghymru, a rhwng Cymru a dinasoedd allweddol yn Lloegr. Er enghraifft, mae'r Astudiaeth yn cynnwys opsiwn i foderneiddio Prif Linell Arfordir Gogledd Cymru er mwyn gwella cysylltedd rhwng gogledd Cymru â Llundain, Manceinion, Lerpwl a Chaer.
- 1.17 Er ei bod yn cymryd rhan yng Ngrŵp Cynllunio'r Diwydiant Rheilffyrdd, mae Llywodraeth Cymru o'r farn bod y broses cynllunio strategaethau yn gyfyngedig ac nid yw'n rhoi sylw llawn i'w dyheadau ar gyfer gwasanaethau trên. Mae'r broses cynllunio strategaethau ond yn ystyried sut i ymateb i alwadau'r presennol a'r dyfodol ar y rhwydwaith fel y mae ar hyn o bryd. Mae Llywodraeth Cymru am i Network Rail gynllunio ar gyfer 'newid mwy trawsnewidiol' ac ystyried datblygu llinellau a gorsafoedd newydd lle mae sail resymegol gadarn dros wneud hynny. Mae Strategaeth Llwybrau Cymru bresennol Network Rail yn canolbwyntio'n bennaf ar sut i ateb y cynnydd disgwyliedig yn y galw gan ddefnyddio'r 'rhwydwaith presennol'. Fodd bynnag, pwysleisiodd Network Rail i ni ei ymrwymiad i weithio gydag arianwyr er mwyn helpu i ddarparu llinellau newydd, er enghraifft cangen leol newydd i Abertyleri¹⁰.
- 1.18 Mae swyddogion yr Adran Drafnidiaeth wedi dweud wrthym fod Llywodraeth y DU yn annog y fath ymdrechion i hybu twf economaidd drwy wella capasiti'r rheilffyrdd, ond ei bod yn disgwyl i fuddiolwyr ariannu'r newidiadau, gan fod yr arian sydd ar gael iddi ariannu'r Fanyleb Allbwn Lefel Uchel yn gyfyngedig a bod angen ei dargedu, o reidrwydd, at wella capasiti ar 'bwyntiau straen' ar y rhwydwaith lle mae'r galw yn fwy na'r capasiti.
- 1.19 Mae Llywodraeth Cymru yn gweithio gyda 'Grŵp Goruchwylio Cynllunio' y Grŵp Cyflawni Rheilffyrdd ('Rail Delivery Group')¹¹ sy'n gyfrifol am lunio Cynllun Cychwynnol y Diwydiant ar gyfer Cymru a Lloegr, gan ddefnyddio'r strategaethau llwybrau.
- 1.20 Fel rhan o'i hymdrechion i ddylanwadu ar Fanyleb Allbwn Lefel Uchel 2019-2024, mae Llywodraeth Cymru hefyd yn ymgysylltu'n uniongyrchol â'r Swyddfa Rheilffyrdd a Ffyrdd. Dechreuodd yr ymgysylltu uniongyrchol hwn ym mis Tachwedd 2014, ac roedd yn cynnwys trafodaethau ynghylch datganoli rhagor o bwerau dros reilffyrdd, chwarae mwy o ran yn y broses hirdymor o gynllunio seilwaith y rheilffyrdd a chydberthynas gytundebol Llywodraeth Cymru â Network Rail. Ers mis Tachwedd 2014, mae Llywodraeth Cymru wedi negodi nifer o ymrwymadau er mwyn helpu i sicrhau y caiff blaenoriaethau o ran gwasanaethau rheilffyrdd yng Nghymru eu cynrychioli'n llawn yn yr Adolygiad Cyfnodol. Ymhlith y rhain mae ymrwymiad i gynnwys Llywodraeth Cymru mewn trefniadau i adolygu'r ffordd y caiff Network Rail ei ariannu.

¹⁰ Mae Network Rail yn gwneud gwaith i adnewyddu signalau ar linell Cwm Ebwy er mwyn gwneud darpariaeth addas ar gyfer ymestyn y llinell honno i Abertyleri yn y dyfodol, er mwyn adlewyrchu dyheadau cynllunio Llywodraeth Cymru.

¹¹ Sefydlwyd y Grŵp yn 2011 ac mae'n dwyn ynghyd berchenogion cwmnïau trên cludo teithwyr Prydain, gweithredwyr cludo nwyddau a Network Rail.

Tudalen y pecyn 53

- 1.21 Mae Llywodraeth Cymru hefyd yn ceisio dylanwadu ar yr Adran Drafnidiaeth i gynnwys prosiectau yn ei Manyleb Allbwn Lefel Uchel. Er enghraifft, wrth ddatblygu achos busnes dros drydaneiddio prif linell Gogledd Cymru i'w gynnwys yn y Fanyleb Allbwn Lefel Uchel (2019-2024). Mewn tystiolaeth i Bwyllgor Menter a Busnes y Cynulliad Cenedlaethol ym mis Medi 2015, nododd yr Adran Drafnidiaeth, drwy ddatblygu'r achos busnes dros y cynlluniau â blaenoriaeth yr hoffent eu rhoi ar waith, er enghraifft, fod Llywodraeth Cymru eisoes yn ymgysylltu â'r Adran Drafnidiaeth yn y ffordd gywir.
- 1.22 Mae Pwyllgor Menter a Busnes Cynulliad Cenedlaethol Cymru wedi cynnal ymchwiliad i'r blaenoriaethau ar gyfer seilwaith y rheilffyrdd yng Nghymru yn y dyfodol¹². Bwriedir i'w adroddiad ddylanwadu ar benderfyniadau ynghylch y prosiectau sy'n ymwneud â seilwaith rheilffyrdd Cymru i'w cynnwys yn y Fanyleb Allbwn Lefel Uchel nesaf ar gyfer y cyfnod rhwng 2019 a 2024.

Er bod gan Lywodraeth Cymru lai o bŵer dros Network Rail nag sydd gan Lywodraethau'r DU a'r Alban, gallai fod wedi gweithredu ynghynt i atgyfnerthu ei drefniadau ar gyfer goruchwyllo'r gwaith o gyflawni prosiectau

- 1.23 Ers mis Tachwedd 2014, mae Llywodraeth Cymru wedi gweithredu Bwrdd Rheoli Prosiectau a Rhaglenni ar y cyd rhwng Network Rail a Llywodraeth Cymru. Mae Trenau Arriva Cymru yn mynd i'r cyfarfodydd fel sylwedydd. Sefydlwyd y Bwrdd i graffu ar y ffordd y caiff prosiectau cyfalaf eu cyflawni mewn ffordd fwy gweithredol.
- 1.24 Mae Llywodraeth Cymru yn cydnabod bod effeithiolrwydd y Bwrdd Rheoli Prosiectau a Rhaglenni yn cael ei gyfyngu gan sefyllfa gytundebol a chyfreithiol Llywodraeth Cymru. Serch hynny, mae Llywodraeth Cymru yn ystyried bod y Bwrdd yn gyfle i wella ei chydberthynas waith ac ymgysylltu'n fwy strategol â Network Rail.
- 1.25 Yn ystod 2014, adolygodd Gwasanaethau Archwilio Mewnol Llywodraeth Cymru y ffordd roedd Llywodraeth Cymru yn adolygu contractau cyfalaf rheilffyrdd. Nododd Gwasanaethau Archwilio Mewnol nifer o nodweddion cadarnhaol ynghylch trefniadau llywodraethu'r Bwrdd Rheoli Prosiectau a Rhaglenni. Cyn pob cyfarfod, mae Network Rail yn cyhoeddi crynodeb manwl o brosiect ar gyfer pob un o brosiectau presennol Network Rail. Mae pob crynodeb o brosiect yn cynnwys: cam presennol y prosiect; manylion rheolwyr y prosiect; dyddiad y cytundeb cyfreithiol; dyddiadau gwahanol gamau'r prosiect; data ariannol; sylwadaeth ar gynnydd y prosiect a materion a risgiau.
- 1.26 Ers mis Tachwedd 2014, mae Llywodraeth Cymru hefyd wedi gweithredu Bwrdd Rheilffyrdd mewnol er mwyn dwyn ynghyd amrywiaeth o swyddogion prosiectau a pholisi rheilffyrdd er mwyn trafod prosiectau rheilffyrdd y presennol a'r dyfodol. Mae swyddogion yn y cyfarfodydd hyn yn cynnal adolygiad lefel uchel o gynlluniau cyfalaf rheilffyrdd ac yn ystyried a yw contractau yn cael eu cyflawni yn unol â'r amserlen ac o fewn y gyllideb ac yn diwallu'r anghenion a nodwyd.

¹² Pwyllgor Menter a Busnes Cynulliad Cenedlaethol Cymru, **Blaenoriaethau ar gyfer Buddsoddi yn Seilwaith Rheilffyrdd Cymru yn y Dyfodol**, Mawrth 2016.

- 1.27 Caiff gwelliannau i seilwaith a nodir yn y Manylebau Allbwn Lefel Uchel eu categorioeddio'n 'allbynnau a reoleiddir'. Os yw Network Rail yn debygol o fethu, neu os bydd yn methu â chyflawni allbwn a reoleiddir, gall y Swyddfa Rheilffyrdd a Ffyrdd benderfynu a yw'r methiant yn gyfystyr â thorri amodau'r drwydded ac a all gymryd camau yn erbyn Network Rail.
- 1.28 Mae Deddf Rheilffyrdd 2005 yn rhoi pwerau i Lywodraeth Cymru ariannu gwelliannau i wasanaethau trên a seilwaith y rheilffyrdd. Fodd bynnag, nid yw gwaith a wneir gan Network Rail ar ran Llywodraeth Cymru yn cael ei reoli gan yr un gydberthynas reoleidiol, sy'n bodoli rhwng Network Rail, y Swyddfa Rheilffyrdd a Ffyrdd a llywodraethau'r Alban a'r DU. Yn lle hynny, sefydlir cydberthynas Llywodraeth Cymru â Network Rail drwy gontractau unigol a lofnodir â Network Rail. Trafodir cyfyngiadau'r cydberthnasau cytundebol hyn isod ([paragraffau 1.33 i 1.39](#)).
- 1.29 Gall Llywodraeth Cymru ofyn i'r Swyddfa Rheilffyrdd a Ffyrdd ymchwilio ar ei rhan i gŵyn ffurfiol yn erbyn Network Rail. Mae Llywodraeth Cymru wedi gofyn i'r Swyddfa Rheilffyrdd a Ffyrdd ystyried cynnydd yng nghostau'r prosiect sy'n cael ei gyflawni gan Network Rail i leihau amserau teithio a chynyddu capasiti ar y llinell rhwng gogledd a de Cymru. Mewn ymateb i'r cais hwn, ystyriodd y Swyddfa Rheilffyrdd a Ffyrdd a oedd gwaith Network Rail ar y contract yn amlygu problemau systemig a allai fod yn gyfystyr ag achos posibl o dorri amodau trwydded ei rwydwaith¹³. Dywedodd y Swyddfa Rheilffyrdd a Ffyrdd wrthym fod ei hadolygiad wedi nodi nifer o ddiffygion o ran y ffordd y cynlluniwyd y prosiect a'r ffordd y mae'n cael ei gyflawni. Fodd bynnag, gan fod Network Rail wedi llunio cynllun gwella i fynd i'r afael â'r problemau hyn ac yn ei roi ar waith, roedd y Swyddfa Rheilffyrdd a Ffyrdd o'r farn na fyddai'n fuddiol ystyried achos pellach o dorri amodau'r drwydded.
- 1.30 Mae Llywodraeth Cymru wedi dweud wrthym nad yw o'r farn bod y gorwariant i'w briodoli i'r camau a gymerwyd ganddi, a bod Network Rail bellach yn ystyried cyflwyno cais am y costau hyn i gronfa risg a ffioedd y diwydiant ([paragraff 1.35](#)).
- 1.31 Oherwydd pryderon sydd wedi'n nodi'n eang bu perfformiad Network Rail yn destun tri adolygiad diweddar ([Atodiad 1](#)). At hynny, ar 31 Mawrth 2015 rhoddodd y Swyddfa Rheilffyrdd a Ffyrdd rybudd ffurfiol i Network Rail ei bod yn bwriadu ymchwilio i b'un a oedd Network Rail yn gwneud popeth sy'n 'rhesymol ymarferol' i gyflawni ei rwymedigaethau i gyflawni prosiectau gwella. Ym mis Hydref 2015, hysbysodd y Swyddfa Rheilffyrdd a Ffyrdd ei bod o'r farn bod Network Rail wedi torri amodau trwydded ei rwydwaith am ei fod wedi methu â chynllunio a chyflawni ei raglen o welliannau yn ddigonol i'r graddau mwyaf sy'n rhesymol ymarferol.
- 1.32 Mae trafodaethau diweddar Llywodraeth Cymru â'r Swyddfa Rheilffyrdd a Ffyrdd ([paragraff 1.20](#)) wedi cynnwys deialog ynglŷn â sut y gall Llywodraeth Cymru ddwyn Network Rail i gyfrif o gofio statws Llywodraeth Cymru. O ganlyniad, cyfarfu'r Swyddfa Rheilffyrdd a Ffyrdd a Llywodraeth Cymru am y tro cyntaf ym mis Medi 2015 yn benodol i adolygu perfformiad Network Rail. Mae'r Swyddfa

¹³ Mae Network Rail yn gweithredu o dan drwydded rhwydwaith, sy'n cynnwys set o amodau y mae'n rhaid i Network Rail weithredu oddi tanynt. Y drwydded rhwydwaith yw'r dull a ddefnyddir gan y Swyddfa Rheilffyrdd a Ffyrdd i ddwyn Network Rail i gyfrif.

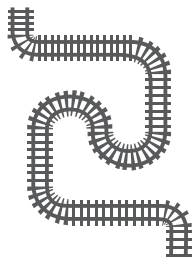
Rheilffyrdd a Ffyrdd a Llywodraeth yr Alban yn cynnal cyfarfodydd tebyg â Network Rail i adolygu perfformiad. Mae'r amserlen gymharol fyr ar gyfer rhoi rhai o'r un cyfleoedd i Lywodraeth Cymru oruchwylio Network Rail ag sydd gan Lywodraeth yr Alban yn awgrymu y gallai Llywodraeth Cymru fod wedi cyflawni'r canlyniad hwn ynghynt.

Dim ond yn ddiweddar y mae Llywodraeth Cymru wedi cymryd camau i fynd i'r afael â chyfyngiadau ei chydberthnasau cytundebol â Network Rail

- 1.33 Wrth weithio gydag arianwyr heblaw am lywodraethau'r Alban a'r DU – arianwyr yn y sector preifat neu arianwyr eraill yn y sector cyhoeddus – mae Network Rail yn ymrwymo i gontractau sy'n seiliedig ar dempledi safonedig y Swyddfa Rheilffyrdd a Ffyrdd. Mae pedwar prif fath o gytundeb sy'n cwmpasu mathau gwahanol o waith. Datblygodd y Swyddfa Rheilffyrdd a Ffyrdd y contractau templed hyn er mwyn lleihau'r amser a gymerir i gwblhau'r trafodyn a'r gost i fuddsoddwyr o gymharu â negodi contract o'r cychwyn cyntaf. Bwriedir i gontractau templed hefyd reoli'r gydberthynas rhwng Network Rail ac arianwyr yn y sector preifat. Fodd bynnag, gall Llywodraeth Cymru roi mwy o sicrwydd ynghylch ariannu ei chontractau nag y gall buddsoddwr yn y sector preifat ei wneud.
- 1.34 Mae rhai contractau templed yn gontractau costau sy'n dod i'r amlwg ('cost emerging contracts'), sy'n golygu mai Llywodraeth Cymru, yn hytrach na Network Rail, sy'n talu unrhyw gostau ychwanegol ar ben y gost amcangyfrifedig. Mae pob contract templed yn gofyn am ychwanegu swm o arian wrth gefn sy'n amrywio yn ôl y prosiect ac sy'n seiliedig ar asesiad risg Network Rail nad yw Llywodraeth Cymru bob amser yn cymryd rhan ynddo. Weithiau, ac fel y caniateir iddo wneud hynny, mae Network Rail yn gwario arian wrth gefn y prosiect heb hysbysu Llywodraeth Cymru ([Astudiaeth Achos 1](#)).
- 1.35 Yn gyffredin â phob ariannwr arall, ac eithrio llywodraethau'r DU a'r Alban, mae'n ofynnol i Lywodraeth Cymru dalu premiwm o 2 y cant fesul prosiect i 'Gronfa Risg y Diwydiant Rheilffyrdd' Network Rail. Mae'r gronfa hon yn gweithredu mewn ffordd debyg i yswiriant gan fod arianwyr yn gallu defnyddio'r gronfa, o bosibl, i dalu costau annisgwyl penodol, megis unrhyw gostau sy'n gysylltiedig â newid yn y gyfraith sy'n effeithio ar y ffordd y mae'r diwydiant yn gweithio. Mae Network Rail yn penderfynu lle y dylai costau annisgwyl gael eu talu o'r gronfa. Bydd y Swyddfa Rheilffyrdd a Ffyrdd yn cymryd rhan y broses os bydd anghydfod rhwng Network Rail a'r ariannwr ynghylch a ddylai'r gronfa dalu'r swm a geisir. Mae Llywodraeth Cymru yn aros am benderfyniad gan Network Rail ynghylch cais am gostau annisgwyl yr aed iddynt gan y prosiect i wella amseroedd teithio rhwng gogledd a de Cymru ([Astudiaeth Achos 1](#)). Hwn fyddai'r cais cyntaf o'i fath a wnaed gan Lywodraeth Cymru. Fodd bynnag, mae'r gronfa wedi cael ei defnyddio gan Network Rail i dalu costau annisgwyl ychwanegol o £0.23 miliwn ar waith ym Mhontypridd ([Atodiad 4](#)).

- 1.36 Nid yw pob contract templed yn cynnwys yr hawl i'r ariannwr derfynu'r cytundeb. Fodd bynnag, os oes gan yr ariannwr yr hawl i derfynu'r contract, mae'r contract yn ffafrio Network Rail o ran talu costau. Er enghraifft, mae'r contract templed yn nodi, os caiff contract ei derfynu, na fydd gan yr ariannwr yr hawl i unrhyw daliad nac iawndal nac unrhyw hawliau neu rwymedïau eraill mewn perthynas â cholli elw, referniw neu ewyllys da. Nid yw Llywodraeth Cymru wedi terfynu unrhyw un o'i chontractau â Network Rail.

Astudiaeth Achos 1 – Defnydd Network Rail o arian wrth gefn ar y gwelliannau i Gyffordd yr Orsedd a Saltney



Ar hyn o bryd mae Llywodraeth Cymru yn ariannu cost gyfan prosiect i wella amseroedd teithio ac amlder teithiau ar y llwybr allweddol rhwng gogledd a de Cymru. Mae'r gwaith yn cynnwys dyblu 5.5 milltir o drac rhwng Cyffordd yr Orsedd a Saltney, newid ac uwchraddio croesfannau gwastad a gwella signalau.

Dylai'r prosiect gwneud y daith rhwng Caerdydd a Chaerdybi yn fyrrach o 16 munud a darparu'r capasiti i redeg trên ychwanegol rhwng Caerdydd a Chaerdybi bob dwy awr i'r ddau gyfeiriad.

Mae Network Rail wedi defnyddio'r holl arian wrth gefn, sef £6.7 miliwn, o fewn y prosiect sy'n werth £49 miliwn. Mae Llywodraeth Cymru eisoes wedi lleihau maint y prosiect oherwydd cyfyngiadau cyllidebol, ond canfu Network Rail geblau o dan y trac presennol roedd angen iddo eu symud er mwyn darparu ar gyfer gosod ail drac cyfochrog. Yn y pen draw gorchuddiodd Network Rail y ceblau â choncrid er mwyn eu hatal rhag cael eu dwyn, a oedd yn waith ychwanegol a arweiniodd at wariant annisgwyl o £800,000 o'r arian wrth gefn yr aed iddo heb hysbysu Llywodraeth Cymru. Bellach, mae'n rhaid i Lywodraeth Cymru ariannu'r gwaith ychwanegol hwn tua diwedd amserlen cyflawni'r prosiect lle mae llai o gyfleoedd i wrthbwyso'r gost gan ddefnyddio arbedion eraill. Roedd disgwyl i'r prosiect gael ei gwblhau ym mis Tachwedd 2015, ond cafwyd rhagor o broblemau gyda Llywodraeth Cymru yn priodoli'r oedi i Network Rail gan datgan yn gyhoeddus nad yw'r oedi yn dderbyniol ac yn gofyn i Network Rail gymryd camau ar frys er mwyn mynd i'r afael â'r mater. Mae Network Rail bellach wedi pennu dyddiad comisiynu newydd, sef gwanwyn 2017.

Ffynhonnell: Swyddfa Archwilio Cymru

- 1.37 Nid oes unrhyw rwymedigaeth ar Network Rail na Llywodraeth Cymru i ddefnyddio contractau templed y Swyddfa Rheilffyrdd a Ffyrdd pe baent yn eu hystyried yn anaddas. Mae polisi a chanllawiau'r Swyddfa Rheilffyrdd a Ffyrdd ar ddefnyddio contractau templed¹⁴ yn nodi y gall buddsoddwyr ddewis defnyddio'r contractau templed fel sail i gontractau i sicrhau gwelliannau. Mae'r canllawiau hefyd yn nodi, oherwydd pryderon a risgiau penodol sy'n gysylltiedig â phrosiectau unigol, y gall y partïon cytundebol fod yn agored i negodi darpariaethau amgen sy'n gweddu i amgylchiadau unigol. Yn 2015, cynhaliodd Network Rail ddau weithdy gyda Llywodraeth Cymru er mwyn trafod ffyrdd amgen o gontractio.

¹⁴ Y Swyddfa Rheilffyrdd a Ffyrdd, *Investment framework consolidated policy and guidelines*, Hydref 2010.

- 1.38 Mae Llywodraeth Cymru ar gam cynnar yn y broses o gynnig proses contractio lle mai dim ond swm bach o'r arian wrth gefn y byddai'n ei ddyrannu ymlaen llaw i Network Rail er mwyn iddo ymdrin â risgiau sy'n dod i'r amlwg. Mae Llywodraeth Cymru yn bwriadu sicrhau bod ganddi fwy o reolaeth dros y defnydd o arian wrth gefn drwy ddal yr arian sy'n weddill ar lefel rhaglen, gyda Network Rail yn gorfod cael ei chymeradwyaeth er mwyn cael rhagor o arian wrth gefn. Bydd Network Rail yn ystyried y cynigion hyn pan fyddant wedi'u cwblhau. Ni fyddai'r dull hwn o weithredu yn newid y ffaith, o dan contractau costau sy'n dod i'r amlwg, mai Llywodraeth Cymru sy'n gyfrifol am holl gostau'r prosiectau. Fodd bynnag, bydd y dull gweithredu arfaethedig yn sicrhau bod Llywodraeth Cymru yn fwy ymwybodol, ar gam cynnar, o unrhyw gynnydd yng nghostau prosiectau ac yn rhoi gwell cyfle iddi gydbwysu unrhyw gynnydd mewn costau yn erbyn arbedion posibl mewn meysydd eraill o'i rhaglen seilwaith rheilffyrdd. Mae Network Rail wedi pwysleisio i ni fod contractau templed â phrisiau sefydlog, ond mae'n anochel y bydd y rhain yn cynnwys premiwm gan ei fod yn dwyn y risg, am nad oes gan Network Rail gronfeydd wrth gefn ac nis ariennir i gymryd risgiau.
- 1.39 O gofio manteision posibl defnyddio contractau pwrpasol o ran cynnig gwerth am arian, yn ein barn ni, gallai Llywodraeth Cymru fod wedi nodi'r cyfle i ailnegodi ei chydberthynas gytundebol â Network Rail yn gynharach. Mae Llywodraeth Cymru wedi cyfarfod â'r Swyddfa Rheilffyrdd a Ffyrdd ddwywaith (mis Tachwedd 2014 a mis Gorffennaf 2015) er mwyn trafod y defnydd y mae'n ei wneud o contractau templed.

Mae Llywodraeth Cymru wedi ariannu dau brosiect seilwaith gan ddefnyddio contractwyr heblaw am Network Rail ond mae'n gobeithio cymhwyso'r dull hwn o weithredu'n ehangach

- 1.40 Mae Llywodraeth Cymru yn awyddus i gyflawni mwy o brosiectau drwy contractwyr heblaw am Network Rail. Mae Llywodraeth Cymru o'r farn y bydd y dull hwn o weithredu yn ei galluogi i sicrhau gwell gwerth am arian, er nad yw'n gwarantu y caiff prosiectau eu cyflawni'n llwyddiannus.
- 1.41 Cyfeiriodd ein hadroddiad ar **Brosiectau Trafnidiaeth Mawr**, a gyhoeddwyd ym mis Ionawr 2011, at y prosiect i ailagor llinell reilffordd Cwm Ebwy yn 2008. Ni wnaeth Network Rail y gwaith dylunio na'r gwaith adeiladu er ei fod yn rhanddeiliad allweddol yn y prosiect. Caffaelodd Cyngor Bwrdeistref Sirol Blaenau Gwent y trefniadau cytundebol a'u rheoli ac ariannodd Llywodraeth Cymru y prosiect. Dyblodd costau'r prosiect bron i £48 miliwn, er i'n hadroddiad nodi nad oedd yr amcangyfrif cynnar yn cynnwys unrhyw ddarpariaeth ar gyfer cost gyfunol tir, iawndal a ffioedd yr aed iddi yn y pen draw, sef £5.12 miliwn. Nododd yr adroddiad hefyd anghydfod rhwng y Cyngor, Llywodraeth Cymru a'r contractwr ynghylch y cyfrifoldeb am gost gwaith adfer roedd angen ei wneud. Roedd angen gwneud y gwaith adfer er mwyn bodloni Network Rail bod y llinell yn unol â dyluniad y gallai ei gymeradwyo fel prif berchennog yr ased.

- 1.42 Ar raddfa lawer llai, ni luniodd Llywodraeth Cymru gontract â Network Rail mewn perthynas â'r orsaf yn Pye Corner, Casnewydd, a gwblhawyd yn ddiweddar. Ni lwyddodd Network Rail i gyflawni'r prosiect o fewn y terfyn amser angenrheidiol i gael arian gan yr Adran Drafnidiaeth am y gwaith. Cymerodd 40 wythnos i gyflawni'r prosiect a oedd yn gyfnod boddhaol iawn o amser i wneud hynny, ym marn Llywodraeth Cymru. Cwblhaodd y contractwr y prosiect ym mis Rhagfyr 2014 ar gost o £3.4¹⁵ miliwn, ac mae Llywodraeth Cymru wedi amcangyfrif bod y gwaith adeiladu wedi costio tua 15 y cant i 20 y cant yn llai nag y byddai wedi costio pe bai Network Rail wedi cyflawni'r contract. Seiliodd Llywodraeth Cymru yr amcangyfrif hwn ar gymariaethau rhwng ei chostau rheoli prosiect a ffioedd rheoli prosiect Network Rail. Nid ydym wedi bwrw golwg dros y manylion sy'n sail i amcangyfrif Llywodraeth Cymru.
- 1.43 Mae Llywodraeth Cymru wedi rhoi gwybodaeth am gostau prosiect Pye Corner i'r Swyddfa Rheilffyrdd a Ffyrdd. Dywedodd Llywodraeth Cymru y bydd y Swyddfa Rheilffyrdd a Ffyrdd yn cynnwys prosiect Pye Corner o fewn darn o waith y mae'n ei wneud i feincnodi costau Network Rail ar gyfer nifer o brosiectau.
- 1.44 Mae Network Rail yn cydnabod bod Llywodraeth Cymru wedi cyflawni prosiect Pye Corner yn effeithiol, ond nododd nifer o faterion yn ystod y cam adeiladu. Mae Network Rail yn atebol am faterion diogelwch ar y rhwydwaith rheilffyrdd ac roedd ganddo bryderon a barodd iddo ailbennu aelod o staff Network Rail i weithio'n llawn amser ar y prosiect am wyth mis. Bu'r aelod hwn o staff yn gweithio'n agos gyda'r contractwr i sicrhau cydymffurfio â safonau cyfreithiol a safonau diogelwch.
- 1.45 Mae Llywodraeth Cymru yn ystyried llunio contractau â chyflenwyr heblaw am Network Rail mewn perthynas â nifer o gynlluniau eraill, gan gynnwys cynllun y Metro, sef ei menter trafnidiaeth fawr i dde Cymru. Ar hyn o bryd, amcangyfrifir y bydd prosiect Cam 2 y Metro yn costio cyfanswm o £734 miliwn yn ôl prisiau 2018 (paragraff 2.33).
- 1.46 Mae Network Rail yn fodlon ar ddull arfaethedig Llywodraeth Cymru o ddefnyddio contractwyr eraill o'r sector preifat i gyflawni prosiectau cyfalaf, ond gyda rhai amodau yn seiliedig ar ei brofiad blaenorol. Maent yn cynnwys:
- a yr angen i gynnwys Network Rail yn gynnar yn y broses o ddatblygu prosiectau; a hefyd
 - b yr angen i contractwyr yn y sector preifat weithio'n agos gyda Network Rail fel perchennog a gweithredwr y seilwaith.
- 1.47 Ym mis Ionawr 2016, cytunodd Llywodraeth Cymru a Network Rail ar Femorandwm Cyd-ddealltwriaeth a nododd yr egwyddorion a'r trefniadau i'r ddau barti gydweithio i gyflawni prosiect Metro De Cymru a chaffael masnachfaint nesaf Cymru a'r Gororau. Ymhlith y camau gweithredu y cytunwyd arnynt mae datblygu cynllun ar y cyd gan gynnwys amserlenni a sefydlu trefniadau llywodraethau a thîm cyflawni ar y cyd.

15 Ariannwyd y gwaith o adeiladu gorsaf Pye Corner gan Lywodraeth Cymru (£1.3 miliwn) a'r Adran Drafnidiaeth (£2.1 miliwn).

Rhan 2

Rhwng mis Ebrill 2011 a mis Mawrth 2016, cyfrannodd Llywodraeth Cymru tua £362 miliwn at wariant sector cyhoeddus ehangach ar reilffyrdd yng Nghymru, ond ni wnaeth ddigon i werthuso'r buddiannau sydd wedi deillio o'i buddsoddiad



2.1 Mae'r rhan hon o'r adroddiad yn nodi gwariant cyfalaf gan Network Rail i gynnal a chadw, adnewyddu a gwella seilwaith rheilffyrdd Cymru rhwng mis Ebrill 2011 a mis Mawrth 2016. Mae hefyd yn mesur gwariant cyfalaf a refeniw gan Lywodraeth Cymru i wella gwasanaethau trên yn unol â'i blaenoriaethau strategol ar gyfer rheilffyrdd ac yn ystyried cynlluniau Llywodraeth Cymru ar fuddsoddi cyfalaf yn y dyfodol. Yn olaf, mae'n ystyried effeithiolrwydd dull Llywodraeth Cymru o werthuso effeithiau ei buddsoddiad.

Buddsoddodd Network Rail £1.4 biliwn yn seilwaith rheilffyrdd Cymru rhwng mis Ebrill 2011 a mis Mawrth 2016

2.2 Rhwng 1 Ebrill 2011, pan ddaeth data ar gyfer Cymru ar gael am y tro cyntaf, a 31 Mawrth 2016, buddsoddodd Network Rail tua £1.4 biliwn i gynnal a chadw, adnewyddu a gwella seilwaith rheilffyrdd Cymru. Buddsoddodd Network Rail yr arian hwn yn bennaf mewn prosiectau i adnewyddu'r seilwaith presennol (£882 miliwn) a gwaith cynnal a chadw (£301 miliwn), gyda £235 miliwn yn cael ei fuddsoddi mewn gwelliannau (Ffigur 4). Fel y nodwyd ym mharagraffau 1.11-13, mae Llywodraeth Cymru o'r farn y dylai Network Rail fod wedi gwario mwy ers 2011 ar wella seilwaith rheilffyrdd Cymru.

Ffigur 4 – Gwariant cyfalaf Network Rail yng Nghymru 2011-2016

| | 2011-12 £m | 2012-13 £m | 2013-14 £m | 2014-15 £m | 2015-16 £m | Cyfanswm £m |
|---|---------------|---------------|---------------|---------------|---------------|----------------|
| Gwaith Cynnal a Chadw ¹ | 50 | 50 | 62 | 67 | 72 | 301 |
| Gwaith i adnewyddu seilwaith presennol y rheilffyrdd ² | 161 | 211 | 203 | 135 | 172 | 882 |
| Gwelliannau i'r rhydwaiith rheilffyrdd ^{3, 4} | 15 | 46 | 47 | 44 | 83 | 235 |
| Cyfanswm⁵ | 226 | 307 | 312 | 246 | 327 | 1,418 |

Nodiadau

1 Mae costau cynnal a chadw yn cynnwys archwilio ac atgyweirio'r seilwaith.

2 Mae prosiectau o'r fath yn cynnwys adnewyddu'r seilwaith presennol, megis y trac, heb godi tâl na gwella ei berfformiad.

3 Mae gwelliannau yn brosiectau sy'n gwella'r rheilffordd.

4 Nid yw'r ffigurau yn cynnwys gwelliannau a ariannwyd gan Lywodraeth Cymru na chyfraniadau Llywodraeth Cymru at brosiectau mwy o faint a gyflawnwyd gan Network Rail, megis y prosiect Adnewyddu Signalau yn Ardal Caerdydd.

5 Nid yw'r gwariant cyfalaf hwn yn cynnwys costau gweithredu o £334 miliwn, megis costau staff, gan gynnwys pensiynau a thaliadau cymhelliant, costau'r Heddlu Trafnidiaeth Brydeinig a chostau llety. Ac nid yw'n cynnwys iawndal gwerth £46 miliwn a dalwyd i gwmnïau trên am darfu a gynlluniwyd a tharfu nas cynlluniwyd.

Ffynhonnell: Datganiadau Ariannol Rheoleiddiol Network Rail

Rhwng mis Ebrill 2011 a mis Mawrth 2016, buddsoddodd Llywodraeth Cymru £109 miliwn mewn gwell gwasanaethau yn ychwanegol at fasnachfaint graidd Cymru a'r Gororau ac roedd yn ofynnol iddi dalu £27 miliwn mewn taliadau cymell perfformiad cytundebol, net o daliadau cosb

- 2.3 Rhwng 1 Ebrill 2011 a 31 Mawrth 2015, roedd y costau i Lywodraeth Cymru a oedd yn gysylltiedig â chymorthdalau gwasanaethau craidd masnachfaint Cymru a'r Gororau ar gyfer gwasanaethau Cymru yn unig a gwasanaethau i Gymru yn cyfateb i £617 miliwn. Ar gyfer Gwasanaethau Cymru yn unig a Gwasanaethau i Gymru, gall Llywodraeth Cymru addasu cytundeb y fasnachfaint er mwyn ateb galw ychwanegol drwy sicrhau 'gwelliannau i wasanaethau'. Gallai'r gwelliannau hyn gynnwys darparu gwasanaethau ychwanegol, gwella amllder trenau a chynyddu capasiti drwy ddarparu cerbydau ychwanegol.
- 2.4 Mae newidiadau i gytundeb y fasnachfaint yn seiliedig ar yr egwyddor na ddylent arwain at golled ariannol net nac elw net i weithredwr y fasnachfaint. O ganlyniad, os bydd Llywodraeth Cymru yn gofyn am welliant i wasanaeth sy'n cynyddu costau gweithredu Trenau Arriva Cymru, mae'n rhaid iddi dalu cymhorthdal am ei bod bron yn anochel y bydd y gweithredwr ar ei golled.
- 2.5 Rhwng 1 Ebrill 2011 a 31 Mawrth 2016, buddsoddodd Llywodraeth Cymru £109 miliwn i ddarparu 10 gwell gwasanaeth (**Atodiad 3**). Rhwng mis Ebrill 2006, pan aeth yn gyfrifol am reoli'r fasnachfaint o ddydd i ddydd, a diwedd y fasnachfaint yn 2018, mae Llywodraeth Cymru yn amcangyfrif y bydd wedi buddsoddi mwy na £250 miliwn mewn gwell gwasanaethau¹⁶.
- 2.6 Yn 2014, adolygodd Gwasanaethau Archwilio Mewnol Llywodraeth Cymru nifer o agweddau ar y ffordd roedd Llywodraeth Cymru yn rheoli'r fasnachfaint rheilffyrdd, gan gynnwys a oedd Llywodraeth Cymru wedi cydymffurfio â'r broses ar gyfer datblygu gwelliannau i wasanaethau¹⁷. Nododd yr archwiliad, mewn perthynas â chyflwyno'r gwasanaeth trên bob hanner awr i Ferthyr Tudful yn 2009, na allai Llywodraeth Cymru ddarparu'r ddogfennaeth ofynnol i ddangos ei bod wedi cydymffurfio â'r broses y cytunwyd arni. Fodd bynnag, nododd yr archwilwyr fod y gwelliannau mwy diweddar i wasanaethau a samplwyd – sef y Prif Wasanaeth rhwng Gogledd a De Cymru (2012) a wasanaethau Abergwaun (2011) – wedi cydymffurfio â'r broses y cytunwyd arni. Ac, yn gyffredinol, roedd y Gwasanaethau Archwilio Mewnol yn gallu rhoi sicrwydd llawn ynglŷn â'r rheolaethau a oedd ar waith dros y fasnachfaint rheilffyrdd.

¹⁶ Mae ansicrwydd o hyd ynghylch yr union ffigur am fod y costau yn gysylltiedig â chwyddiant. Rhagflaenodd buddsoddiad Llywodraeth Cymru mewn dau wasanaeth (Caerdydd i Gaerdybi a Rheilffordd Calon Cymru (ar ddydd Sul) 2006. Mae cost ychwanegol y ddau wasanaeth hyn rhwng 2004 a 2006 tua £2.2 miliwn.

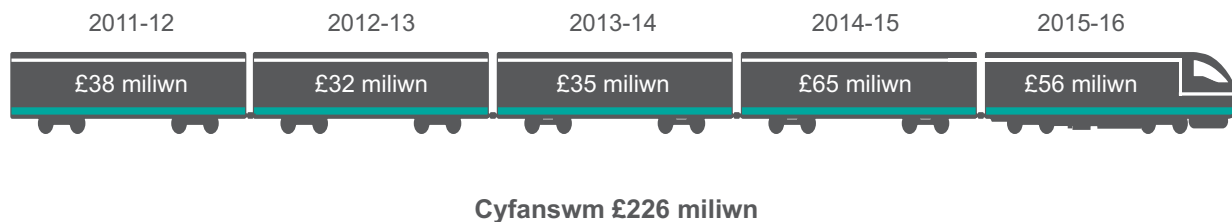
¹⁷ O dan gytundeb y fasnachfaint, mae'n rhaid i Trenau Arriva Cymru gyflwyno 'cynnig datblygu' ynghyd â chostau amcangyfrifedig i Lywodraeth Cymru i'w hadolygu cyn .. Ni nododd y Gwasanaethau Archwilio Mewnol dystiolaeth berthnasol, heblaw am gynnig datblygu yn dyddio o 2006.

2.7 Yn gyffredin â phob masnachfrait rheilffyrdd eraill yn y DU, mae Trenau Arriva Cymru yn gymwys i gael taliadau cymhelliant os bydd yn cyflawni targedau ar gyfer ei berfformiad dros bob cyfnod o bedair wythnos. Rhwng 1 Ebrill 2011 a 31 Mawrth 2016, cafodd Trenau Arriva Cymru daliadau cymhelliant gwerth ychydig dros £27.5 miliwn gan Lywodraeth Cymru. Os na fydd yn cyflawni'r targed perfformiad mae'n ofynnol i Trenau Arriva Cymru dalu cosb ariannol i Lywodraeth Cymru. Ar gyfer yr un cyfnod, talodd Trenau Arriva Cymru gosbau ariannol gwerth £0.66 miliwn (mae [paragraffau 3.5-3.7](#) yn rhoi manylion pellach am y gyfundrefn cymell perfformiad a chostau).

Rhwng 2011 a 2016, buddsoddodd Llywodraeth Cymru £226 miliwn mewn prosiectau i wella seilwaith rheilffyrdd

2.8 Rhwng mis Ebrill 2011 a mis Mawrth 2016, buddsoddodd Llywodraeth Cymru tua £226 miliwn mewn prosiectau cyfalaf rheilffyrdd, gan gynnwys arian a gafodd gan gronfeydd strwythurol yr Undeb Ewropeaidd ([Ffigur 5](#)). Mae Llywodraeth Cymru wedi pwysleisio i ni ei bod wedi gwneud y buddsoddiad hwn er mwyn mynd i'r afael â'i phryderon ynghylch tanfuddsoddi yn rhwydwaith Cymru gan Network Rail ([paragraffau 1.11-1.13](#)).

Ffigur 5 – Buddsoddiad Llywodraeth Cymru mewn prosiectau cyfalaf seilwaith 2011-2016 (£ miliwn gan gynnwys arian Ewrop)



Ffynhonnell: Llywodraeth Cymru

2.9 Yn ystod yr un cyfnod, fwy neu lai (hynny yw, rhwng mis Ionawr 2011 a mis Mai 2016), cwblhawyd 11¹⁸ prosiect seilwaith yng Nghymru a gafodd rywfaif o arian gan Lywodraeth Cymru ([Atodiad 4](#)). Cyfanswm cost y prosiectau hyn, heb gynnwys gwariant cyn mis Ebrill 2011, oedd £137 miliwn, a oedd yn cynnwys y canlynol.

- a £101 miliwn gan Lywodraeth Cymru, sy'n cynnwys arian Ewropeaidd gwerth £46 miliwn;
- b £27 miliwn gan Network Rail;
- c £6 miliwn gan yr Adran Drafndiaeth; a
- ch chyfraniadau o amrywiol ffynonellau eraill gwerth ychydig dros £3 miliwn.

18 Mae nifer o gynlluniau wedi cael eu pwyo a'u mesur fel un prosiect o dan Raglen Gwella Gorsafoedd Cymru. At hynny, mae nifer o gynlluniau wedi cael eu pwyo a'u mesur fel un prosiect o dan raglen Mynediad i Bawb ac felly hefyd cynllun Adnewyddu Signalau yn Ardal Caerdydd.

- 2.10 Fel rhan o'i hadolygiad o gcontractau cyfalaf rheilffyrdd, a gynhaliwyd yn 2014 ([paragraff 1.25](#)), daeth Gwasanaethau Archwilio Mewnol Llywodraeth Cymru i'r casgliad bod y ffordd roedd Llywodraeth Cymru yn nodi ac yn blaenoriaethu prosiectau cyfalaf rheilffyrdd yn foddhaol. Nododd y Gwasanaethau Archwilio Mewnol fod y sampl o brosiectau a ddewiswyd ganddynt:
- a yn dod o ddogfennau cynllunio trafndiaeth allweddol, er enghraifft, Cynllun Trafnidiaeth Cenedlaethol 2010 a Chynllun Trafnidiaeth Cenedlaethol a flaenoriaethwyd 2011;
 - b eu bod yn cael eu hategu gan achos busnes cadarn a nododd sail resymegol dros gynnal y cynllun; ac
 - c eu bod wedi'u cymeradwyo gan Weinidogion Cymru, fel oedd yn ofynnol.
- 2.11 Argymhellodd ein hadroddiad ar **Brosiectau Trafnidiaeth Mawr**, a gyhoeddwyd ym mis Ionawr 2011, ar gyfer prosiectau trafndiaeth mawr – y gwnaethom eu dosbarthu'n brosiectau a oedd yn costio mwy na £5 miliwn – y dylai Llywodraeth Cymru gofnodi gwybodaeth er mwyn olrhain perfformiad y prosiectau ar gamau allweddol yn y broses o'u cyflawni a chofnodi newidiadau o ran costau prosiectau. Er bod yr adroddiad hwnnw yn canolbwyntio ar brosiectau cefnffyrdd, roedd yr adroddiad yn cynnwys sylwadaeth ar ddau brosiect rheilffyrdd ac roedd ei argymhellion yr un mor gymwys i brosiectau rheilffyrdd.
- 2.12 Mae wyth cam i broses Canllaw Network Rail ar Brosiectau Buddsoddi mewn Rheilffyrdd (GRIP) o bennu cwmpas y buddsoddiad i ddechrau, drwy'r cam cynllunio mawr i gam cwblhau'r prosiect. Gwnaethom ofyn i Lywodraeth Cymru ddarparu data y gellid eu defnyddio i gymharu unrhyw newidiadau mewn costau amcangyfrifedig rhwng y gwahanol gamau hyn o'r broses o gyflawni prosiect ar gyfer y prosiectau a gwblhawyd ers mis Ionawr 2011. Rydym yn cydnabod bod rhai o'r prosiectau wedi'u cyflawni i raddau helaeth cyn cyhoeddi ein hadroddiad yn 2011 a bod sawl un wedi costio llai na £5 miliwn. At hynny, roedd rhai o'r prosiectau hyn, megis Moderneiddio Gorsaf Casnewydd a gwblhawyd yn 2011, yn cynnwys cyfraniad penodedig gan Lywodraeth Cymru i brosiect a ariannwyd gan Network Rail¹⁹.
- 2.13 Roedd Llywodraeth Cymru yn gallu darparu rhywfaint o ddata perthnasol er mwyn i ni allu cymharu costau ar gamau penodol o broses GRIP ond nid yn gyson ar gyfer pob prosiect. Y gwerth uchaf o blith y prosiectau hyn o ran cyfraniad Llywodraeth Cymru oedd prosiect moderneiddio gorsaf Tre-gŵyr a'r cynllun i ailddyblu'r llinell rhwng Tre-gŵyr a Chasllwchwr (cost o £27.4 miliwn a rannwyd rhwng arian craidd Llywodraeth Cymru a chronfeydd strwythurol yr Undeb Ewropeaidd). Mae Llywodraeth Cymru wedi dweud wrthym fod cost amcangyfrifedig y prosiect wedi lleihau £0.2 miliwn rhwng cam 5 o GRIP – sef y cam cynllunio manwl – ac adeg cwblhau'r prosiect. Mewn enghraifft arall, costiodd yr orsaf newydd yn Eneu'r-glyn ar linell Cwm Rhymni gyfanswm o £5.5 miliwn (a rannwyd unwaith eto rhwng arian craidd Llywodraeth Cymru a chronfeydd strwythurol yr Undeb Ewropeaidd). Y gost amcangyfrifedig ar gam 5 o GRIP oedd £5.2 miliwn, er i'r prosiect gael ei gwblhau ym mis Hydref 2013 o gymharu â'r dyddiad cwblhau amcangyfrifedig a nodwyd ar gam 5 o GRIP, sef mis Rhagfyr 2013.

¹⁹ Cyfrannodd Llywodraeth Cymru £7.7 miliwn i'r prosiect, gyda Network Rail yn talu'r costau a oedd yn weddill, sef £20.2 miliwn.

- 2.14 Ym mis Mai 2016, cyfanswm cost prosiectau rheilffyrdd sy'n mynd rhagddynt a gafodd rywfaint o arian gan Lywodraeth Cymru yw £156 miliwn ar adeg eu cwblhau. Mae rhai o'r prosiectau yn ddarnau o waith dylunio (**Atodiad 4**). Disgwylir i'r prosiectau hyn orffen cyn diwedd 2017-18. Maent yn cynnwys lleihau'r amser teithio rhwng gogledd a de Cymru, drwy wneud gwahanol welliannau i'r rhwydwaith, yr amcangyfrifir y byddant yn costio £49 miliwn (**Astudiaeth Achos 1** ar dudalen 26). Maent hefyd yn cynnwys elfennau o Gamau 1 a 2 y Metro (**Blwch 1** ar dudalen 41) a gwahanol welliannau i orsafoedd o dan raglen Mynediad i Bawb (**Astudiaeth Achos 2**).
- 2.15 Croesawodd yr Adran Drafnidiaeth barodrwydd Llywodraeth Cymru i roi arian cyfatebol ar gyfer rhaglen gorsafoedd Mynediad i Bawb. Ar gyfer y gorsafoedd y cyhoeddwyd y byddent yn cael eu gwella ym mis Ebrill 2014, mae arian cyfatebol Llywodraeth Cymru wedi'i gwneud yn bosibl i wella pedair gorsaf, yn hytrach na dwy, fel y bwriadwyd yn wreiddiol gan yr Adran Drafnidiaeth.

Astudiaeth Achos 2 – Mynediad i Bawb



Mae Mynediad i Bawb yn rhaglen fawr sy'n cael ei chynnal gan Lywodraeth y DU i wella hygyrchedd mewn gorsafoedd trenau ledled y wlad drwy osod lifftiau a rampiau.

Yn dilyn gwelliannau mewn gorsafoedd eraill yng Nghymru yn ystod camau cynharach y rhaglen, ar ddechrau 2014, cyhoeddodd Network Rail y byddai buddsoddiad o £12 miliwn, a oedd yn cynnwys £7 miliwn a gyfrannwyd gan Lywodraeth Cymru, i wella gorsafoedd y Waun, Llandaf, Machynlleth, Radur ac Ystrad Mynach.

Mewn cyhoeddiad ar wahân ym mis Ebrill 2014, ychwanegwyd pedair gorsaf arall (sef Tref y Barri, Cathays, Llanelli a Threfforest) at y rhaglen. Mae Llywodraeth Cymru wedi cynnig hyd at £5 miliwn ar gyfer y pedair gorsaf hyn i gyfateb cyfraniad ariannol gan yr Adran Drafnidiaeth. Wedyn ychwanegwyd gorsafoedd Treherbert a Ffynnon Taf at y rhaglen ar ddiwedd 2014, gyda Llywodraeth Cymru unwaith eto yn cyfrannu at gost y gwaith hwn.

Mae grŵp diwydiant, sy'n cynnwys Llywodraeth Cymru, yn dewis y gorsafoedd sydd i'w gwella gan ddefnyddio nifer o feini prawf, gan gynnwys pa mor brysur yw gorsafoedd a nifer yr achosion o anabledd fel y'u cofnodwyd yn yr ardal leol gan y cyfrifiad. Mae hefyd yn ystyried ffactorau eraill megis agosrwydd at ysbysai ac ysgolion ar gyfer plant anabl.

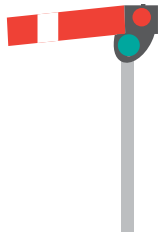
Ffynhonnell: Swyddfa Archwilio Cymru

- 2.16 Roedd Network Rail hefyd yn gadarnhaol ynghylch y ffordd y mae Llywodraeth Cymru wedi sicrhau arian Ewropeaidd ar gyfer prosiectau rheilffyrdd, er enghraifft, £5.7 miliwn o arian Ewropeaidd ar gyfer prosiect Gwella Signalau yn Ardal Caerdydd (**Astudiaeth Achos 3**). Nododd Network Rail brosiect arall lle roedd arian ychwanegol gan Lywodraeth Cymru wedi gwella ei gynlluniau gwreiddiol. Dim ond adnewyddu'r lifftiau yng Ngorsaf Pontypridd roedd Network Rail yn bwriadu ei wneud, ond neilltuodd Llywodraeth Cymru £2.5 miliwn o arian ychwanegol i wneud gwelliannau pellach i flaen-gwrt, mynedfa a phlatfformau'r orsaf.

Mae Llywodraeth Cymru wedi adeiladu ar waith arfaethedig gan Network Rail er mwyn helpu i wella'r seilwaith a gwasanaethau ymhellach

- 2.17 Manteisiodd Llywodraeth Cymru ar gynllun Network Rail i adnewyddu'r draphont ansefydlog rhwng Tre-gŵyr a Chasllwchwr er mwyn ariannu'r gwaith o ailddyblu bron chwe milltir o'r llinell ac adfer y platfform yn Nhre-gŵyr, nad oedd yn cael ei ddefnyddio, ar gost o £27.4 miliwn. Cyflawnodd Network Rail y ddau brosiect ar yr un pryd, gan gyflawni arbedion effeithlonrwydd a sicrhau cyn lleied o darfu â phosibl. Mae'r draphont newydd a'r gwaith a wnaed i ddyblu'r llinell wedi cael gwared â thagfa ac mae'n darparu capasiti ychwanegol i gynyddu nifer y trenau sy'n rhedeg bob awr o ddau i dri, ar yr amod bod arian ar gael i ddarparu cerbydau ychwanegol. Mae'r gwasanaethau ychwanegol yn fasnachol ddichonadwy ac nid oes angen arian Llywodraeth Cymru arnynt.
- 2.18 Mae Llywodraeth Cymru yn cyfrannu £16.6 miliwn, gan gynnwys £5.7 miliwn o arian Ewropeaidd, at brosiect Network Rail i Adnewyddu Signalau yn Ardal Caerdydd sy'n werth £245 miliwn (**Astudiaeth Achos 3**) y disgwylir iddo gael ei gwblhau yn 2017.
- 2.19 Cyfrannodd Llywodraeth Cymru £8 miliwn, gyda Network Rail yn rhoi £5 miliwn o arian cyfatebol, er mwyn gwella seilwaith ar brif linell y Cambrian drwy ddarparu dolenni pasio ychwanegol, gwella croesfan wastad a chodi rhan o'r trac. Roedd angen gwneud y gwelliannau hyn er mwyn cefnogi gwasanaethau ychwanegol rhwng y gorsafoedd canlynol: Aberystwyth a'r Amwythig; Aberystwyth a Phwllheli; Llanymddyfri a Thre-gŵyr/Abertawe, a Llandrindod a'r Amwythig/Crewe.
- 2.20 Cwblhawyd y gwaith seilwaith yn 2010. Gwnaed y gwaith seilwaith ar y cyd â phrosiect mwy o faint gwerth tua £60 miliwn roedd Network Rail yn ei gynnal i adnewyddu signalau. Drwy wneud y gwaith adnewyddu signalau a'r gwaith seilwaith gyda'i gilydd bu'n bosibl manteisio ar arbedion maint ac mae Llywodraeth Cymru yn amcangyfrif bod hyn wedi arbed £2 filiwn. Yn 2014, cymeradwyodd y Gweinidog dros Fusnes, Menter, Technoleg a Gwyddoniaeth bryd hynny arian refeniw i ddarparu gwasanaethau ychwanegol. Cyflwynwyd y gwasanaethau ychwanegol fel cynllun peilot tair blynedd o fis Mai 2015.

Astudiaeth Achos 3 – Prosiect Adnewyddu Signalau yn Ardal Caerdydd



Mae prosiect Adnewyddu Signalau yn Ardal Caerdydd (CASR) yn brosiect ar y cyd rhwng Llywodraeth Cymru, Network Rail a'r Adran Drafnidiaeth i wella ac uwchraddio safon gwasanaethau sydd ar gael ar Linellau'r Cymoedd. Mae'r prosiect yn cynnwys gwaith ar y coridor rhwng y Barri a Heol y Frenhines, Caerdydd er mwyn gwneud y canlynol:

- gwella hygyrchedd gorsaf Heol y Frenhines, Caerdydd;
- uwchraddio ac adnewyddu signalau mewn nifer o leoliadau;
- adeiladau platfformau newydd yn y Barri a gorsaf Caerdydd Canolog (platfform 8); ac
- adnewyddu ac ailfodelu darnau o drac.

Mae prosiect Adnewyddu Signalau yn Ardal Caerdydd hefyd yn cynnwys tair elfen a ariennir gan Lywodraeth Cymru yn Nhir Phil, Caerffili a'r Barri (**Atodiad 4**) sy'n darparu capasiti er mwyn gallu cynyddu amlder gwasanaethau yn y dyfodol. Er enghraifft, drwy adeiladu dolen basio yn Nhir Phil bydd yn bosibl rhedeg gwasanaeth bob hanner awr i Rymni. Mae Llywodraeth Cymru yn disgwyl i'r fanyleb ar gyfer masnachfrait nesaf Cymru a'r Gororau adlewyrchu'r capasiti ychwanegol y mae wedi'i ariannu ledled y rhwydwaith cyfan.

Pan fydd wedi'i gwblhau, disgwylir i'r prosiect hwn gael gwared â'r dagfa rhwng Caerdydd Canolog a Heol y Frenhines, gan ei gwneud yn bosibl i redeg 16 o drenau cludo teithwyr drwy'r ardal bob awr, sy'n gynnydd o 25 y cant o gymharu â lefelau presennol.

Mae'r prosiect yn wynebu costau cynyddol a mwy a mwy o oedi. Ym mis Hydref 2015, roedd cyfanswm costau'r prosiect wedi cynyddu o £220 miliwn i £245 miliwn ac mae'r dyddiad cwblhau disgwyliedig wedi'i ymestyn o 2015 i fis Ionawr 2017. Bydd cyfraniad Llywodraeth Cymru yn parhau'n sefydlog.

Mae'r prosiect yn rhan o'r cynllun ehangach i adnewyddu signalau yn ne Cymru sy'n werth £450 miliwn; rhwng 2007 a 2018, mae Network Rail yn gosod technoleg signalu newydd ledled rhwydwaith de Cymru; Bro Morgannwg; llinell Cwm Rymni; Y Barri; dwyrain Caerdydd; canol Caerdydd ac i'r gorllewin a'r dwyrain o Bort Talbot o Faglan i Lanelli.

Ffynhonnell: Swyddfa Archwilio Cymru

Nid oedd Llywodraeth Cymru wedi mabwysiadu dull systematig o werthuso gwerth am arian ei buddsoddiad mewn gwasanaethau trên ac mae wrthi'n atgyfnerthu'r trefniadau hyn

- 2.21 Ym mis Ebrill 2013, cynhaliodd ymgynghorwyr Arup **Adolygiad o Effeithlonrwydd Gwasanaethau Trên** ar ran Llywodraeth Cymru. Beirniadodd yr adolygiad ddull Llywodraeth Cymru o fonitro a gwerthuso gwelliannau i wasanaethau o dan fasnachfrait Cymru a'r Gororau ar ôl i brosiectau gael eu cwblhau. Daeth i'r casgliad nad oedd unrhyw dystiolaeth o ddull systematig o adolygu effaith gwasanaethau newydd ar ôl iddynt gael eu cyflwyno. Daeth Arup i'r casgliad hefyd nad oedd Llywodraeth Cymru wedi cynnal adolygiad²⁰ i nodi'r graddau yr oedd wedi sicrhau gwerth am arian ar gyfer yr un o'r tri contract gwasanaeth a archwiliwyd fel rhan o'r adolygiad.
- 2.22 Awgrymodd adolygiad Arup y dylai Llywodraeth Cymru ddefnyddio proses adolygu fwy ffurfiol ar ôl cyflwyno gwasanaeth newydd er mwyn deall effaith y gwasanaeth a nodi a sicrhawyd gwerth am arian. Awgrymodd hefyd y dylai Llywodraeth Cymru ystyried cyflwyno gwasanaethau ar sail cynllun peilot. At hynny, ar ôl chwe mis, awgrymodd y dylai Llywodraeth Cymru gynnal adolygiadau ar wahân o bob agwedd ar y gwasanaeth er mwyn gweld a oes angen addasu'r tybiaethau o dan y cytundeb gwasanaeth. Fodd bynnag, ni chynhwyswyd yr awgrym hwn, sef y dylid cyflwyno gwasanaethau ar sail cynllun peilot, yn y 13 o argymhellion yn yr adroddiad.
- 2.23 Mae Llywodraeth Cymru wedi cyflwyno dau wasanaeth newydd ers i Arup gyflwyno ei adroddiad ym mis Ebrill 2013. Ym mis Mai 2015, cyflwynodd Llywodraeth Cymru wasanaethau ychwanegol ar linellau Calon Cymru a'r Cambrian fel cynllun peilot tair blynedd a bydd yn eu hadolygu ar ddiwedd y cyfnod hwn.
- 2.24 Hyd yma, mae llawer o fuddsoddiadau Llywodraeth Cymru i wella gwasanaethau trên a seilwaith y rheilffyrdd yn deillio o **Gynllun Trafnidiaeth Cenedlaethol** 2010. Ym mis Mai 2014, cyhoeddodd Llywodraeth Cymru adroddiad gwerthuso interim a nododd mai prin iawn oedd y data ar effaith buddsoddiadau a wnaed o dan y Cynllun Trafnidiaeth Cenedlaethol²¹. Argymhellodd y gwerthusiad y dylai Llywodraeth Cymru sefydlu cronfa ddata ganolog i gadw'r data monitro a gwerthuso ar gyfer pob cynllun, gan gynnwys gwaith adolygu ar ôl cwblhau prosiectau a'r costau alldro sy'n gysylltiedig â chyflawni pob prosiect. Nid yw Llywodraeth Cymru wedi gweithredu'r argymhelliad hwn eto.
- 2.25 Ym mis Ionawr 2014, adolygodd Gwasanaethau Archwilio Mewnol Llywodraeth Cymru i ba raddau roedd gweithgarwch monitro a gwerthuso prosiectau cyfalaf rheilffyrdd yn effeithiol, yn amserol ac yn ymdrin â mater gwireddu buddiannau. Nododd yr adroddiad fod angen i Lywodraeth Cymru gynnal gwerthusiadau rheolaidd ar ôl i brosiectau gael eu cwblhau²². Gwnaeth yr adroddiad nifer o

20 Gwasanaethau Abergwaun, gwasanaethau ychwanegol rhwng gogledd a de Cymru a gwasanaethau llinell Cwm Ebwy.

21 Llywodraeth Cymru, **Interim Evaluation Report on National and Regional Transport Plan**, Mai 2014. Adolygodd y gwerthusiad Gynllun Trafnidiaeth Cenedlaethol 2010 a'r pedwar cynllun trafndiaeth rhanbarthol a luniwyd gan y Consortia Trafnidiaeth Rhanbarthol.

22 Yn ein hadroddiad ar **Brosiectau Trafnidiaeth Mawr**, a gyhoeddwyd ym mis Ionawr 2011, argymhellwyd y dylai Llywodraeth Cymru gynnal adolygiadau gwireddu buddiannau ar gyfer pob prosiect trafndiaeth mawr ac y dylent ddechrau o fewn 12 i 18 mis i gwblhau'r prif waith adeiladu. Canolbwyntiodd yr adroddiad ar brosiectau cefnffyrdd ond cyfeiriodd hefyd at ddau brosiect rheilffyrdd pwysig. Diffiniwyd prosiectau mawr fel rhai a oedd yn costio mwy na £5 miliwn.

argymhellion, y mae Llywodraeth Cymru wedi'u derbyn, ac ers hynny mae wedi gwneud y canlynol:

- a penderfynu'n derfynol ar ei phroses werthuso ddrafft a dechrau ei rhoi ar waith ym mhob rhan o'r rhaglen ehangach;
 - b comisiynu adolygiadau gwerthuso lle nad yw'r rhain wedi'u cynnal eto; a
 - c defnyddio gwersi a ddysgwyd i lywio prosiectau yn y dyfodol fel rhan o'r drefn.
- 2.26 Mae'r Swyddfa Archwilio Genedlaethol wedi nodi gwendidau tebyg yn flaenorol mewn perthynas â Llywodraeth y DU. Ym mis Hydref 2014²³, nododd y Swyddfa Archwilio Genedlaethol nad oedd yr Adran Drafndiaeth yn gwerthuso ei rhaglenni rheilffyrdd mawr yn systematig er mwyn cadarnhau a oedd canlyniadau wedi sicrhau'r buddiannau a nodwyd yn yr achos busnes.
- 2.27 Yn ddiweddar dechreuodd Llywodraeth Cymru werthuso'r buddiannau a sicrhawyd gan ei buddsoddiad mewn gwasanaethau ychwanegol, er ei bod wedi cyflwyno rhai o'r gwasanaethau hyn mor bell yn ôl â 2004. Sbardunwyd y gwerthusiadau hyn i raddau helaeth gan ffactorau allanol, yn enwedig yr angen i gydymffurfio ag amodau arian grant Ewropeaidd a pharatoadau Llywodraeth Cymru ar gyfer datganoli'r cyfrifoldeb am nodi a chaffael y set nesaf o wasanaethau Cymru a'r Gororau. Mae pob prosiect sy'n cael arian grant Ewropeaidd wedi cydymffurfio â'r gofyniad i gynnal gwerthusiad annibynnol o ba mor effeithiol y cyflawnwyd y prosiectau (gan gynnwys gwerth am arian) a'u heffaith ddisgwyliedig o ran gwella teithiau a'r effaith economaidd ehangach. Ymhlith yr enghreifftiau o werthusiadau o'r fath mae'r gwerthusiad o gynllun gwella gwasanaethau i Atgyfnerthu Llinellau'r Cymoedd a ariennir gan grant Ewropeaidd sy'n aros i gael ei gymeradwyo gan y Gweinidog ar hyn o bryd cyn cael ei gyhoeddi.
- 2.28 Yn ddiweddar cymerodd Llywodraeth Cymru nifer o gamau eraill er mwyn atgyfnerthu ei threfniadau gwerthuso:
- a Ym mis Mawrth 2015, cyhoeddodd Llywodraeth Cymru brotocol ar gyfer gwerthuso ei rhaglenni buddsoddi mewn rheilffyrdd a'r Metro ar ôl i brosiectau gael eu cwblhau. Mae'r protocol yn nodi opsiynau ar gyfer cyflawni'r gwerthusiad (arbenigedd mewnol neu ymchwil a gomisiynwyd) ac yn pennu amserlenni ar gyfer cynnal gwerthusiadau. Mae hefyd yn nodi cyfres o gwestiynau y dylai pob gwerthusiad roi sylw iddynt. Er enghraifft, a gyflawnwyd y prosiect yn unol â'r amserlen ac o fewn y gyllideb; pa mor dda roedd Llywodraeth Cymru wedi rheoli newid a risgiau o fewn y prosiect ac a gyflawnodd y prosiect ei ganlyniadau disgwyliedig, er enghraifft, targedau ar gyfer teithiau ychwanegol at drafndiaeth gyhoeddus.
 - b Mae Llywodraeth Cymru yn datblygu cronfa ddata a fydd yn ei galluogi i werthuso effeithiau buddsoddiadau mewn trafndiaeth gyhoeddus yn fwy effeithiol. Mae'n sefydlu system ar hyn o bryd i'w galluogi i fonitro amseroedd teithio ar drafndiaeth gyhoeddus rhwng cyrchfannau allweddol bob tri mis. Bydd y data hyn yn ffurfio llinell sylfaen ar gyfer gwerthuso effeithiau buddsoddiadau mewn ymyriadau trafndiaeth gyhoeddus yn y dyfodol.

23 Swyddfa Archwilio Genedlaethol, **Lessons from major rail infrastructure programmes**, Hydref 2014

- 2.29 Mae'r nifer fach o werthusiadau a gynhaliwyd hyd yma yn rhoi rhyw syniad o'r buddiannau a wireddwyd. Er enghraifft, nododd y gwerthusiad o'r orsaf newydd yn Eneu'r-glyn fod y cynnydd yn nifer y cilomedrau teithwyr a deithiwyd gryn dipyn yn llai na'r disgwyl²⁴. Mae hyn i'w briodoli i nifer o ffactorau, gan gynnwys y ffaith bod teithiau arferol yn fyrrach nag a ragwelwyd a bod llai o bobl nag a ragwelwyd yn trosglwyddo o'u ceir ac o fysiau i ddefnyddio'r trên. Nododd y gwerthusiad o effeithiau platfformau ychwanegol yng ngorsafoedd Pontypridd a Chaerffili nad oedd y buddiannau disgwylidig wedi'u sicrhau eto, oherwydd oedi a achoswyd i gynllun cysylltiedig Adnewyddu Signalau Ardal Caerdydd (**Astudiaeth Achos 3**). Fodd bynnag, gan fod trenau eisoes yn cael eu dal yn y platfformau newydd, daeth y gwerthusiad i'r casgliad bod y gwelliannau yn atgyfnerthu'r rhwydwaith.
- 2.30 Mae gwerthusiadau eraill yn brin o fanylion:
- a Daeth y gwerthusiad o Orsaf y Stryd Fawr Abertawe i'r casgliad bod y cynllun wedi sicrhau'r budd a fwriadwyd, sef gostwng troseddu yn yr orsaf ac o'i hamgylch. Fodd bynnag, nid yw'r gwerthusiad yn nodi i ba raddau y mae troseddu wedi gostwng gan gyfeirio at ddata llinell sylfaen nac yn dangos y gellir priodoli'r gostyngiad mewn lefelau troseddu yn uniongyrchol i'r prosiect.
 - b Nid yw'r gwerthusiad o'r gwasanaeth trên sy'n rhedeg bob hanner awr i Ferthyr Tudful yn mesur effaith y gwasanaeth ar y defnydd o geir ac mae ond yn nodi bod y gwasanaeth rheilffordd bob hanner awr, ers iddo gael ei gyflwyno yn 2009, wedi denu nifer o yrwyr ceir i ddefnyddio gwasanaethau rheilffordd gan helpu i leihau'r tagfeydd ar y ffordd gyswllt allweddol hon i mewn i Gaerdydd.

24 Nododd y gwerthusiad gynnydd net alldro o 0.76 miliwn yn nifer y cilomedrau teithwyr o gymharu â'r 4.25 miliwn a ragwelwyd.

Fel y nodir yn y Cynllun Cyllid Trafnidiaeth Cenedlaethol, ar hyn o bryd mae Llywodraeth Cymru yn bwriadu canolbwyntio ei buddsoddiad ei hun yn seilwaith y rheilffyrdd yn y tymor canolig ar brosiectau Cam 2 Metro De Cymru

- 2.31 Mae **Cynllun Cyllid Trafnidiaeth Cenedlaethol 2015** yn nodi lefel buddsoddiad Llywodraeth Cymru mewn seilwaith a gwasanaethau trafndiaeth rhwng 2015 a 2020, er bod y terfyn amser ar gyfer cyflawni rhai o'r prosiectau yn ymestyn y tu hwnt i gyfnod y cynllun. Yn ogystal â darparu arian ymlaen llaw ar gyfer prosiectau seilwaith rheilffyrdd, mae'r Cynllun yn ymrwymo Llywodraeth Cymru i barhau i geisio manteisio i'r eithaf ar y cyfleoedd a gynigir gan ffynonellau eraill o gyllid ar gyfer rheilffordd, yn enwedig gan Lywodraeth y DU. Fel rhan o'r broses o gyflawni'r ymrwymiad hwn, ariannodd Llywodraeth Cymru y gwaith o ddatblygu achos busnes dros drydaneiddio prif linell arfordir Gogledd Cymru erbyn 2024²⁵. Dywedodd Llywodraeth Cymru wrthym ei bod yn bwriadu dechrau gweithio ar ddatblygu cynlluniau ar gyfer system Metro i Ogledd Cymru.
- 2.32 Mae'r Cynllun Cyllid Trafnidiaeth Cenedlaethol yn nodi cynlluniau penodol, terfynau amser ar gyfer eu cyflawni, y costau disgwylid a ffynonellau tebygol o gyllid. Dywedodd Llywodraeth Cymru wrthym fod y Cynllun yn ddogfen 'fyw' y bydd yn ei hadolygu'n rheolaidd, a hefyd ei bod yn bosibl y bydd rhagor o gynlluniau trafndiaeth yn datblygu drwy'r broses deialog gystadleuol y mae'n bwriadu ei defnyddio i gaffael masnachfaint nesaf Cymru a'r Gororau a'r Metro. Mae'r cynllun yn nodi tri phrif gynllun rheilffyrdd y bydd Llywodraeth Cymru yn buddsoddi ynddynt, sy'n cwmpasu rhai o'r prosiectau y cyfeirir atynt yn **Atodiad 4** ond nid pob un ohonynt. Y tri chynllun yw:
- Rhaglen Gwella Gorsafoedd Cymru i wella gorsafoedd a'u hintegreiddio â dulliau eraill o deithio, oedd â chyfanswm cost ddangosol o £24 miliwn a'r dyddiad cwblhau ffisegol a gweithredol tybiedig yw mis Tachwedd 2015;
 - Cam 1 Metro De Cymru (**Blwch 1**) â chyfanswm cost ddangosol o £77 miliwn gyda dyddiad cwblhau ffisegol a gweithredol ym mis Tachwedd 2017; a
 - Cam 2 Metro De Cymru (**Blwch 1**) â chyfanswm cost ddangosol o £580 miliwn (heb gynnwys TAW a chwyddiant) a disgwylir iddo gael ei gwblhau, mewn sawl cam, rhwng 2019 a 2023.

²⁵ Ar 31 Mawrth 2016, cyflwynodd Gweinidog yr Economi, Gwyddoniaeth a Thrafnidiaeth ar y pryd yr achos busnes amlinellol dros drydaneiddio'r llinell o Gaergybi a Llandudno i Warrington a Crewe Lysgrifennydd Gwladol y DU dros Drafnidiaeth.

Blwch 1 – Camau 1 a 2 Metro De Cymru

Gweledigaeth gyffredinol Llywodraeth Cymru ar gyfer y pecyn o brosiectau Metro yw creu rhwydwaith cludiant cyflym amlfoddol sy'n integreiddio pob dull cludo, sy'n galluogi'r teithiwr i ddefnyddio pob rhan o'r rhwydwaith gan ddefnyddio un tocyn.

Mae Llywodraeth Cymru yn datblygu ei gweledigaeth ar gyfer y Metro mewn dau gam: Mae Cam 1 y Metro yn cynnwys:

- ymestyn y llinell reilffordd i dref Glynebwy a gorsaf newydd – hefyd yn cynnwys gwella cyflymer y llinell a chynyddu capasiti;
- gorsaf newydd yn Pye Corner;
- gwelliannau i reilffyrdd a gorsafoedd bysiau;
- cynllun sy'n rhoi blaenoriaeth i fysiau sy'n canolbwyntio ar goridor yr A470 rhwng Caerdydd a Rhondda Cynon Taf;
- teithio llesol; a
- chynlluniau parcio a theithio.

Mae rhai o brosiectau Cam 1 y Metro wedi'u cyflawni (er enghraifft, gorsafoedd Pye Corner a Thref Glynebwy, mae eraill yn mynd rhagddynt (er enghraifft, cynllun rhoi blaenoriaeth i fysiau'r A470). Ar hyn o bryd mae Llywodraeth Cymru yn datblygu cais am arian Ewropeaidd i dalu rhai o gostau Cam 1 y Metro, fel arall bydd yn talu cyfanswm y costau amcangyfrifedig sy'n cyfateb i £77 miliwn.

Mae Llywodraeth Cymru wedi ymgorffori rhaglen Trydaneiddio Llinellau'r Cymoedd yng Ngham 2 y Metro. Yn ogystal â'r rhaglen drydaneiddio, mae Cam 2 y Metro yn cynnwys deuoli trac ar nifer o linellau, adeiladu dolenni pasio ar nifer o linellau, plattformau ychwanegol a gwelliannau i orsafoedd.

Mae Cam 2 y Metro wedi'i gynnwys yng ngytundeb ehangach y Fargen Ddinesig ar gyfer Prifddinas-Ranbarth Caerdydd a lofnodwyd rhwng Lywodraeth Cymru a Llywodraeth y DU a 10 awdurdod lleol yng Nghymru ar 15 Mawrth 2016. Mae buddsoddiad gwerth £1.2 biliwn yn seilwaith Prifddinas-Ranbarth Caerdydd drwy Gronfa Fuddsoddi 20 mlynedd yn allweddol i'r cytundeb (**Ffigur 6**). I ddechrau bydd y Gronfa Fuddsoddi yn rhoi blaenoriaeth i Gam 2 y Metro.

Ni wnaed unrhyw benderfyniadau eto ynghylch cynlluniau pellach sydd i'w hariannu gan y Gronfa Fuddsoddi. Fodd bynnag, maent yn debygol o gynnwys rhagor o gynlluniau trafndiaeth, gan adeiladu ar gam nesaf prosiect y Metro, buddsoddiad i ryddhau safleoedd tai a chyflogaeth a gwaith i ddatblygu cyfleusterau ymchwil ac arloesi.

Nod y Gronfa Fuddsoddi yw creu hyd at 25,000 o swyddi newydd a denu o leiaf £4 biliwn o fuddsoddiad ychwanegol gan bartneriaid lleol a'r sector preifat erbyn 2036.

Ffynhonnell: Llywodraeth Cymru, **A Cardiff Capital Region Metro Update report**, Awst 2014; Llywodraeth Cymru, **Cynllun Cyllid Trafndiaeth Cenedlaethol 2015**, Mehefin 2015; Llywodraeth Cymru, **Datganiad Llafar-Bargeinion Dinesig**, 16 Mawrth 2016

Ffigur 6 – Buddsoddwyr yng Nghronfa Fuddsoddi Prifddinas-Ranbarth Caerdydd

| Buddsoddwr | Y buddsoddiad y cytunwyd arno £ miliwn |
|---|---|
| Llywodraeth Cymru | 500 |
| Llywodraeth y DU | 500 |
| 10 awdurdod lleol (isafswm cyfraniad cyfunol) | 120 |
| Arian yr Undeb Ewropeaidd | 100 |

Ffynhonnell: **Cardiff Capital City Region Deal**, Mawrth 2016

- 2.33 Ers cyhoeddi'r Cynllun Cyllid Trafnidiaeth Cenedlaethol, mae costau amcangyfrifedig Cam 2 y Metro wedi cynyddu i £734 miliwn yn ôl prisiau 2018, fel y nodwyd yng nghytundeb y Fargen Ddinesig dyddiedig Mawrth 2016. Mae'r amcangyfrif diwygiedig yn adlewyrchu chwyddiant costau adeiladu a sefyllfa wahanol o ran TAW i'r un a ragwelwyd yn wreiddiol. Mae costau Cam 2 y Metro yn cynnwys costau'r rhaglen drydaneiddio yn bennaf. Ym mis Tachwedd 2014, yr amcangyfrif mwyaf diweddar a nodwyd ar gyfer cost rhaglen Trydaneiddio Llinellau'r Cymoedd oedd tua £555 miliwn. Mae Llywodraeth Cymru yn adolygu'r amcangyfrif hwn yn rheolaidd ond nid yw wedi cyhoeddi amcangyfrif mwy cyfredol er mwyn peidio â thanseilio ei thrafodaethau masnachol.
- 2.34 Yn dilyn trafodaethau hirfaith rhwng Llywodraeth Cymru a Llywodraeth y DU ynghylch arian i dalu costau'r rhaglen trydaneiddio a moderneiddio, cytunodd y ddau barti ar setliad terfynol ym mis Tachwedd 2014. Bydd Llywodraeth y DU yn cyfrannu £125 miliwn tuag at gostau'r gwaith trydaneiddio a moderneiddio a wneir yn ystod Cam 2 y Metro.
- 2.35 Llywodraeth Cymru fydd yn talu unrhyw gostau eraill sy'n gysylltiedig â'r rhaglen trydaneiddio a moderneiddio yn ystod Cam 2 y Metro. Mae Llywodraeth Cymru yn bwriadu gwneud cais am £125 miliwn o arian yr Undeb Ewropeaidd sydd ar gael drwy Gronfa Datblygu Rhanbarthol Ewrop i ategu ei buddsoddiad ei hun. Mae Llywodraeth Cymru yn bwriadu cyflwyno 'hysbysiad o brosiect mawr' i'r Comisiwn Ewropeaidd yn ystod ail hanner 2016²⁶. Ers canlyniad y refferendwm ar aelodaeth o'r Undeb Ewropeaidd, mae'r Prif Weinidog wedi ceisio cadarnhad y dylai Cymru allu parhau i hawlio'r arian hwn neu allu cael arian cyfatebol gan Lywodraeth y DU.

26 Os bydd cyfanswm yr arian cyhoeddus ar gyfer prosiect yn fwy na €50 miliwn, mae'n rhaid i'r Comisiwn Ewropeaidd gymeradwyo'r prosiect ond, yn achos Cymru, caiff prosiectau sy'n cael llai na €50 miliwn o arian cyhoeddus eu cymeradwyo gan Swyddfa Cyllid Ewropeaidd Cymru.

O dan reolau'r cronfeydd Ewropeaidd mae'n rhaid i Lywodraeth Cymru allu dangos bod trydaneiddio wedi sicrhau'r buddiannau arfaethedig erbyn 2023 neu efallai y bydd angen iddi ad-dalu unrhyw arian Ewropeaidd y bydd yn llwyddo i'w sicrhau.

- 2.36 Os bydd Llywodraeth Cymru yn sicrhau arian Ewropeaidd, bydd yn rhaid iddi dalu gweddill cost Cam 2 y Metro, yr amcangyfrifir ei bod yn cyfateb i£484 miliwn ar hyn o bryd. Yn flaenorol, rhagwelodd Llywodraeth Cymru y byddai'n adennill ei buddsoddiad cychwynol yn y rhaglen drydaneiddio ac na fyddai, o ganlyniad i hynny, yn mynd i unrhyw gost net ei hun ar gyfer y prosiect.
- 2.37 Roedd yr asesiad hwnnw yn seiliedig ar y dybiaeth y byddai prosiect moderneiddio Llinellau'r Cymoedd yn cynnwys gwaith trydaneiddio rheilffyrdd trwm ac y byddai angen llai o gymorthdaliadau ar y gwasanaethau am fod trenau electrig yn cludo mwy o deithwyr ac am eu bod yn fwy effeithlon fel y nodir yn achos busnes amlinellol Mehefin 2012. Ers hynny, mae Llywodraeth Cymru wedi penderfynu ymchwilio i atebion technegol eraill ar gyfer trydaneiddio Llinellau'r Cymoedd a moderneiddio Llinellau'r Cymoedd fel rhan o brosiect Metro De Cymru. Mae Llywodraeth Cymru wedi pwysleisio i ni nad yw'r dybiaeth y gellid cyflawni'r rhaglen drydaneiddio heb unrhyw gost net yn ddilys mwyach, am fod Metro De Cymru yn brosiect gwahanol â thybiaethau o ran cyflawni ac allbynnau sy'n wahanol i'r rhai a ddefnyddiwyd yn yr achos busnes dros drydaneiddio Llinellau'r Cymoedd.

Rhan 3

Ers 2006, mae gwasanaethau ar fasnachfaint Cymru a'r Gororau wedi gwella, er bod cymariaethau â gwasanaethau trên eraill yn y DU yn dangos perfformiad cymysg



- 3.1 Mae'r rhan hon o'r adroddiad yn rhoi trosolwg lefel uchel o berfformiad masnachfaint Cymru a'r Gororau – a redir gan Trenau Arriva Cymru. Mae'n dibynnu ar ddata ar brydlondeb a dibynadwyedd gwasanaethau, gwerth taliadau cymhellant a chosb a boddhad teithwyr.

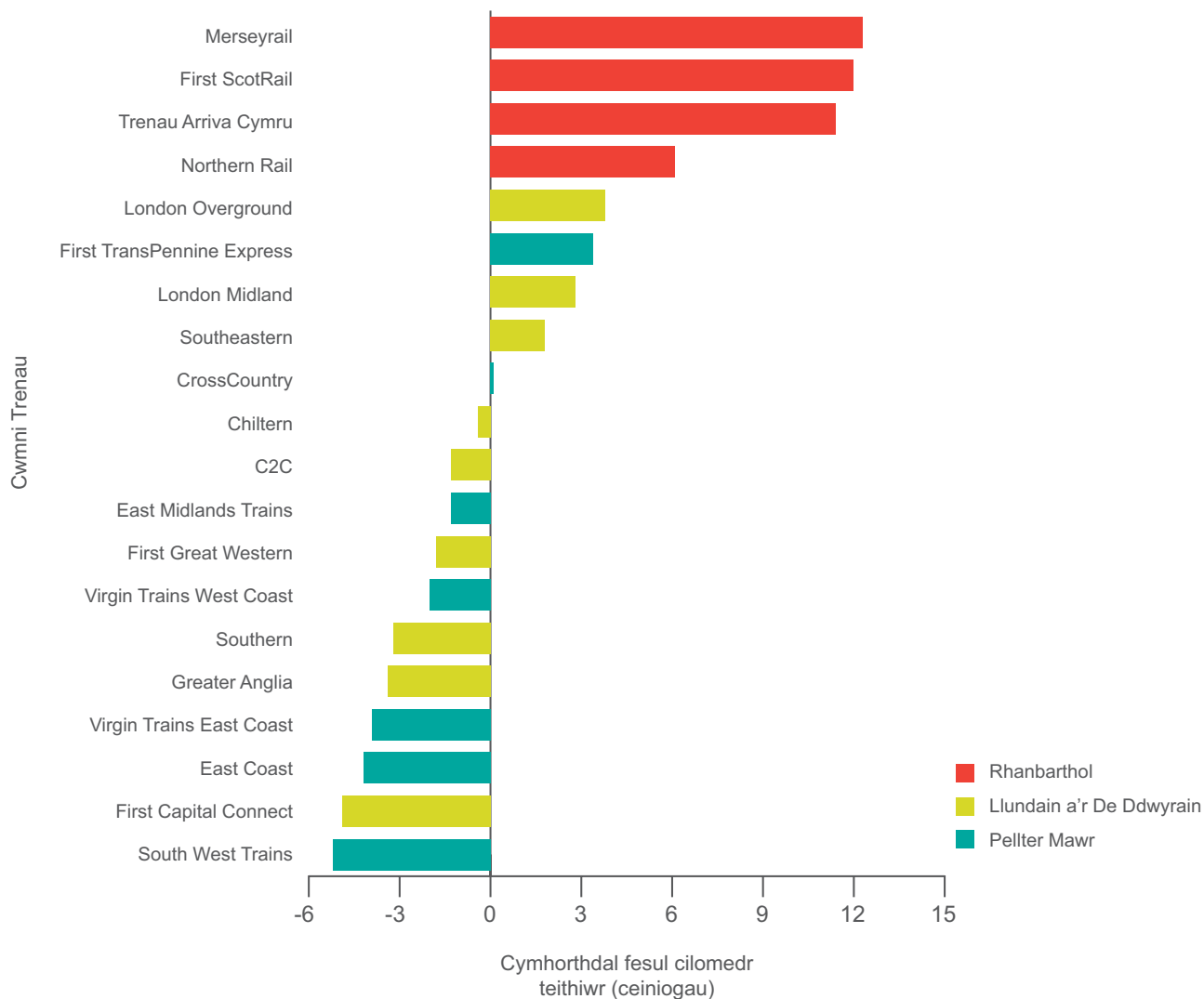
Trenau Arriva Cymru a gafodd y trydydd cymhorthdal mwyaf fesul cilomedr teithiwr o blith yr holl gwmnïau trên yn y DU rhwng 2011-12 a 2014-15, er nad yw cymhorthdal mawr yn anghyffredin ar gyfer masnachfreintiau rhanbarthol sy'n darparu gwasanaethau gwledig

- 3.2 Rhwng 1 Ebrill 2011 a 31 Mawrth 2015, cost y cymhorthdal a roddwyd i'r fasnachfaint graidd oedd £617 miliwn i Lywodraeth Cymru, a oedd yn cyfateb i tua £154 miliwn y flwyddyn, ar gyfartaledd²⁷. Dros oes y fasnachfaint (rhwng 2003 a 2018), yn seiliedig ar ddata Llywodraeth Cymru, rydym yn amcangyfrif bod cyfanswm y gost tua £2.5 biliwn. Trenau Arriva Cymru sydd wedi cael y trydydd cymhorthdal mwyaf o blith yr holl gwmnïau trên yn y DU fesul cilomedr teithiwr ers 2011-12 (Ffigur 7).
- 3.3 Er mwyn gwneud cymariaethau yn fwy ystyrlon, mae Transport Focus²⁸ yn dosbarthu'r gwahanol fasnachfreintiau a chwmnïau trên yn y DU yn grwpiau cymheiriaid. Mae masnachfaint Cymru a'r Gororau wedi'i chategoreiddio fel un o'r pedwar 'cwmni trên rhanbarthol,' ynghyd â Merseyrail, First ScotRail a Northern Rail. Y categorïau eraill yw 'Llundain a De-ddwyrain Lloegr' a 'gweithredwyr Pellter Mawr'. Er nad yw Transport Focus yn mesur y cymhorthdal fesul cilomedr teithiwr, rydym yn cymhwyso'r un egwyddor wrth gymharu cymhorthdal Trenau Arriva Cymru â'r cwmnïau trên rhanbarthol eraill.
- 3.4 Dengys Ffigur 7, yn ystod y cyfnod rhwng 2011-12 a 2014-15, fod pob un o'r cwmnïau trên rhanbarthol wedi cael cymorthdaliadau fesul cilomedr teithiwr a oedd gryn dipyn yn fwy na'r cymorthdaliadau a gafodd y cwmnïau trên eraill. Mae angen cymorthdaliadau cymharol fawr ar gwmnïau trên rhanbarthol am eu bod yn gwasanaethu ardaloedd gwledig yn bennaf.

²⁷ Nid yw hyn yn cynnwys gwariant arall yr Adran Drafnidiaeth mewn perthynas â'r fasnachfaint nad yw'n dod o dan gyfrifoldebau rheoli na rheolaeth Llywodraeth Cymru. Er enghraifft, mae'r Adran Drafnidiaeth yn talu iawndal i Trenau Arriva Cymru am newidiadau a wnaed i'w weithrediadau er mwyn darparu ar gyfer masnachfaint newydd Virgin (sydd â gwasanaethau yng Nghymru) pan gafodd ei gosod yn 2008. Ac nid yw'n cynnwys taliadau a wnaed gan yr Adran Drafnidiaeth i Trenau Arriva Cymru am wasanaethau yn Lloegr.

²⁸ Ym mis Gorffennaf 2015, ailenwyd Passenger Focus yn Transport Focus ac ymestynnwyd ei gylch gwaith y tu hwnt i deithwyr ar drenau a bysiau i gynnwys defnyddwyr ffyrdd. Mae Transport Focus yn Gorff Gwarchod Teithwyr annibynnol ar gyfer y rhai sy'n teithio ar drenau, ffyrdd a bysiau. Mae Transport Focus yn ymgynghori â mwy na 50,000 o deithwyr y flwyddyn er mwyn llunio'r Arolwg Cenedlaethol o Deithwyr Rheilffordd – sy'n rhoi darlun o foddhad teithwyr â theithio ar drenau ledled y rhwydwaith. Caiff barn teithwyr am wasanaethau trên eu casglu ddwywaith y flwyddyn o sampl gynrychioliadol o deithiau.

Ffigur 7 – Cymhorthdal cyfartalog gan y Llywodraeth fesul cilomedr teithiwr ar gyfer Cwmnïau Trên yn y DU rhwng 2011-12 a 2014-15



Noder

Mae ffigurau negyddol yn adlewyrchu lle roedd gweithredwyr trenau yn talu premiwm i'r Adran Drafnidiaeth am yr hawl i ddarparu'r gwasanaethau, yn hytrach na chael cymhorthdal.

Ffynhonnell: Y Swyddfa Rheilffyrdd a Ffyrdd

Mae Trenau Arriva Cymru wedi cyflawni'r targedau perfformiad a bennwyd o dan gytundeb masnachfrait Cymru a'r Gororau i raddau helaeth

- 3.5 O dan delerau cytundeb y fasnachfrait ac yn gyffredin â phob masnachfrait rheilffyrdd arall yn y DU, mae Llywodraeth Cymru yn defnyddio 'mesur perfformiad cyhoeddus' a nodir yng nghytundeb y fasnachfrait (Blwch 2). Os bydd Trenau Arriva Cymru yn cyflawni'r mesur perfformiad cyhoeddus neu'n rhagori arno mewn cyfnod o bedair wythnos, bydd Llywodraeth Cymru yn gwneud taliad cymell perfformiad i Trenau Arriva Cymru. Os na fydd Trenau Arriva Cymru yn cyflawni'r targed hwn, efallai y bydd angen iddo wneud taliad cosb i Lywodraeth Cymru. Dengys gwaith dadansoddi a ddefnyddiodd y data a gasglwyd yn ystod y cyfnod o bedair wythnos, ers i Lywodraeth Cymru fynd yn gyfrifol am redeg y fasnachfrait o ddydd i ddydd yn 2006, fod Trenau Arriva Cymru wedi rhagori ar y targed ar gyfer perfformiad gwasanaethau, gyda dim ond rhai eithriadau, er bod y targed wedi dod yn fwy heriol (Ffigur 8).

Blwch 2 – Mesur perfformiad cyhoeddus cwmnïau trên

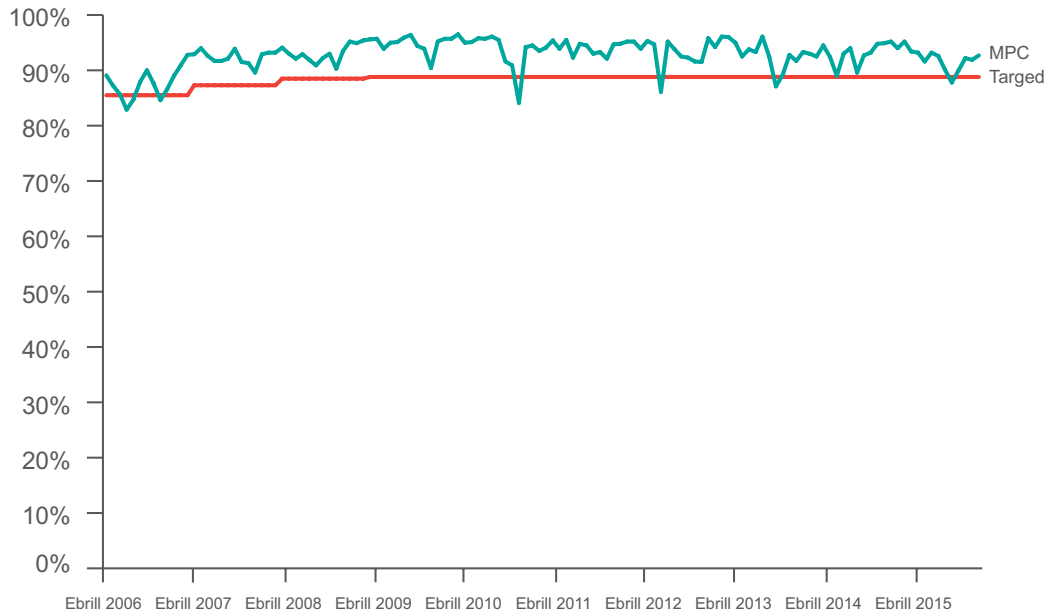
Dengys y mesur perfformiad cyhoeddus ganran y trenau sy'n cyrraedd eu gorsaf derfynol ar amser. Yn ôl diffiniad y mesur hwn mae trên yn cyrraedd 'ar amser' os yw'n cyrraedd y gyrchfan o fewn pum munud o'i amser rhestredig ar gyfer gwasanaethau cymudwyr ac o fewn 10 munud ar gyfer gwasanaethau pellter mawr (sy'n tueddu i fod yn wasanaethau rhyng-ddinesig.) Yn unol â chytundeb y fasnachfrait, at ddibenion cadarnhau a yw Trenau Arriva Cymru wedi cyflawni'r mesur perfformiad cyhoeddus diffinnir gwasanaeth fel un sy'n cyrraedd ar amser os yw'n cyrraedd o fewn pum munud.

Mae'r mesur perfformiad cyhoeddus yn cyfuno ffigurau ar gyfer prydlondeb a dibynadwyedd i roi un mesur o berfformiad. Y mesur perfformiad cyhoeddus yw mesur safonol y diwydiant o berfformiad y mae Network Rail yn ei ddefnyddio fel rhan o'r drefn ac yn adrodd arno ym mhob un o'r 13 o gyfnodau o bedair wythnos bob blwyddyn.

Mae Network Rail hefyd yn casglu data perfformiad 'amser cywir', sy'n mesur canran y trenau sy'n cyrraedd eu gorsaf derfynol yn gynnar neu o fewn 59 eiliad i'r amser rhestredig. Er ei fod yn casglu'r data hyn, mae Network Rail ei hun yn nodi nad yw data amser cywir yn fesur dibynadwy o berfformiad ac, yn benodol, nad yw'n cynrychioli canlyniadau a phrofiad teithwyr a wasanaethir gan weithredwyr pellter mawr sy'n sicrhau rhai o'r lefelau uchaf o foddhad teithwyr yn y diwydiant. Y rheswm a roddir gan Network Rail dros natur annibynadwy'r data hyn yw nad yw'r broses ar gyfer casglu data mor fanwl â hyn yn gwbl ddibynadwy ar hyn o bryd a bod y diwydiant yn gweithio ar wella ansawdd y wybodaeth hon er mwyn sicrhau bod data amser cywir yn fwy dibynadwy. Serch hynny, defnyddir y wybodaeth hon gan Network Rail i asesu perfformiad. Dengys y ffigurau cyfartalog blynyddol symudol amser cywir mwyaf diweddar sydd ar gael fod Trenau Arriva Cymru wedi perfformio'n well na'r tri chwmni trên rhanbarthol arall.

Ffynhonnell: Swyddfa Archwilio Cymru

Ffigur 8 – Perfformiad Trenau Arriva Cymru yn erbyn y mesur perfformiad cyhoeddus, rhwng 2006-07 a 2015-16



Ffynhonnell: Llywodraeth Cymru

- 3.6 Rhwng mis Ebrill 2006 a mis Mawrth 2016, dim ond mewn wyth o'r 130 o gyfnodau adrodd o bedair wythnos y bu'n ofynnol i Trenau Arriva Cymru wneud taliad cosb i Lywodraeth Cymru. Ym mis Ebrill 2016, cyfanswm y taliadau cosb a wnaed gan Trenau Arriva Cymru i Lywodraeth Cymru ers 2006-07 oedd £2.2 miliwn (Ffigur 9). Ni fu'n ofynnol iddo wneud unrhyw daliadau cosb yn 2014-15 nac yn 2015-16. Rhwng 2006-07 a 2015-16, gwnaeth Llywodraeth Cymru daliadau cymell perfformiad gwerth ychydig o dan £50 miliwn i Trenau Arriva Cymru²⁹.
- 3.7 Gyda chymeradwyaeth yr Adran Drafndiaeth, gall Llywodraeth Cymru ddiwygio'r mesur perfformiad cyhoeddus o fewn oes y fasnachfaint bresennol os yw hyn yn adlewyrchu gwelliant a ddisgwylir yn rhesymol gan brosiect mawr a nodwyd. Fodd bynnag, fel y nodwyd gan Arup yn yr **Adolygiad o Effeithlonrwydd Gwasanaethau Trên** a gynhaliodd ar ran Llywodraeth Cymru yn 2013 (paragraff 2.21), mae'n debyg y byddai'n rhaid i unrhyw newid fynd drwy broses datrys anghydfod gyda Trenau Arriva Cymru a allai fod yn gostus. Mae Llywodraeth Cymru hefyd wedi ceisio cyngor cyfreithiol ar y posibilrwydd o newid y mesur perfformiad cyhoeddus presennol, a oedd yn ategu'r farn a nodwyd yn adroddiad Arup ar y mater hwn. O ystyried y cyngor gan Arup a'r cyngor cyfreithiol, mae Llywodraeth Cymru o'r farn ei bod yn annhebygol y bydd yn gallu ailgyfrifo'r mesur perfformiad cyhoeddus yn ôl-weithredol, ond nid yw wedi diystyru hyn yn gyfan gwbl.

29 Nodwyd taliadau cymhelliant yn y fasnachfaint pan gafodd ei chaffael yn 2003 ac fe'u cyfrifir fel a ganlyn. Caiff y gyfradd fonws sefydlog ei lluosio â'r gwahaniaeth rhwng y mesur perfformiad cyhoeddus meincnod (sef 88.8 y cant) a'r ffigur perfformiad cyhoeddus a gyflawnwyd gan Trenau Arriva Cymru ar gyfer pob cyfnod o bedair wythnos. Caiff y gyfradd fonws ei huwchraddio yn unol â'r Mynegai Prisiau Manwerthu (RPI) bob blwyddyn. Mae Swyddfa Cyfrifoldeb Cyllidebol y DU yn diffinio'r Mynegai Prisiau Manwerthu fel mesur cyfartalog o brisiau nwyddau a gwasanaethau, sy'n seiliedig ar gost basgedaid o nwyddau a gwasanaethau.

Ffigur 9 – Lefel y taliadau cymhelliant a chosb ar gyfer masnachfrait Cymru a'r Gororau 2006-07 i 2015-16

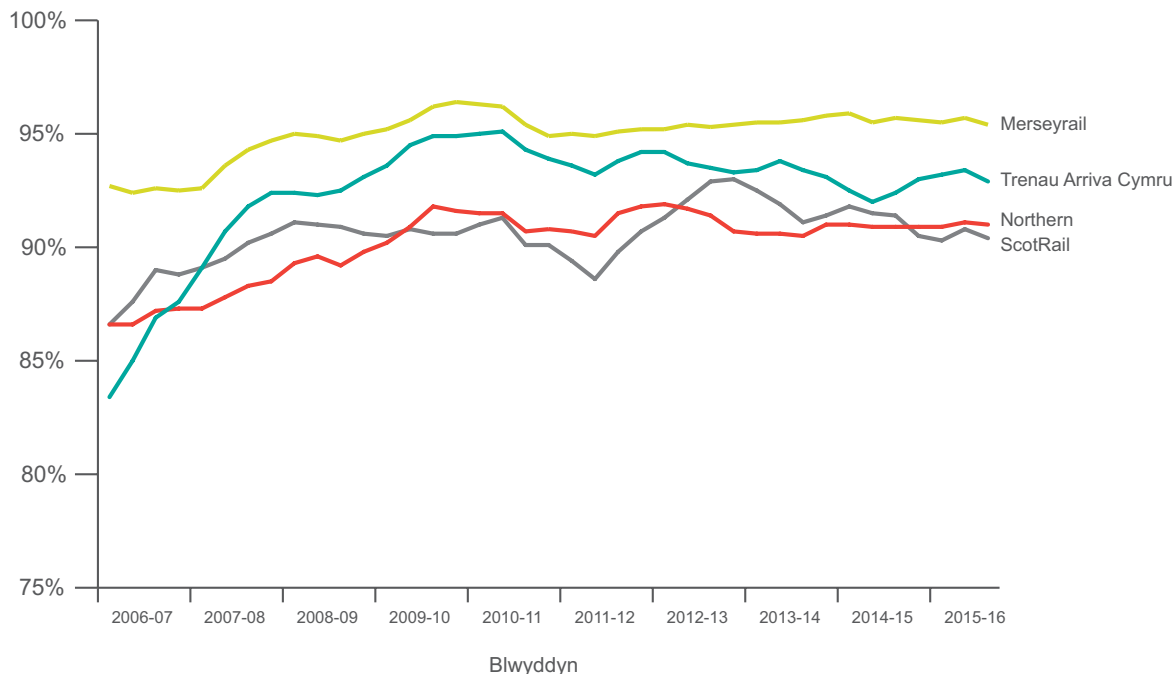
| Blwyddyn | Taliadau cosb gan Arriva Trains Wales (£ miliwn) | Taliadau cymhelliant gan Lywodraeth Cymru (£ miliwn) | Sefyllfa net Llywodraeth Cymru (£ miliwn) |
|-----------------|--|--|---|
| 2006-07 | 0.489 | 0 | 0.489 |
| 2007-08 | 0 | 5.422 | -5.422 |
| 2008-09 | 0 | 4.786 | -4.786 |
| 2009-10 | 0 | 7.042 | -7.042 |
| 2010-11 | 1.015 | 4.744 | -3.792 |
| 2011-12 | 0 | 6.303 | -6.303 |
| 2012-13 | 0.411 | 5.548 | -5.137 |
| 2013-14 | 0.245 | 5.533 | -5.288 |
| 2014-15 | 0 | 5.690 | -5.690 |
| 2015-16 | 0 | 4.457 | -4.457 |
| Cyfanswm | 2.160 | 49.525 | -47.365 |

Ffynhonnell: Llywodraeth Cymru

- 3.8 Daeth adroddiad Arup i'r casgliad bod y gwelliant o ran cyflawni'r mesur perfformiad cyhoeddus ers 2006-07 i'w briodoli i'r canlynol:
- a amserlen ddiwygiedig a oedd wedi symleiddio gweithrediadau, er enghraifft, drwy gyflwyno trenau a redai bob 15 neu 30 munud ar lwybrau prysur penodol; a
 - b mentrau gwella fflyd a sefydlwyd gan Trenau Arriva Cymru megis safonau gwell o ran gwaith cynnal a chadw.
- 3.9 Fel rhan o'i pharatoadau ar gyfer masnachfrait nesaf Cymru a'r Gororau, mae Llywodraeth Cymru yn adolygu'r gyfundrefn perfformiad y mae am ei rhoi ar waith. Bydd adolygiad Llywodraeth Cymru yn ystyried ai parhau i ddefnyddio'r mesur perfformiad cyhoeddus yw'r ffordd fwyaf priodol o fesur perfformiad deiliad y fasnachfrait.

- 3.10 Er mwyn ein galluogi i wneud cymariaethau hirdymor â'r cwmnïau trê'n rhanbarthol eraill mae'r dadansoddiad isod yn defnyddio metrig a elwir yn 'gyfartaledd blynyddol symudol y mesur perfformiad cyhoeddus'. Ar gyfer pob chwarter, y cyfartaledd symudol yw cyfartaledd y gwerth ar gyfer y chwarter penodol a'r tri chwarter blaenorol. Mae'r dull hwn yn dileu'r amrywiadau o chwarter i chwarter yn y data sylfaenol (sydd i'w priodoli i ffactorau tymhorol neu dros dro) ac mae'n golygu ei bod yn haws gweld tueddiadau tymor hwy o ran y data.
- 3.11 Ym mis Ebrill 2006, cyfartaledd blynyddol symudol mesur perfformiad cyhoeddus Trenau Arriva Cymru oedd 81.3 y cant. Ers hynny, mae Trenau Arriva Cymru wedi gweld y gwelliant cyffredinol mwyaf o gymharu â'r cwmnïau trê'n rhanbarthol eraill (Ffigur 10). Mae perfformiad wedi dirywio ychydig ers 2009-10 ond mae wedi parhau i fod yn uwch na tharged perfformiad cyhoeddus cenedlaethol y DU, sef 90.7 y cant, a bennwyd gan y Swyddfa Rheilffyrdd a Ffyrdd. Ar ddiwedd trydydd chwarter 2015-16, dengys y cyfartaledd blynyddol symudol, gan ddefnyddio'r mesur hwn, fod perfformiad yn cyfateb i 92.9 y cant, sef y seithfed perfformiad uchaf o blith yr holl gwmnïau trê'n yn y DU.

Ffigur 10 – Cyfartaledd blynyddol symudol y mesur perfformiad cyhoeddus, 2006-07 i drydydd chwarter 2015-16



Ffynhonnell: Y Swyddfa Rheilffyrdd a Ffyrdd

Mae boddhad teithwyr â Trenau Arriva Cymru wedi gwella i ryw raddau, ond mae cymariaethau â chwmnïau trên eraill yn dangos perfformiad cymysg

- 3.12 Ym mis Rhagfyr 2013, cyhoeddodd yr Ymgyrch dros Drafnidiaeth Well³⁰ adroddiad yn cymharu gwasanaethau trên yn naw cyn-Ranbarth Swyddfa'r Llywodraeth yn Lloegr, yn ogystal â Chymru a'r Alban. Ystyriodd y dadansoddiad wasanaethau yn erbyn ystod eang o feini prawf. Nododd yr adroddiad fod Cymru yn y 10fed safle o blith yr 11 o ranbarthau a daeth i'r casgliad nad oedd gwasanaethau trên yng Nghymru yn perfformio cystal â phob rhanbarth arall, ac eithrio Dwyrain Lloegr, o ran defnydd, hygyrchedd a boddhad. Barn yr Ymgyrch dros Drafnidiaeth Well oedd bod y rhwydwaith rheilffyrdd yng Nghymru yn tanberfformio o gymharu â lefel y cyllid y mae'n ei gael, sy'n dangos bod angen mwy o gymorth ariannol arno er mwyn sicrhau'r elw mwyaf posibl o fuddsoddiad'.
- 3.13 Fodd bynnag, dengys data a gasglwyd ac a ddadansoddwyd gan Transport Focus o'i Arolwg Teithwyr Rheilffordd Cenedlaethol a gynhelir ddwywaith y flwyddyn (**Blwch 3**), mewn rhai o brif feysydd profiad teithwyr, fod gwelliant wedi bod ers i ddata gael eu casglu gyntaf neu o'r adeg yr aeth Llywodraeth Cymru yn gyfrifol am reoli'r fasnachfaint o ddydd i ddydd yn 2006 (**Ffigur 11**)³¹. Er enghraifft, cynyddu boddhad ag amgylchedd yr orsaf yn gyffredinol ers 2006. Y prif eithriadau yw bod teithwyr bellach yn llai bodlon nag yr oeddent yn ystod gwanwyn 2010 â'r gwerth am arian roedd pris y tocyn yn ei gynnig. Bu gostyngiad bach hefyd ers gwanwyn 2010 mewn lefelau boddhad â threnau a'u prydlondeb a'u dibynadwyedd, a all adlewyrchu'r ffaith bod cerbydau Trenau Arriva Cymru yn heneiddio. Data a gesglir drwy Arolwg Teithwyr Rheilffyrdd Cenedlaethol yw'r safon a dderbynnir gan y diwydiant ac fe'i defnyddir yn ffurfiol i reoli cytundebau masnachfaint, gan gynnwys masnachfaint Cymru a'r Gororau³².
- 3.14 Cymharwyd data boddhad teithwyr ar gyfer Trenau Arriva Cymru yn ystod gwanwyn a hydref 2015 â chwmnïau trên eraill yn y DU. Dengys y data mwyaf cyfoes (hydref 2015) fod teithwyr sy'n teithio ar drenau Arriva Cymru yn llai bodlon ym mhob un o'r tri phrif gategori o foddhad teithwyr (**Ffigur 12**). Fodd bynnag, mae lefelau boddhad teithwyr yn amrywio. Er enghraifft, dengys data gwanwyn 2015 fod teithwyr a oedd yn teithio ar drenau Arriva Cymru yn fwy bodlon â'r profiad teithio yn gyffredinol, y trên a phrydlondeb a dibynadwyedd y gwasanaeth, ond roedd Trenau Arriva Cymru yn y safle isaf o ran boddhad ag amgylchedd yr orsaf yn gyffredinol.
- 3.15 Ym mis Chwefror 2016, cynhaliodd cylchgrawn 'Which' arolwg lle nododd teithwyr mai Trenau Arriva Cymru a oedd â'r nifer lleiaf o achosion o oedi o ran gwasanaethau o blith y 22 o gwmnïau trên. Nododd 'Which' hefyd, ar gyfer boddhad teithwyr yn gyffredinol, fod Trenau Arriva Cymru yn y 18fed safle o blith y 22 o gwmnïau trên.

30 Mae'r Ymgyrch dros Drafnidiaeth Well yn elusen a grŵp pwyso annibynnol sy'n darparu ymchwil ac atebion i broblemau trafnidiaeth, ac ym mis Rhagfyr 2013 cyhoeddodd **The Effectiveness of the Rail Network Across Great Britain – a comparative analysis**.

31 Arfer y diwydiant yw cofnodi boddhad cwsmeriaid â pherfformiad y cwmnïau trên, megis Trenau Arriva Cymru. Fodd bynnag, mae boddhad teithwyr yn debygol o adlewyrchu rhai ffactorau sydd y tu hwnt i reolaeth Trenau Arriva Cymru. Er enghraifft, bydd y camau a gymerir gan Network Rail i gynnal a chadw, adnewyddu a gwella'r seilwaith yn effeithio ar brydlondeb a dibynadwyedd trenau.

32 Ar gyfer cyfres o fesurau (er enghraifft glendid trenau), mae cytundeb y fasnachfaint yn nodi sgôr darged ar gyfer boddhad. Os bydd Trenau Arriva Cymru yn methu'r targed, mae'n ofynnol iddo gyflwyno cynllun gweithredu sy'n nodi sut mae'n bwriadu gwella perfformiad.

Blwch 3 – Arolwg Teithwyr Rheilffordd Cenedlaethol

Yn y gwanwyn a'r hydref bob blwyddyn, mae Transport Focus yn cynnal yr Arolwg Teithwyr Rheilffordd Cenedlaethol sy'n rhoi darlun o foddhad teithwyr â theithio ar drên ledled y rhwydwaith rheilffyrdd ym Mhrydain Fawr. Yn genedlaethol, mae pob cylch o'r arolwg yn cynnwys tua 30,000 o bobl, gydag arolwg hydref 2015 yn samplu 1,109 o deithwyr Trenau Arriva Cymru.

Mae Transport Focus yn gofyn i deithwyr roi eu barn am y daith benodol y maent yn ei gwneud ar yr adeg y cânt eu harolygu. Gofynnir i deithwyr roi sgôr i nodi eu boddhad cyffredinol â'u taith, â'r orsaf lle yr aethant ar y trên ac â'r trên y gwnaethant deithio arno. Hefyd, gofynnir i deithwyr ofyn cyfres o 33 o gwestiynau boddhad am agweddau mwy penodol ar yr orsaf lle yr aethant ar y trên a'r trên y buont yn teithio arno.

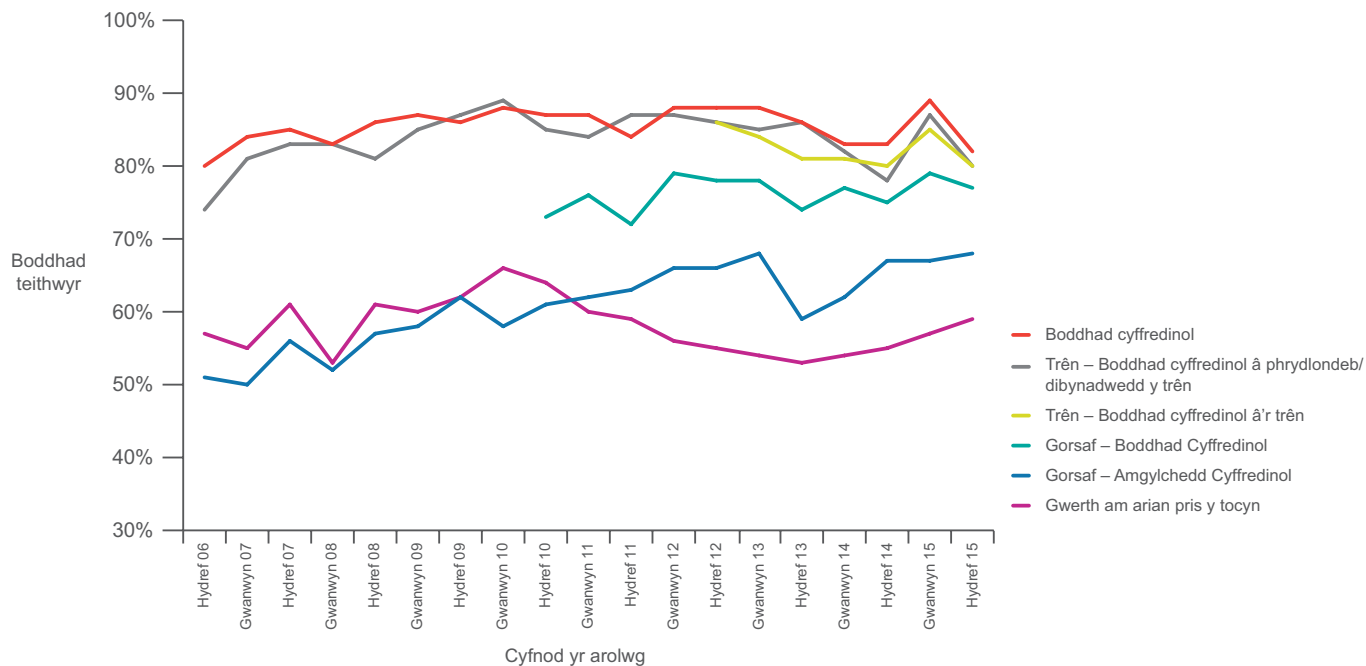
Mae Transport Focus yn gwneud amrywiaeth eang o waith dadansoddi gan ddefnyddio gwybodaeth a gasglwyd yn ystod yr arolwg, gan gynnwys dadansoddi data boddhad ar dair lefel, sef: y DU, cwmni trên a llwybrau. Mae'r data ar lefel llwybr yn cynnwys llwybrau sy'n dod i mewn i Gymru ond nad ydynt yn rhan o fasnachfrait Cymru a'r Gororau.

Ceir rhagor o wybodaeth am yr arolwg ar wefan Transport Focus.

Ffynhonnell: Swyddfa Archwilio Cymru

- 3.16 Ar gyfer pob cwmni trên, mae Transport Focus yn llunio adroddiad sy'n nodi'r prif ffactorau ar y trên ac yn yr orsaf sy'n dylanwadu ar sgorau boddhad cyffredinol. Dengys ei ddadansoddiad mwyaf diweddar (hydref 2015), ar gyfer Trenau Arriva Cymru, fod 12 o'r 33 o fesurau yn dylanwadu ar lefelau boddhad cyffredinol. Y ddau fesur sy'n cael yr effaith fwyaf ar foddhad cyffredinol yw ffactorau ar y trên, sef glendid y tu mewn i'r trên wedi'i ddilyn gan gysur ardal y seddi. Ar gyfer teithwyr Trenau Arriva Cymru, mae prydlondeb a dibynadwyedd y trên yn llai pwysig na'r ddau ffactor blaenorol o ran esbonio boddhad cyffredinol. Mewn cyferbyniad, ar lefel genedlaethol, prydlondeb a dibynadwyedd y trên yw'r ffactor pwysicaf o ran dylanwadu ar foddhad cyffredinol teithwyr â'r daith.
- 3.17 Hefyd, mae Transport Focus yn cymharu boddhad teithwyr â phrydlondeb â phrydlondeb gwirioneddol pob cwmni trên, gan ddefnyddio mesurau sy'n cynnwys y mesur perfformiad cyhoeddus (cyfartaledd blynyddol symudol) a drafodwyd uchod. Ar gyfer Trenau Arriva Cymru ymddengys fod ei ddadansoddiad yn dangos, wrth i brydlondeb wella, fod boddhad teithwyr yn gwella hefyd ac fel arall.

Ffigur 11 – Boddhad teithwyr â Trenau Arriva Cymru, rhwng hydref 2006 a hydref 2015

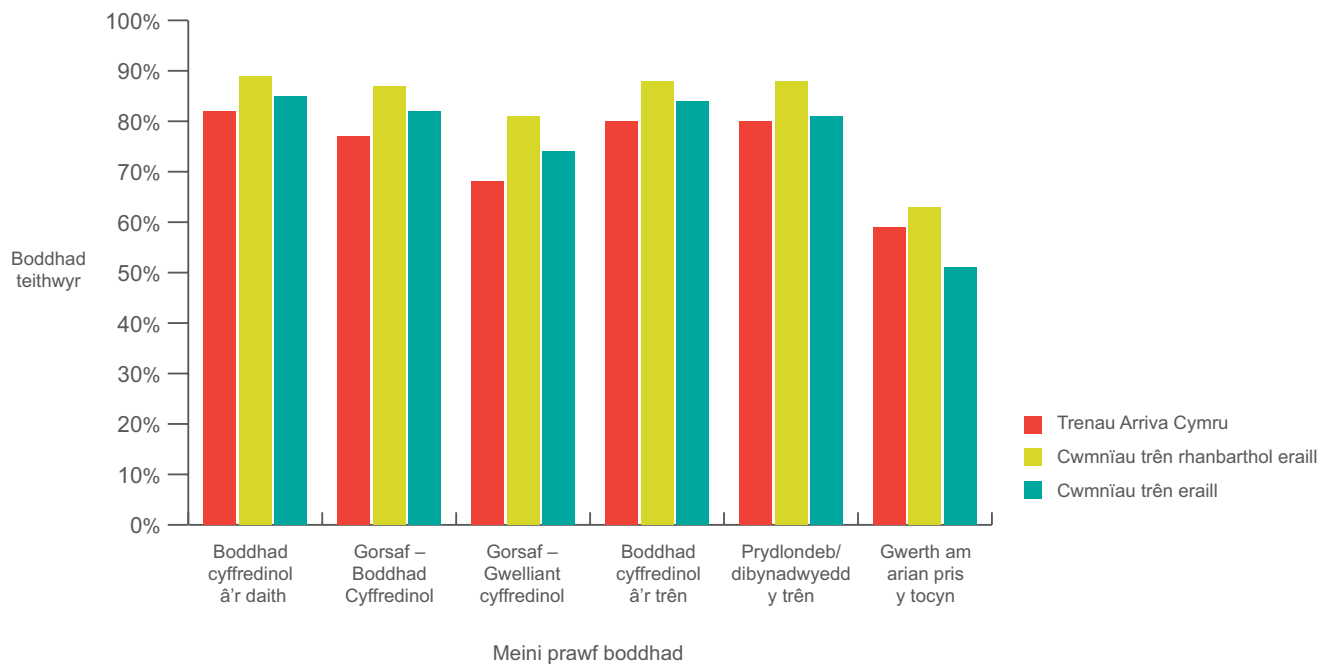


Noder

Mae canran y teithwyr a ddiffinnir fel rhai sy'n fodlon yn cynnwys nifer y teithwyr sy'n ymateb drwy nodi eu bod yn 'eithaf bodlon' a 'bodlon iawn'. Nid yw'r adroddiad hwn yn ystyried cyfraddau anfodlonrwydd a'r rhesymau drosto. Fodd bynnag, mae Transport Focus yn adrodd ar anfodlonrwydd mewn sawl ffordd. Er enghraifft, ar gyfer pob cwmni trôn mae'n ystyried y prif ffactorau sy'n dylanwadu ar anfodlonrwydd teithwyr. Mae 'anfodlonrwydd' hefyd yn gyfuniad o deithwyr sy'n ymateb drwy nodi eu bod yn 'eithaf anfodlon' ac 'anfodlon iawn'. Ar gyfer pob cwestiwn am foddhad, mae teithwyr hefyd yn cael y dewis o ymateb 'ddim yn fodlon nac yn anfodlon' a 'ddim yn gwybod/dim barn'.

Ffynhonnell: Data Arolwg Teithwyr Rheilffordd Cenedlaethol Transport Focus

Ffigur 12 – Boddhad teithwyr Trenau Arriva Cymru o gymharu â chwmnïau trên eraill yn y DU, hydref 2015



Noder

Mae'r ffigur hwn yn cynnwys data ar gyfer pob un o'r pedwar cwmni trên rhanbarthol, Trenau Arriva Cymru, Merseyrail, First ScotRail a Northern Rail.

Ffynhonnell: Data Arolwg Teithwyr Rheilffordd Cenedlaethol Transport Focus

Rhan 4

Mae nifer o risgiau, heriau a chyfleoedd i Lywodraeth Cymru yn gysylltiedig â chaffael gwasanaethau Cymru a'r Gororau o 2018, ac mae rhai penderfyniadau allweddol i'w gwneud o hyd



- 4.1 Mae rhan olaf yr adroddiad hwn yn ystyried cynlluniau Llywodraeth Cymru ar gyfer caffael gwasanaethau Cymru a'r Gororau o 2018. Dirprwy Ysgrifennydd Parhaol Llywodraeth Cymru dros yr Economi, Sgiliau ac Adnoddau Naturiol yw 'Uwch Berchennog Cyfrifol' y prosiect caffael.
- 4.2 Nid ydym wedi cynnal adolygiad manwl o drefniadau rheoli prosiect Llywodraeth Cymru ar gyfer nodi a chaffael y gwasanaethau. Fodd bynnag, mae Llywodraeth Cymru wedi cynnal ei hadolygiad cychwynol ei hun, sef adolygid 'Gateway', o'r broses o gaffael gwasanaethau a seilwaith Cymru a'r Gororau a'r seilwaith Metro ar y cyd.
- 4.3 Nododd adolygiad Gateway bod cyflawni'r broses gaffael o fewn y terfynau amser gofynnol yn ddichonadwy, yn ôl pob tebyg, ond bod materion pwysig eisoes wedi codi y mae angen i'r rheolwyr roi sylw iddynt. Ymddengys fod modd datrys y rhain ar yr adeg hon ac, os eir i'r afael â hwy yn brydlon, ni ddylai fod cost yn gysylltiedig â hwy ac ni ddylent beri i'r prosiect ymestyn y tu hwnt i'r terfyn amser a nodwyd. Ymhlith y materion mae: eglurdeb y trefniadau llywodraethu; yr angen am brif raglen gyffredinol ar gyfer y broses gaffael ac ar ôl hynny sy'n cynnwys darparu adnoddau, dibyniaethau allweddol a llwybr hanfodol; a'r angen am fwy o eglurder ynglŷn â chanlyniadau dymunol contract integredig a'r hyn y mae'n rhaid ei gyflawni fel gofyniad sylfaenol drwy'r broses gaffael.

Mae enghraifft ddiweddar masnachfaint InterCity West Coast yn tynnu sylw at rai o'r risgiau sy'n gysylltiedig â'r broses gaffael ar gyfer gwasanaethau newydd Cymru a'r Gororau

- 4.4 Ar hyn o bryd Adran Drafnidiaeth Llywodraeth y DU yn gyfrifol am reoli a gosod yr 16 o fasnachfreintiau rheilffordd ledled Cymru a Lloegr. Mae'r cyfrifoldeb hwn yn nwylo'r Adran Drafnidiaeth ers 1994, a dyfarnodd ei masnachfaint gyntaf ym mis Rhagfyr 1995.
- 4.5 Ar 3 Hydref 2012, oherwydd problemau a oedd yn gysylltiedig â'r broses gaffael diddymodd yr Adran Drafnidiaeth ei phenderfyniad dros dro i ddyfarnu masnachfaint InterCity West Coast franchise i First Group, ac atal ei rhaglen fasnachfreinio gyfan dros dro. Ystyriodd y Swyddfa Archwilio Genedlaethol y cefndir i'r penderfyniad i atal y broses gaffael dros dro a nododd nifer o wersi i ddiogelu rhag prosesau gwneud penderfyniadau gwael ynghylch prosiectau mawr yn y dyfodol (**Blwch 4**).

Blwch 4 – Gwersi a ddysgwyd yn sgil canslo masnachfaint InterCity West Coast yn Lloegr

Nododd y Swyddfa Archwilio Genedlaethol bum mesur hanfodol i ddiogelu rhag prosesau gwneud penderfyniadau gwael a daeth i'r casgliad nad oedd yr un o'r mesurau diogelwch hyn yn gweithredu'n effeithiol yn achos cystadleuaeth InterCity West Coast:

- Mae eglurder amcanion yn helpu gwneuthurwyr penderfyniadau i lunio barn briodol drwy fod yn faen prawf i gyfeirio yn ôl ato drwy gydol y broses gwneud penderfyniadau.
- Mae prosesau rheoli prosiectau a rhaglenni cadarn yn dwyn ynghyd y ffrydiau gwaith gwahanol ac yn eu cydgysylltu, yn nodi rhyngddibyniaethau a dilyniant digwyddiadau – y llwybr hanfodol – y mae angen i raglen ei ddilyn.
- Mae gwaith goruchwyllo uwch swyddogion yn gweithredu fel gwiriad synnwyr.
- Mae gweithgarwch ymgysylltu effeithiol â rhanddeiliaid, megis cyflenwyr, yn helpu drwy gyfrannu eu gwybodaeth a thynnu sylw at broblemau ac mae'n dod â hwy i mewn i'r broses.
- Mae sicrwydd mewnol ac allanol yn darparu gwiriad synnwyr a gall nodi unrhyw feysydd sy'n peri pryder i reolwyr.

Ffynhonnell: Swyddfa Archwilio Genedlaethol, **Lessons from cancelling the InterCity West Coast franchise competition**, Rhagfyr 2012

Mae Llywodraeth Cymru wedi sefydlu cwmni trafndiaeth a bwrdd cynghori strategol er mwyn cynyddu ei adnoddau i gaffael gwasanaethau newydd Cymru a'r Gororau

- 4.6 Ym mis Rhagfyr 2014, sefydlodd Llywodraeth Cymru Fwrdd Cynghori Strategol newydd³³ er mwyn llywio'r broses o ddatblygu trafndiaeth integredig yng Nghymru gan gynnwys Metro De Cymru, a phennu manyleb gwasanaethau newydd Cymru a'r Gororau a'u caffael. Mae Llywodraeth Cymru hefyd wedi penodi Cyfarwyddwr Rhaglen Reilffordd newydd i gydgyssylltu amrywiol brosiectau mawr.
- 4.7 Mae Llywodraeth Cymru hefyd wedi ffurfio cwmni trafndiaeth nid er difidend – sef Trafndiaeth Cymru. Rheolir y gydberthynas rhwng Llywodraeth Cymru a'r cwmni gan nifer o ddogfennau allweddol (**Blwch 5**). Rôl bresennol y cwmni yw rhoi cyngor a chymorth mewn perthynas â chaffael masnachfaint nesaf Cymru a'r Gororau a seilwaith Metro. Bydd y prif gontractau ar gyfer y fasnachfaint rheilffyrdd a chyflenwi seilwaith rhwng Llywodraeth Cymru a'r darparw(y)r, gyda Trafndiaeth Cymru yn rhoi cyngor ac yn darparu gwasanaethau arbenigol. Mae Llywodraeth Cymru o'r farn y bydd y cwmni yn cynyddu ei adnoddau a'i allu i wireddu ei uchelgeisiau ar gyfer y sector rheilffyrdd ac yn lleihau ei gostau ar yr un pryd³⁴.

³³ Mae'r Bwrdd Cynghori Strategol yn cynnwys pris swyddog risg Admiral Group (a gymerodd le prif swyddog gweithredol Admiral Group fel aelod o'r Bwrdd), cyn-reolwr gyfarwyddwr South West Trains and First Group, (sydd bellach yn cyflawni rôl prif weithredwr yr Awdurdod Hedfan Sifil) a chyn-gyfarwyddwr Virgin Trains a Trenau Arriva Cymru (sydd bellach yn un o gyfarwyddwyr anweithredol Network Rail).

³⁴ Ym mis Hydref 2014, nododd y Swyddfa Archwilio Genedlaethol fod angen i Adran Drafndiaeth y DU feithrin ei gallu a'i sgiliau i gyflawni prosiectau seilwaith rheilffyrdd mawr. Nododd yr adroddiad y gall trefniadau hyd braich, megis Crossrail Limited, ei gwneud hi'n haws recriwtio pobl brofiadol a galluog. Fodd bynnag, pwysleisiodd yr adroddiad hefyd y gallai cyflenwi sgiliau ddod yn fwy anodd o gofio'r nifer o fawr o brosiectau seilwaith mawr sy'n mynd rhagddynt ac y bwriedir eu cynnal (Swyddfa Archwilio Cymru, **Lessons from major rail infrastructure programmes**, Hydref 2014).

Tudalen y pecyn 88

Mae Llywodraeth Cymru yn rhagweld y bydd y cwmni yn ei galluogi i wneud y canlynol:

- a Cynyddu neu leihau ei hadnoddau yn well er mwyn ateb galw sy'n newid Mae Llywodraeth Cymru o'r farn y bydd sefydlu'r Cwmni recriwtio staff arbenigol â'r sgiliau priodol yn helpu i ddatblygu ei hygredded ymhlith cyflenwyr a chontractwyr.
- b Lleihau ei dibyniaeth ar gontractwyr allanol. Mae Llywodraeth Cymru yn pryderu y gallai costau ymgynghori gynyddu wrth i'w gweithgareddau sy'n gysylltiedig â rheilffyrdd ehangu.

Blwch 5 – Trefniadau llywodraethu Trafnidiaeth Cymru

Ar hyn o bryd mae'r bwrdd yn cynnwys wyth cyfarwyddwr, (gan gynnwys y gadair):

- pum cyfarwyddwr anweithredol, sy'n cynnig profiad ac arbenigedd ehangach mewn meysydd megis Adnoddau Dynol, cyllid, cyflenwi seilwaith a llywodraethu, y mae pob un ohonynt yn gyflogeion i Lywodraeth Cymru; a
- thri chyfarwyddwr gweithredol sydd ag arbenigedd penodol yn eu maes cyfrifoldeb³⁵.

Rheolir y cydberthnasau rhwng Llywodraeth Cymru a'r cwmni gan y dogfennau allweddol canlynol:

- Mae llythyr dirprwy a gyhoeddwyd gan yr Ysgrifennydd Parhaol yn rhoi cyfrifoldebau swyddog cyfrifyddu ychwanegol i'r Dirprwy Ysgrifennydd Parhaol dros yr Economi, Sgiliau ac Adnoddau Naturiol sydd i'w cyflawni ganddo drwy ei benodiad yn Gadeirydd y cwmni.
- Mae Cytundeb Rheoli rhwng Llywodraeth Cymru a'r cwmni yn nodi diben y cwmni, ei atebolrwydd a'i gyfrifoldebau. Caiff y Cytundeb Rheoli ei adolygu o bryd i'w gilydd er mwyn sicrhau ei fod yn parhau i fod yn addas at y diben.
- Mae llythyr cylch gwaith gan Lywodraeth Cymru yn nodi'r amcanion a'r allbynnau allweddol y disgwylir i'r cwmni eu cyflawni.
- Cynllun busnes, a luniwyd gan y cwmni, sy'n nodi sut y bydd y cwmni yn cyflawni'r amcanion a'r allbynnau a nodir yn y llythyr cylch gwaith. Mae cynllun busnes Tachwedd 2015 yn nodi'r hyn sydd i'w gyflawni a'r ffactorau llwyddiant hanfodol y mae'n rhaid iddynt fod ar waith er mwyn cwblhau'r broses o gaffael y contract integredig ar amser.

Ffynhonnell: Swyddfa Archwilio Cymru

³⁵ Mae Dau Gyfarwyddwr Gweithredol ar secondiad o Lywodraeth Cymru ar hyn o bryd. Nid yw'r trydydd, sef y Rheolwr Gyfarwyddwr, yn un o gyflogeion Llywodraeth Cymru.

Mae Llywodraeth Cymru am gael model gweithredu gwahanol ar gyfer y fasnachfaint nesaf, ond nid yw wedi nodi eto beth yw'r model gweithredu hwnnw

- 4.8 Mae deddfwriaeth³⁶ bresennol, na chaiff ei diwygio cyn i'r fasnachfaint nesaf gael ei chaffael, yn golygu na all cylch gwaith Trafnidiaeth Cymru ymestyn i redeg gwasanaethau. Syniadaeth bresennol Llywodraeth Cymru yw y bydd yn defnyddio proses y ddeialog gystadleuol i lunio cytundeb sy'n cyd-fynd â'i hamcanion. Mae wedi ystyried sut mae angen i'r model gweithredu ar gyfer y fasnachfaint nesaf adlewyrchu'r amgylchiadau penodol yng Nghymru ac amcanion polisi penodol Llywodraeth Cymru, ond nid yw wedi cadarnhau ei safbwynt eto.
- 4.9 Roedd Llywodraeth Cymru wedi ystyried symud o fodel 'masnachfaint' i fodel 'consesiwn' yn flaenorol y rhagwelyd y byddai ei fanteision yn cynnwys y gallu i ailfuddsoddi mewn gwasanaethau wrth i refeniw gynyddu. Fodd bynnag, syniadaeth bresennol Llywodraeth Cymru yw y bydd yn defnyddio'r broses gaffael i gadarnhau'r model gweithredol. Nid yw Llywodraeth Cymru wedi cadarnhau manylion ei dull o gymell gweithredwr y fasnachfaint a sicrhau bod cymaint o arian â phosibl yn cael ei ailfuddsoddi mewn gwasanaethau trên eto.
- 4.10 Mae natur y gwasanaethau a ddarperir gan fasnachfaint Cymru a'r Gororau (sy'n gymysgedd o wasanaethau gwledig, rhwydwaith cymudwyr yn ne-ddwyrain Cymru a nifer o wasanaethau rhyng-ddinesig), a'r tebygolrwydd y bydd angen cymorthdalau gwasanaethau yn y dyfodol yn golygu bod angen i Lywodraeth Cymru ddatblygu safbwynt clir ar y materion canlynol:
- Faint o reolaeth sydd gan Lywodraeth Cymru dros y broses o bennu manylebau gwasanaethau a'u darparu. Fel arfer, cyfeirir at fasnachfreintiau y mae gan yr awdurdod gryn dipyn o reolaeth drostynt fel 'contractau rheoli' neu 'gonsesiynau', a chyfeirir at y rhai a reolir gan y gweithredwr, i raddau helaeth neu'n llwyr, fel 'masnachfreintiau masnachol.
 - Ei dull o ddyrannu amrywiaeth o risgiau, megis dyrannu risgiau refeniw. Mewn masnachfaint fasnachol, mae'r atebolrwydd am y risg refeniw, i raddau helaeth neu'n llwyr, yn tueddu i fod yn nwylo'r gweithredwr sydd hefyd yn cael cyfle i gynyddu ei elw os gall gynyddu ei refeniw. Ond mewn contract rheoli yr awdurdod sy'n atebol am y risg refeniw i raddau helaeth neu'n llwyr. Mae'n rhaid i Lywodraeth Cymru hefyd benderfynu ar dull o ddyrannu risgiau, megis amrywiadau mewn costau tanwydd. Mewn masnachfaint fasnachol mae'r gweithredwr yn aml yn cynnwys risg amrywiadau mewn costau tanwydd wrth gyfrifo ei gostau gweithredu, ond mewn contract rheoli gall yr awdurdod fod yn atebol am risg amrywiadau mewn costau tanwydd i raddau helaeth neu'n llwyr.

³⁶ Mae Adran 25 o Ddeddf Rheilffyrdd 1993 yn atal 'gweithredwyr yn y sector cyhoeddus' rhag rhedeg masnachfaint reilffyrdd ym Mhrydain. Fodd bynnag, mae Deddf yr Alban (Diwygio) 2015-16, sy'n cael ei hystyried ar hyn o bryd gan Senedd y DU, yn cynnig y dylid datganoli'r pŵer i Lywodraeth yr Alban ganiatáu i weithredwyr yn y sector cyhoeddus wneud cais am fasnachfreintiau reilffyrdd a ariennir ac a ragnodir gan Weinidogion yr Alban. Mae Llywodraeth y DU wedi cytuno i ystyried a ddylid rhoi'r un pwerau i Gymru yn hyn o beth.

- 4.11 Fel rhan o'r broses o ddatblygu dull gwahanol o redeg gwasanaethau Cymru a'r Gororau, mae Llywodraeth Cymru wedi cyfarfod â Llywodraeth yr Alban er mwyn trafod ei dull o ddyfarnu masnachfaint ScotRail. Mae masnachfaint newydd ScotRail yn cynnwys cynghrair agos rhwng deiliad y fasnachfaint – sef Abellio³⁷ – a Network Rail fel perchennog a gweithredwr y seilwaith. Dywed Network Rail fod 'cynghrair agos' yn gynghrair lle mae Network Rail a chwmmi trêrn yn rhannu '... upside or downside risk against an agreed baseline for all and most of their activities'. Mewn 'cynghrair agos', dylai fod tîm rheoli integredig ac un Rheolwr Gyfarwyddwr sy'n atebol i'r ddau gwmni. Trafododd Llywodraeth Cymru fanteision posibl model cynghrair mewn sesiwn briffio a gynhaliodd gyda'r diwydiant rheilffyrdd ym mis Mehefin 2015.

Nod Llywodraeth Cymru yw gosod contract integredig ar gyfer Cymru a'r Gororau a'r Metro yn 2017 yr amcangyfrifir ei fod yn werth £3.5 biliwn, drwy broses deialog gystadleuol

- 4.12 Yn 2017, nod Llywodraeth Cymru yw gosod contract integredig ar gyfer Cymru a'r Gororau a'r Metro. Mae o'r farn y bydd cyfuno'r broses o gaffael y Metro â masnachfaint Cymru a'r Gororau yn newid ansawdd yn sylweddol, gan gynnwys amserau teithio cyflymach, gwasanaethau mwy dibynadwy a lleddfu problem gorlenwi.
- 4.13 Mae Llywodraeth Cymru wedi amcangyfrif bod y contract integredig yn werth £3.5 biliwn. Mae'r gwerth amcangyfrifedig yn adlewyrchu tybiaeth sy'n seiliedig ar fasnachfaint 15 mlynedd, er y caiff penderfyniad terfynol ynghylch hyd y fasnachfaint ei gwneud yn ystod y broses gaffael. Mae hyd y fasnachfaint yn golygu ei bod yn arbennig o bwysig bod Llywodraeth Cymru yn cael manyleb y contract yn iawn. Cydnabyddir yn eang bod y diffyg darpariaeth ar gyfer cynnydd yn nifer y teithwyr yn un o gyfyngiadau'r fasnachfaint bresennol³⁸.
- 4.14 Ym mis Tachwedd 2015, cyhoeddodd y Swyddfa Archwilio Genedlaethol ei hadolygiad o ymagwedd Adran Drafnidiaeth Llywodraeth y DU at fasnachfreinio rheilffyrdd ers methiant cystadleuaeth InterCity West Coast³⁹. Nododd yr adroddiad nifer o risgiau i sicrhau gwerth am arian yn y rhaglen fasnachfreinio, gan gynnwys y rhyngddibyniaethau heriol rhwng gwaith seilwaith mawr, cerbydau a masnachfreintiau. Mae Transport Scotland wedi ceisio rheoli'r rhyngddibyniaethau hyn drwy'r model 'cynghrair agos'. Mae Llywodraeth Cymru o'r farn y dylai caffael contract integredig gynnig y cyfle i reoli rhyngddibyniaethau o'r fath yn well.
- 4.15 Mae Llywodraeth Cymru wedi dewis mabwysiadu proses deialog gystadleuol er mwyn caffael y contract integredig. Dylai'r broses deialog gystadleuol alluogi Llywodraeth Cymru i lunio ateb dichonadwy sy'n addas at y diben er mwyn cyflawni amcanion Llywodraeth Cymru yn hytrach na rhagnodi hyn ymlaen llaw⁴⁰.

37 Ym mis Hydref 2014, dyfarnodd Llywodraeth yr Alban fasnachfaint ScotRail i Abellio, sy'n un o is-gwmnïau gweithredwr cenedlaethol yr Iseldiroedd. Bydd y contract yn para am o leiaf saith mlynedd o 1 Ebrill 2015 gydag opsiwn i ymestyn y tymor i 10 mlynedd drwy gydsyniad ar ôl pum mlynedd.

38 Am drafodaeth ynghylch cryfderau a gwendiau'r fasnachfaint bresennol a gaffaelwyd gan yr Adran Drafnidiaeth yn 2003, gweler, Pwyllgor Menter a Busnes Cynulliad Cenedlaethol Cymru, **Dyfodol Masnachfaint Rheilffyrdd Cymru a'r Gororau**, Rhagfyr 2013.

39 Swyddfa Archwilio Genedlaethol, **Reform of the rail franchising programme**, Tachwedd 2015.

40 Mae adroddiad yr Archwilydd Cyffredinol ar **Buddsoddiad Llywodraeth Cymru yn Isadeiledd Band Eang y Genhedlaeth Nesaf**, a gyhoeddwyd ym mis Mai 2015, yn nodi bod Llywodraeth Cymru wedi mabwysiadu'r broses deialog gystadleuol er mwyn caffael ei contract Cyflymu Cymru â BT.

4.16 Mae'r amserlen bresennol fel a ganlyn:



Tudalen y pecyn 92

- 4.17 Yn flaenorol roedd Llywodraeth Cymru wedi rhagweld y byddai'n cwblhau'r cam pennu manyleb erbyn dechrau 2016. Fodd bynnag, mae wedi cymryd mwy o amser nag a amcangyfrifwyd yn wreiddiol i negodi trefniant i gyflawni ei dewis ddull gweithredu â'r Adran Drafndiaeth a Network Rail. Mae'r oedi hwn wedi effeithio ar y cam caffael y disgwylid yn wreiddiol y câi ei gwblhau erbyn diwedd 2016. Dywedodd Llywodraeth Cymru wrthym fod amserlenni cynllunio cynnar yn rhai dangosol a'u bod yn darparu ar gyfer oedi. Mae Llywodraeth Cymru yn hyderus y bydd yr amserlen ddiwygiedig yn ei gwneud yn bosibl i'r fasnachfaint newydd ddechrau yn ystod hydref 2018 o hyd. Ym mis Mai 2016, penododd Trafnidiaeth Cymru gwmni ymgynghori Mott MacDonald i weithredu mewn rôl gynghori a darparu arbenigedd yn ystod y broses gaffael.
- 4.18 Mae Llywodraeth Cymru yn ymgysylltu â rhanddeiliaid allweddol i ddatblygu ei chynlluniau ar gyfer rhagnodi a chaffael y fasnachfaint a chyflawni ei phrosiectau seilwaith o dan Gam 2 y Metro. Cynhaliodd Llywodraeth Cymru nifer o ddigwyddiadau ymgynghori yn ystod 2015 ac, ym mis Ionawr 2016, cyhoeddodd ddogfen ymgynghori **Gosod y Trywydd ar gyfer Rheilffordd Cymru a'r Gororau**. Ymhlith y materion yr ymdriniodd yr ymgynghoriad â hwy mae: gwelliannau i orsafoedd; y gyfundrefn rheoli perfformiad yn y dyfodol ar gyfer masnachfaint nesaf Cymru a'r Gororau; priodoldeb gwasanaethau presennol Cymru a'r Gororau (er enghraifft, amllder gwasanaethau ar hyn o bryd) a systemau tocynnau (er enghraifft, barn pobl ar gael gwared ar y system tocynnau papur bresennol a rhoi system newydd yn ei lle).
- 4.19 Ym mis Mai 2016, cynhaliodd Trafnidiaeth Cymru, ar ran Llywodraeth Cymru, ddigwyddiad mewn perthynas â phroses gaffael Cymru a'r Gororau a'r Metro er mwyn rhoi manylion i ddarpar gynigwyr a'r gadwyn gyflenwi uniongyrchol (megis gweithgynhyrchwyr cerbydau, cwmnïau cerbydau a chontractwyr seilwaith mawr).
- 4.20 Bydd angen i Lywodraeth Cymru reoli cyfres o risgiau wth weithio gyda'r diwydiant i gyflawni'r contract integredig o fewn y terfynau amser gofynnol. Mewn datganiad dyddiedig 12 Gorffennaf 2016 i Gynulliad Cenedlaethol Cymru ar flaenoriaethau ar gyfer ei lywodraeth, cododd y Prif Weinidog y posibilrwydd, oherwydd canlyniad y refferendwm ar aelodaeth o'r Undeb Ewropeaidd, y gallai gymryd mwy o amser nag a ragwelwyd yn wreiddiol i gyflawni prosiect Metro De Cymru. Efallai y bydd ansicrwydd ynghylch terfynau amser yn effeithio ar lefel y diddordeb o fewn y diwydiant wrth gyflawni'r prosiect. Os na chaiff y broses gaffael ei chwblhau erbyn diwedd y fasnachfaint bresennol, yn yr achos hwn, o ran yr elfen fasnachfaint, gall Llywodraeth Cymru wneud Dyfarniad Uniongyrchol neu ymestyn y fasnachfaint bresennol.
- 4.21 Mae Trafnidiaeth Cymru wedi nodi ac asesu'r risgiau i gaffael masnachfaint integredig Cymru a'r Gororau a chaffael y Metro yn llwyddiannus. Cyflwynir adroddiadau ar y risgiau hyn i fwrdd y cwmni.

Nid yw Llywodraeth Cymru a Llywodraeth y DU wedi cytuno ar rai o fanylion y setliad ariannol ar gyfer masnachfaint nesaf Cymru a'r Gororau eto

- 4.22 Ar 17 Medi 2015, dywedodd yr Adran Drafnidiaeth wrth y Pwyllgor Menter a Busnes ei bod wedi cytuno â Llywodraeth Cymru mai un o egwyddorion allweddol y setliad ariannol rhyngddi hi a Llywodraeth Cymru ar gyfer masnachfaint nesaf Cymru a'r Gororau oedd nad effeithid ar y bloc grant⁴¹. Mae nifer o oblygiadau a risgiau yn gysylltiedig â'r cytundeb hwn rhwng y ddwy lywodraeth.
- 4.23 Ni fydd y setliad ariannol yn y dyfodol yn cynnwys unrhyw arian ychwanegol i dalu costau'r gwasanaethau gwell, y mae Llywodraeth Cymru wedi'u hariannu hyd yma ([paragraff 2.5 ac Atodiad 3](#)). Er mwyn parhau i redeg y gwasanaethau ychwanegol o 2018, bydd Llywodraeth Cymru yn gorfod ariannu'r gwasanaethau hyn o hyd ar gost o tua £20 miliwn y flwyddyn (yn seiliedig ar y fasnachfaint bresennol). Dywedodd Llywodraeth Cymru wrthym ei bod yn disgwyl i'r gwasanaethau hyn gael eu darparu am lai o gost o dan y fasnachfaint newydd, am y byddant yn cael eu caffael yn gystadleuol ac yn elwa o gael eu hintegreiddio â gwasanaethau eraill, os bydd hynny'n digwydd.
- 4.24 Mae **Cynllun Trafnidiaeth Cenedlaethol 2010** yn nodi nifer o wasanaethau ychwanegol roedd Llywodraeth Cymru yn anelu at eu darparu ond nad yw wedi'u darparu eto. Un enghraifft o'r fath yw'r penderfyniad i gyflwyno gwasanaethau bob hanner awr ar adegau prysur rhwng Caerffili a Phontypridd, drwy Gaerdydd. Mae Llywodraeth Cymru wedi amcangyfrif mai cyfanswm costau'r dyheadau nas cyflawnwyd eto a nodir yn y Cynllun Trafnidiaeth Cenedlaethol yw tua £13 miliwn y flwyddyn.
- 4.25 Mae **Cynllun Cyllid Trafnidiaeth Cenedlaethol 2015** yn ymrwymo Llywodraeth Cymru i adolygu ei chynigion ar gyfer gwella gwasanaethau. Mae'n anochel y bydd cyfyngiadau cyllidebol sy'n deillio o'r gostyngiadau parhaus mewn termau real yn y grant bloc a gaiff Llywodraeth Cymru gan Lywodraeth y DU, yn ystyriaeth mewn penderfyniadau ynghylch fforddiadwyedd a blaenoriaethu gwell gwasanaethau yn gyffredinol yn y tymor canolig.
- 4.26 Nid yw Llywodraeth Cymru a Llywodraeth y DU wedi cytuno eto ar y graddau y bydd masnachfaint nesaf Cymru a'r Gororau yn cynnwys y gwasanaethau trawsffiniol mwy proffidiol, megis Caerdydd i Fanceinion, sy'n cymorthdalau'r gwasanaethau sy'n llai hyfyw yn ariannol ar hyn o bryd. Mae'r Adran Drafnidiaeth wedi addo na fydd Llywodraeth Cymru ar ei hennill nac ar ei cholled o ganlyniad i unrhyw ymarfer ailfapio o 2018 ymlaen. Fodd bynnag, fel y cydnabu'r Adran Drafnidiaeth, yn ymarferol mae'n eithaf anodd nodi beth yn union y mae hyn yn ei olygu o ran pecyn ariannu terfynol.

⁴¹ Ymdriniodd y cytundeb hwn â nifer o faterion eraill, er enghraifft, yr Adran Drafnidiaeth yn cyfrannu £125 miliwn yn ôl prisiau 2014 at gostau'r gwaith o drydaneiddio Llinellau'r Cymoedd.

4.27 Hefyd, ym mis Hydref 2014, dywedodd Cyfarwyddwr Cyffredinol yr Economi, Gwyddoniaeth a Thrafnidiaeth ar y pryd wrth Bwyllgor Menter a Busnes y Cynulliad Cenedlaethol nad oedd yr arian a roddwyd i Lywodraeth Cymru, pan aeth yn gyfrifol am y fasnachfaint yn 2006, wedi'i fynegrifo. Dywedodd y bydd y methiant hwn wedi ychwanegu tua £60 miliwn i £70 miliwn at gost y fasnachfaint erbyn iddi ddod i ben yn 2018. Mae'r mater hwn yn destun pryder i Lywodraeth Cymru o hyd. Fodd bynnag, dywedodd swyddogion yr Adran Drafnidiaeth wrthym mai Llywodraeth Cymru sy'n gyfrifol am reoli'r risg ariannol hon fel rhan o'r broses o gaffael y fasnachfaint nesaf.

Penderfynir ar ddull Llywodraeth Cymru o reoli a chaffael cerbydau fel rhan o'r broses deialog gystadleuol ar gyfer caffael y fasnachfaint

4.28 Argymhellodd adroddiad Pwyllgor Menter a Busnes y Cynlluniad Cenedlaethol ar **Dyfodol Masnachfaint Rheilffyrdd Cymru a'r Gororau**, a gyhoeddwyd ym mis Rhagfyr 2013, y dylai Llywodraeth Cymru 'datblygu a chyhoeddi strategaeth cerbydau fel mater o frys'. Derbyniodd Llywodraeth Cymru yr argymhelliad hwn mewn egwyddor, ond nododd hefyd yn ei hymateb i'r argymhelliad hwn a nifer o argymhellion eraill y Pwyllgor nad hi oedd yr awdurdod masnachfreinio bryd hynny.

4.29 Mae cerbydau yn fater penodol oherwydd rheoliadau, a elwir yn gyffredin yn 'Persons with Reduced Mobility Regulations', sy'n golygu bod yn rhaid i bob trên fod yn hygyrch erbyn 1 Ionawr 2020⁴². Fel rhan o'r broses deialog gystadleuol ar gyfer caffael y fasnachfaint, mae Llywodraeth Cymru yn disgwyl i Trafnidiaeth Cymru nodi'r opsiwn mwyaf priodol, er enghraifft, rhentu gan gwmnïau gweithredu cerbydau neu berchenogaeth Llywodraeth Cymru, a sefydlu rhaglen gyflawni. Ni ellir gwneud penderfyniadau ynghylch cerbydau nes i Lywodraeth Cymru benderfynu ar yr ateb technegol i gyflawni prosiect Metro De Cymru, er enghraifft, rheilffordd ysgafn neu reilffordd drwm. O ganlyniad, mae risgiau penodol o ran yr amserau paratoi ar gyfer cyflenwi'r cerbydau gofynnol y bydd angen i Lywodraeth Cymru eu rheoli.

⁴² Mae Rheoliadau Hygyrchedd Cerbydau Rheilffordd (System Reilffyrdd na ellir ei Rhyngweithredu) 2010 (RVAR 10) yn gymwys i drenau prif linell a adeiladwyd rhwng 1999 a 2009 a cherbydau rheilffordd nad ydynt yn rhai prif linell. Mae manyleb dechnegol ar gyfer rhyngweithredadwyedd ar gyfer pobl sy'n cael trafferth symud o gwmpas (PRM TSI) yn gymwys i drenau prif linell o 2010 ymlaen. Fodd bynnag, ym mis Ionawr 2020, bydd yn ofynnol i drenau a adeiladwyd cyn 1999 fod yn hygyrch hefyd. Y Swyddfa Rheilffyrdd a Ffyrdi sy'n gyfrifol am orfodi RVAR 2010 a PRM TSI.

Atodiadau



Atodiad 1 - Dulliau

Cwmpas ein gwaith

Canolbwyntiodd ein harchwiliad ar b'un a yw Llywodraeth Cymru wedi rhoi trefniadau effeithiol ar waith er mwyn helpu i ddatblygu a darparu seilwaith a gwasanaethau rheilffordd yng Nghymru. Fel rhan o'n harchwiliad, rydym wedi nodi buddsoddiad y sector cyhoeddus mewn gwasanaethau trên a seilwaith y rheilffyrdd ers mis Ebrill 2011. Dewiswyd y dyddiad hwn fel y man cychwyn ar gyfer ein dadansoddiad oherwydd dyma pryd y dechreuodd Network Rail gofnodi data ar lefel Cymru. Cyn y dyddiad hwn, dim ond ar lefel y DU gyfan roedd data gwariant ar gael gan Network Rail.

Rydym hefyd wedi dadansoddi perfformiad y gwasanaethau a redir gan Trenau Arriva Cymru o dan fasnachfaint Cymru a'r Gororau a boddhad teithwyr â'r gwasanaethau hynny. Ers 2006, bu Llywodraeth Cymru yn gyfrifol am reoli masnachfaint Cymru a'r Gororau o ddydd i ddydd a gall ddewis ariannu gwasanaethau sy'n ychwanegol at y fasnachfaint graidd. Fodd bynnag, nid oes gan Lywodraeth Cymru gyfrifoldebau a phwerau tebyg dros y masnachfreintiau a weithredir gan Virgin, First Great Western a CrossCountry y mae pob un ohonynt yn cynnwys llwybrau sy'n dod i mewn i Gymru.

Nid oedd yr astudiaeth hon yn archwiliad o weithrediadau ac effeithiolrwydd Network Rail. O fis Medi 2014, gan adlewyrchu rheolau adrodd newydd yr Undeb Ewropeaidd, aiddosbarthodd y Swyddfa Ystadegau Gwladol Network Rail yn gorff cyhoeddus, yn hytrach na chorfforaeth anariannol breifat. Ar ôl hynny, o dan Gytundeb Fframwaith Medi 2014 rhwng Network Rail a'r Adran Drafnidiaeth, daeth y Rheolwr ac Archwilydd Cyffredinol yn archwilydd penodedig i Network Rail gan gael y pwerau i gynnal astudiaethau gwerth am arian o dan Ddeddf Archwilio Cenedlaethol 1983 gan ystyried pa mor ddarbodus, effeithlon ac effeithiol y mae Network Rail wedi defnyddio ei adnoddau wrth gyflawni ei swyddogaethau.

Ym mis Hydref 2015, cyhoeddodd y Swyddfa Archwilio Genedlaethol femorandwm ar gyfer Pwyllgor Cyfrifon San Steffan. Mae'r memorandwm hwn yn ymdrin â'r canlynol: y prosesau ar gyfer pennu gwariant ar seilwaith y rheilffyrdd; maint a chwmpas rhaglen fuddsoddi bresennol Network Rail a sut mae'n wahanol i raglenni buddsoddi blaenorol; sut mae materion sy'n ymwneud â chyflawni'r rhaglen bresennol wedi dod yn hysbys ac ymateb Llywodraeth y DU i'r materion sy'n dod i'r amlwg⁴³.

Mae'r ffordd y mae Network Rail yn cyflawni ei raglen wella wedi'i hadolygu gan Syr Peter Hendy a'r Fonesig Coletter Bowe. Mae agweddau eraill ar berfformiad Network Rail wedi'u hadolygu gan Nicola Shaw (**Blwch 6**).

⁴³ Swyddfa Archwilio Genedlaethol, **Planning and delivery of the 2014–2019 rail investment programme**, Hydref 2015.

Blwch 6 – Adolygiadau diweddar o Network Rail

Adolygiad Bowe o'r modd y cynlluniwyd rhaglen wella Network Rail, 2014 to 2019

Gofynnodd Llywodraeth y DU i'r Fonesig Colette Bowe, sef Cyfarwyddwr Anweithredol yr Adran Drafnidiaeth, i nodi'r canlynol:

- y rhesymau dros y cynnydd mewn costau yn erbyn amcangyfrifon cost ac oedi a achoswyd i brosiectau yn ystod Cyfnod Rheoli 5 (2015-2019), gan gynnwys edrych ar y ffordd yr ymdriniwyd â chynlluniau ar gam datblygu cynnar;
- y graddau y mae cynlluniau Network Rail yn cynnwys meithrin gallu a sgiliau yn y cwmni a'i gadwyn gyflenwi i gyflawni'r rhaglen;
- y gwersi i'w dysgu o fodolau cyflawni gwahanol ar gyfer gwelliannau i seilwaith y rheilffyrdd (er enghraifft, Rhaglen Thameslink); a hefyd
- y newidiadau i brosesau ac arfer a fydd yn gwella canlyniadau ar gyfer Cyfnod Rheoli 6 (2019-2024).

Cyhoeddwyd adroddiad y Fonesig Bowe ym mis Tachwedd 2015. Daeth ei hadolygiad i'r casgliad nad oedd unrhyw reswm penodol i esbonio'r costau cynyddol a'r nifer gynyddol o achosion o oedi, a fyddai'n atal problemau tebyg rhag codi yn ystod y cyfnod 2019-2024 pe câi ei ddatrys. Yn lle hynny, nododd nifer o resymau, gan gynnwys y canlynol:

- nid oedd prosesau cynllunio yn ddigonol i gyflawni prosiectau mor fawr ac mor gymhleth â'r rhai y bwriadwyd iddynt gael eu cyflawni yn ystod Cyfnod Rheoli 5, yn benodol i gyflawni rhaglen drydaneiddio ar raddfa nas gwelwyd yn flaenorol yn y DU;
- rolau a chyfrifoldebau aneglur rhwng yr Adran Drafnidiaeth, y Swyddfa Rheilffyrdd a Ffyrd a Network Rail;
- cwmpas a ddiffiniwyd yn wael a'r ffaith bod y cwmpas yn ehangu'n barhaus a arweiniodd at gostau cynyddol;
- strwythurau mewnol a chyfrifoldebau a oedd yn newid o fewn Network Rail, a guddiodd linellau atebolrwydd ac a amharodd ar y gwaith o reoli prosiectau a rhaglenni; a
- gwallau o ran costau cynnar, rhyngddibyniaethau nas rhagwelwyd a pheiriannau na wnaethant gyflawni yn ôl y disgwyl, a barodd oedi i'r rhaglen drydaneiddio.

Adolygiad Hendy o'r broses o ailgynllunio rhaglen fuddsoddi Network Rail

Gan adlewyrchu pryderon ynghylch oedi a gorwariant o fewn rhaglen pum mlynedd Network Rail o welliannau ledled y DU sy'n werth £11.8 biliwn, ar 15 Medi 2015, comisiynodd yr Ysgrifennydd Gwladol Syr Peter Hendy, a oedd newydd ei benodi'n Gadeirydd Network Rail ar y pryd, i 'ailgynllunio'r' rhaglen wella. Cylch gorchwyl adolygiad Hendy yw sicrhau y caiff gwelliannau eu hailgynllunio er mwyn sicrhau'r canlynol:

- gellir cyflawni'r gwaith arfaethedig gan ddefnyddio'r adnoddau sydd ar gael i Network Rail a'i gadwyn gyflenwi mewn unrhyw flwyddyn ariannol benodol;

- sicrheir y gwerth mwyaf posibl drwy ddod o hyd i'r dull cyflawni mwyaf effeithlon;
- caiff gwaith na ellir ei fforddio, neu na ellir ei gyflawni, rhwng 2014 a 2019 ei broffilio i'w gyflawni ar ôl 2019, tra'n aros i gyllid ddod ar gael;
- caiff gwaith ei flaenoriaethu gan roi sylw penodol i ryngwynebau â rhaglenni seilwaith eraill a'r angen i gyflawni'r ymrwymiadau gofynnol o ran buddiannau teithwyr a chludiant, y fasnachfaint a cherbydau;
- roedd disgwyl i Network Rail gyflawni dau brosiect seilwaith mawr yng Nghymru yn ystod Cyfnod Rheoli 5, sef: Trydaneiddio Prif Linell y Great Western (Paddington Llundain i Abertawe) a Thrydaneiddio Llinellau'r Cymoedd.

Cyhoeddwyd adolygiad Hendy ym mis Tachwedd 2015. Nododd yr adolygiad mai'r ddau brif reswm dros y problemau o ran costau a chyflawni oedd gwaith cynllunio a diffinio cwrpas annigonol mewn perthynas â rhai prosiectau ac amcangyfrifon cost gwael. Disgrifiodd yr adolygiad sut mae Network Rail a'r Adran Drafndiaeth wedi cydweithio i nodi arian ychwanegol er mwyn cyflawni rhaglen welliannau Network Rail (gwerthu asedau a benthyca mwy). Fodd bynnag, er bod y dull hwn o weithredu yn ddigon i ariannu'r rhan fwyaf o brosiectau gwella y bwriedir iddynt gael eu cyflawni yn ystod Cyfnod Rheoli 5, nid yw'n ddigonol i ariannu pob prosiect ac mae sawl un wedi'i nodi i'w gwblhau yn ystod Cyfnod Rheoli 6.

Fel rhan o'i adolygiad cyffredinol o raglen wella Network Rail, ailasesodd ac ailgynlluniodd adolygiad Hendy raglen drydaneiddio Prif Linell y Great Western sy'n cynnwys trydaneiddio'r llinell o Paddington Llundain i Abertawe. O dan y rhaglen newydd, bwriedir cwblhau'r gwaith o drydaneiddio'r llinell i Gaerdydd yn ystod Cyfnod Rheoli 5 o hyd yr amcangyfrifir y bydd yn costio cyfanswm o £2.8 biliwn (yn ôl prisiau 2012-13), er bod cerrig milltir costau a chyflawni yn destun adolygiad terfynol o hyd pan gyhoeddwyd adolygiad Hendy. Fodd bynnag, disgwylir i'r gwaith o drydaneiddio'r llinell y tu hwnt i Gaerdydd i Abertawe bellach gael ei gwblhau yn ystod Cam Rheoli 6.

Adolygiad Shaw o ffurf Network Rail a'r ffordd y caiff ei ariannu yn y dyfodol

Ar 8 Gorffennaf 2015, cyhoeddodd Llywodraeth y DU ei bod wedi gofyn i Nicola Shaw, sef Prif Weithredwr High Speed 1, ddatblygu argymhellion ar gyfer ffurf Network Rail a'r ffordd y caiff ei ariannu yn y tymor hwy. Ym mis Tachwedd 2015, cyhoeddodd Ms Shaw 'ddogfen gwmpasu' a oedd yn cynnwys y canlynol: ei dull o gynnal yr adolygiad; rhai materion cefndirol, megis y ffordd y mae Network Rail yn gweithredu ac yn cael ei ariannu, a nododd rai o'r materion gweithredu a gâi eu hystyried ymhellach yn ei hadroddiad terfynol.

Nododd yr adroddiad terfynol bedair prif broblem o ran y ffordd y caiff gwasanaethau seilwaith eu darparu gan Network Rail a gwnaeth saith argymhelliad i fynd i'r afael â'r problemau hyn.

Ffynonellau: Yr Adran Drafndiaeth, **Report of the Bowe Review into the planning of Network Rail's Enhancements Programme 2014-2019**, Tachwedd 2015; Network Rail, **Report from Sir Peter Hendy to the Secretary of State for Transport on the replanning of Network Rail's Investment Programme**, Tachwedd 2015; Yr Adran Drafndiaeth, **The future shape and financing of Network Rail**, Mawrth 2016.

Adolygiad o lenyddiaeth, data ac ystadegau

Rydym wedi adolygu ystod eang o ddogfennau a data, gan gynnwys:

- a Dogfennau polisi Llywodraeth Cymru; gan gynnwys **Cynllun Trafnidiaeth Cenedlaethol 2010 a Chynllun Cyllid Trafnidiaeth Cenedlaethol 2015**.
- b Datganiadau Gweinidogol Llywodraeth Cymru ynghylch gwasanaethau trên ac ymatebion i adroddiadau Cynulliad Cenedlaethol Cymru ar wasanaethau trên.
- c Data cyhoeddedig Llywodraeth Cymru, gan gynnwys y rhai a ddefnyddir i fonitro'r Cynllun Trafnidiaeth Cenedlaethol.
- ch Data ariannol Llywodraeth Cymru, gan gynnwys gwariant ar y fasnachfrait bresennol, gwasanaethau ychwanegol, gwelliannau i seilwaith a gwariant rhagweledig ar brosiectau rheilffyrdd.
- d Data gan y Swyddfa Rheilffyrdd a Ffyrdd ar niferoedd teithwyr, y Mesur Perfformiad Cyhoeddus a chymorthdaliadau i gwmnïau trên ers 2011.
- dd Data gan Transport Focus [Passenger Focus gynt] ar arolygon teithwyr rheilffordd cenedlaethol ers 2011.
- e Data gan yr Adran Drafndiaeth ynglŷn â Chyllid Mynediad i Bawb yng Nghymru.
- f Data Network Rail ar wariant ar reilffyrdd yng Nghymru ers 2011.
- ff Adolygiadau archwilio, adroddiadau craffu a phapurau ymchwil eraill, gan gynnwys:
 - Pwyllgor Menter a Busnes Cynulliad Cenedlaethol Cymru, **Dyfodol Masnachfrait Rheilffyrdd Cymru a'r Gororau**, Rhagfyr 2013.
 - Pwyllgor Menter a Busnes Cynulliad Cenedlaethol Cymru, **Blaenoriaethau ar gyfer Buddsoddi yn Seilwaith Rheilffyrdd Cymru yn y Dyfodol**, Mawrth 2016.
 - Gwasanaeth Ymchwil Cynulliad Cenedlaethol Cymru:
 - **Quick Guide to the Operation of the railways in Wales**, Mai 2011;
 - **Cynllunio Seilwaith y Rheilffyrdd yng Nghymru – hysbysiad hwylus**, Gorffennaf 2016;
 - **Masnachfrait Rheilffyrdd Cymru**, Gorffennaf 2016.
 - Adolygiadau Gwasanaethau Archwilio Mewnol Llywodraeth Cymru o Gontract y Fasnachfrait Rheilffyrdd a'r Contract Cyfalaf Rheilffyrdd a gynhaliwyd yn 2014.
 - **Adolygiad o Effeithlonrwydd Gwasanaethau Trên** a gynhaliwyd gan Arup ar ran Llywodraeth Cymru yn 2013.

- Swyddfa Archwilio Genedlaethol:
 - **Lessons from cancelling the InterCity West Coast franchise competition**, Rhagfyr 2012;
 - **Lessons from major rail infrastructure programmes**, Hydref 2014;
 - **A short guide to Network Rail**, Gorffennaf 2015;
 - **Planning and delivery of the 2014-2019 rail investment programme**, Medi 2015; a
 - **Reform of the rail franchising programme**, Tachwedd 2015.
- Credo Business Consulting LLP ar y cyd â'r Ymgyrch dros Drafnidiaeth Well, **The Effectiveness of the Rail Network Across Great Britain – a comparative analysis**, Rhagfyr 2013.

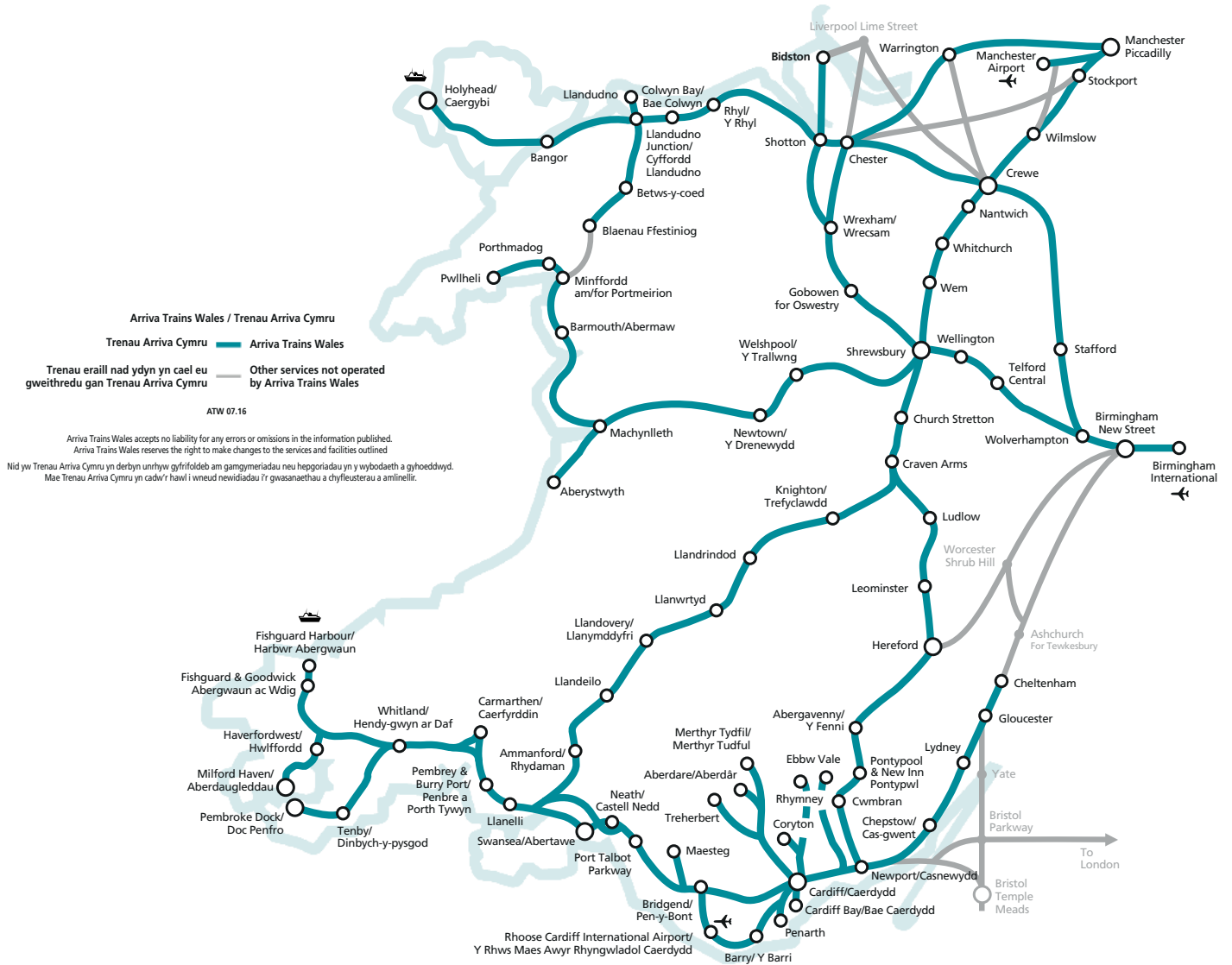
Cyfweliadau â Llywodraeth Cymru, Network Rail, Trenau Arriva Cymru a sefydliadau eraill

Cyfwelwyd ag amrywiaeth o swyddogion o fewn Llywodraeth Cymru a oedd â chyfrifoldebau am y canlynol: datblygu polisi rheilffyrdd; goruchwyllo'r ffordd y mae Trenau Arriva Cymru yn gweithredu masnachfaint bresennol Cymru a'r Gororau ac arwain y broses o bennu manyleb y fasnachfaint nesaf a'i chaffael; cynllunio prosiectau cyfalaf rheilffyrdd a rheoli'r gwaith o'u cyflawni a monitro a gwerthuso effeithiau buddsoddiad Llywodraeth Cymru yn y system rheilffyrdd. Cyfwelwyd â swyddogion yn yr Adran Drafnidiaeth a'r Swyddfa Rheilffyrdd a Ffyrdd hefyd.

Siaradwyd â swyddogion allweddol yn Network Rail yng Nghymru yn ogystal â swyddogion allweddol yn Trenau Arriva Cymru. At hynny, cyfwelwyd â chynrychiolwyr Transport Focus yng Nghymru ac Anabled Cymru.

Hefyd, arsylwyd un o gyfarfodydd Network Rail/Bwrdd Rheoli Rhaglen Llywodraeth Cymru.

Atodiad 2 - Map o lwybrau masnachfraint Cymru a'r Gororau



Ffynhonnell: Trenau Arriva Cymru

Atodiad 3 - Buddsoddiad Llywodraeth Cymru mewn gwell gwasanaethau rhwng 2011-12 a 2015-16

| Gwelliant i'r gwasanaeth | Dyddiad dechrau | Manylion | Cyfanswm y Gost rhwng 2011-12 a 2015-16 (£ miliwn) |
|--|-----------------|---|--|
| Atgyfnerthu Llinellau'r Cymoedd | 2007 | Darparu trenau hwy ar wasanaethau cymudo allweddol yn y bore ac yn y prynhawn ar rwydwaith Llinellau'r Cymoedd er mwyn darparu ar gyfer y cynnydd yn nifer y teithwyr/lleddfu problem gorlenwi. | 34.397 |
| Gwasanaethau llinell Cwm Ebwy ¹ | 2008 | Cyflwyno gwasanaethau bob awr, ar ôl ailagor y llinell i wasanaethau i deithwyr. | 21.733 |
| Y prif wasanaeth cyflym rhwng y Gogledd a'r De | 2008 | Gwasanaeth dychwelyd cyflym yn ystod yr wythnos rhwng Caerdybi a Chaerdydd. | 14.695 |
| Atgyfnerthu llinell y Cambrian | 2007 | Ariannu cerbydau ychwanegol er mwyn darparu ar gyfer y cynnydd yn nifer y teithwyr/lleddfu problem gorlenwi ar wasanaethau rhwng Aberystwyth a Birmingham. | 9.733 |
| Gwasanaeth bob dwy awr rhwng Caerdydd a Chaerdybi | 2004 | Cyflwyno gwasanaethau ychwanegol i greu amserlen â gwasanaethau uniongyrchol bob dwy awr rhwng Caerdybi a Chaerdydd. | 4.957 |
| Gwasanaeth bob hanner awr Merthyr Tudful | 2009 | Cynyddu amlder gwasanaethau rhwng Merthyr Tudful a Chaerdydd yn ystod y dydd o wasanaeth bob awr i wasanaeth bob hanner awr. | 6.739 |
| Gwasanaethau Abergwaun | 2011 | Darparu pum gwasanaeth dychwelyd ychwanegol y dydd i Harbwr Abergwaun. | 6.447 |
| Bro Morgannwg | 2005 | Cyflwyno gwasanaethau bob awr, ar ôl ailagor y llinell i wasanaethau i deithwyr. | 6.726 |
| Gwasanaeth ar y Sul rhwng Wrecsam a Bidston a gwaith atgyfnerthu | 2006 | Ariannu'r gwaith o ddarparu chwe gwasanaeth dychwelyd ynghyd â darparu trenau hwy ar bob gwasanaeth. | 3.434 |
| Gwasanaeth ar y Sul Calon Cymru | 2004 | Darparu ail wasanaeth (i bob cyfeiriad) bob dydd Sul i ddarparu ar gyfer teithiau dwyffordd. | 0.241 |
| Cyfanswm | | | 109.102 |

Noder

¹ Rhwng 2011-12 a 2015-16, o dan drefniant rhannu elw â Trenau Arriva Cymru, cafodd Llywodraeth Cymru incwm o £6 miliwn o linell Cwm Ebwy. Rydym wedi cyflwyno cost lawn gwasanaethau gwell uchod heb ddebydu'r incwm hwn. Amcangyfrifir mai cyfanswm yr incwm o dan y trefniant rhannu elw hyd at ddiwedd y fasnachfaint yn 2018 yw £12 miliwn. Amcangyfrifir mai cyfanswm cost darparu gwasanaethau ar linell Cwm Ebwy hyd at ddiwedd y fasnachfaint yn 2018 yw £41 miliwn.

Ffynhonnell: Llywodraeth Cymru

Tudalen y pecyn 103

Atodiad 4 - Prosiectau seilwaith rheilffyrdd a gwblhawyd yn ddiweddar ac sy'n mynd rhagddynt a ariannwyd yn rhannol gan Lywodraeth Cymru

Mae Ffigurau 13 a 14 yn nodi'r prosiectau seilwaith rheilffyrdd a gwblhawyd yn ddiweddar ac sy'n mynd rhagddynt sy'n cynnwys elfen o arian Llywodraeth Cymru. Nid yw'r naill dabl na'r llall yn cynnwys prosiectau yng Nghymru a ariannwyd gan Lywodraeth y DU drwy Network Rail, ond nad oeddent yn cynnwys cyfraniad gan Lywodraeth Cymru.

Er enghraifft, elfennau o brosiect Adnewyddu Signalau yn Ardal De Cymru (Astudiaeth Achos 3 ar dudalen 36), sydd ei hun yn rhan o raglen ehangach i adnewyddu signalau yn ardal De Cymru, nas ariannwyd gan Lywodraeth Cymru.

Ffigur 13 – Prosiectau seilwaith rheilffyrdd a gwblhawyd yng Nghymru ac a ariannwyd yn rhannol gan Lywodraeth Cymru, rhwng mis Ionawr 2011 a mis Mai 2016

| Prosiect | Ffynonellau cyllid (£ miliwn) | | | | |
|---|-------------------------------|------------------|-------------------------------------|--------------|-----------------|
| | Llywodraeth Cymru | Undeb Ewropeaidd | Adran Drafnidiaeth Llywodraeth y DU | Network Rail | Cyfanswm y gost |
| Moderneiddio Gorsaf Tre-gŵyr ac ailddyblu'r ¹ llinell rhwng Tre-gŵyr a Chasllwchwr (cwblhawyd 2013) ² | 14.4 | 13 | | | 27.4 |
| Gorsaf newydd Eneu'r-glyn, llinell Cwm Rhymni (cwblhawyd 2013) | 2.7 | 2.8 | | | 5.5 |
| Moderneiddio gorsaf y Stryd Fawr, Abertawe (cwblhawyd 2012) | 3.5 | | 1.7 | 2.8 | 8 |
| Moderneiddio gorsaf Casnewydd (cwblhawyd 2011) | 7.7 | | | 20.2 | 27.9 |
| Gwella Cyffordd Gaer (cwblhawyd 2011) | 2.9 | | | | 2.9 |
| Cyfleuster parcio a theithio gorsafoedd Cwm Rhymni (cwblhawyd 2011) | 3.6 | 3.1 | | | 6.7 |

Ffynonellau cyllid (£ miliwn)

| Prosiect | Llywodraeth Cymru | Undeb Ewropeaidd | Adran Drafnidiaeth Llywodraeth y DU | Network Rail | Cyfanswm y gost |
|--|-------------------|------------------|-------------------------------------|--------------|------------------|
| Gorsaf newydd a chyfleuster parcio a theithio Pye Corner (cwblhawyd 2014) | 1.3 | | 2.1 | | 3.4 |
| Adfer platform bae yng ngorsaf Pontypridd er mwyn darparu ar gyfer gwasanaethau ychwanegol, o bosibl (cwblhawyd 2014) | 2.6 | 3.3 | | | 5.9 ³ |
| Adnewyddu Signalau yn Ardal Caerdydd ⁴ : | 6.1 | 2.8 | | | 8.9 |
| • Gorsaf Caerffili –adfer platform bae er mwyn darparu ar gyfer gwasanaethau ychwanegol, o bosibl (cwblhawyd 2013) | 2 | 2.8 | | | 4.8 |
| • Cyfleuster troi'n ôl y Barri - adfer platform bae a signalau er mwyn darparu ar gyfer gwasanaethau ychwanegol, o bosibl, a phont droed newydd (cwblhawyd 2014) | 4.1 | | | | 4.1 |

Ffynonellau cyllid (£ miliwn)

| Prosiect | Llywodraeth Cymru | Undeb Ewropeaidd | Adran Drafndiaeth Llywodraeth y DU | Network Rail | Cyfanswm y gost |
|---|-------------------|------------------|------------------------------------|--------------|--------------------|
| Rhaglen Gwella Gorsafoedd Cymru | 7.6 | 21.4 | | 3.8 | 36.2 |
| • Aberystwyth | 1.4 | 1.5 | | 0.1 | 3 |
| • Twmpathau | 0.2 | 1.5 | | | 1.7 |
| • Llandudno | | 2.0 | | 3.0 | 6.6 ⁵ |
| • Pontypridd | 1.2 | 3.8 | | 0.2 | 5.6 ⁶ |
| • Y Rhyl | 0.6 | 1.0 | | 0.5 | 2.1 |
| • Ystrad Mynach | 0.7 | 0.9 | | | 1.6 |
| • Harbwr Porthmadog | | 0.6 | | | 1.0 ⁷ |
| • Rhaglen mynediad i orsafoedd SWWITCH ⁸ | | 0.9 | | | 0.9 |
| • Caerfyrddin | 0.1 | | | | 0.4 ⁹ |
| • System Wybodaeth i Gwsmeriaid/ Cysgodfannau | 0.4 | | | | 0.4 |
| • Gorsaf Parkway Port Talbot | 3 | 9.2 | | | 12.9 ¹⁰ |

(cwblhawyd pob un erbyn mis Mai 2016)

Ffynonellau cyllid (£ miliwn)

| Prosiect | Llywodraeth Cymru | Undeb Ewropeaidd | Adran Drafndiaeth Llywodraeth y DU | Network Rail | Cyfanswm y gost |
|---|-------------------|------------------|------------------------------------|--------------|-----------------|
| Rhaglen Mynediad i Bawb (cael gwared â phontydd troed a gosod lifftiau a rampiau yn eu lle) | 1.82 | | 2 | | 3.82 |
| • Ystrad Mynach | 0.88 | | 1 | | 1.88 |
| • Y Waun | 0.94 | | 1 | | 1.94 |
| (cwblhawyd y naill erbyn mis Gorffennaf 2015 a'r llall erbyn mis Hydref 2015) | | | | | |
| Cyfansymiau | 54.22 | 46.4 | 5.8 | 26.8 | 136.6 |

Nodiadau

- Rheilffordd ddeudrac lle mae un trac yn rhedeg i bob cyfeiriad fel arfer, o gymharu â rheilffordd untrac lle mae trenau sy'n rhedeg i'r ddau gyfeiriad yn rhannu'r un trac.
- Ochr yn ochr â'r prosiect hwn a arweiniwyd gan Lywodraeth Cymru, adeiladodd Network Rail bont newydd yn lle Pont Reilffordd Casllwchr y gallai'r trac dwbl newydd redeg drosti. Costiodd y cynllun hwn £20.3 miliwn iddo.
- Nid yw'n cynnwys costau annisgwyl o £0.23 miliwn a dalwyd o 'Gronfa Risg y Diwydiant Rheilffyrdd' Network Rail (gweler paragraff 1.35).
- Fel rhan o gynllun Adnewyddu Signalau yn Ardal Caerdydd mae Llywodraeth Cymru hefyd yn ariannu gwelliannau yn Nhir Phil ond nid yw'r gwaith hwn wedi'i gwblhau'n llawn eto (gweler Ffigur 14).
- Cafodd cynllun gwella gorsaf Llandudno gyllid gan gynllun Taith (£1.4 miliwn) a'r Ymddiriedolaeth Treftadaeth Rheilffyrdd (£0.15 miliwn) hefyd.
- Mae'n cynnwys buddsoddiad Trenau Arriva Cymru gwerth £0.4 miliwn.
- Mae'n cynnwys £0.4 miliwn o arian cyfatebol gan Ymddiriedolaeth Rheilffordd Ffestiniog.
- Rhaglen o fân waith i wella mynediad i nifer o orsafoedd yn ardal SWITCH (Sir Benfro, Abertawe, Castell-nedd Port Talbot a Sir Gaerfyrddin). Cydgysylltodd Cyngor Dinas a Sir Abertawe y gwaith o gyflawni'r cynllun ar ran Llywodraeth Cymru.
- Mae'n cynnwys buddsoddiad gwerth £0.27 miliwn gan awdurdodau lleol a buddsoddiad gwerth £0.09 miliwn gan Trenau Arriva Cymru.
- Mae'r cyfanswm yn cynnwys cyfraniad o £0.7 miliwn gan Gyngor Bwrdeistref Sirol Castell-nedd Port Talbot.

Ffynhonnell: Llywodraeth Cymru

Ffigur 14 – Prosiectau seilwaith rheilffyrdd sy'n mynd rhagddynt yng Nghymru a ariannwyd yn rhannol gan Lywodraeth Cymru, ym mis Mai 2016¹

| Cynllun | Cost ddangosol £ miliwn | Dyddiad cwblhau tybiedig |
|--|--|--|
| Lleihau amserau teithio/gwella capasiti ar y llwybr rhwng De a Gogledd Cymru (ailddyblu rhan o'r llinell sengl rhwng Wrecsam a Chaer, signalau a gwella pedair croesfan wastad). | 49 | Gwaith ffisegol erbyn mis Mawrth 2017, wedi'i gomisiynu erbyn mis Rhagfyr 2017. |
| Gorsaf newydd yn Nhref Glynebwy ac ymestyn y llinell o orsaf Parkway, Glynebwy, gan gynnwys gwella cyflymder y llinell. | 11.5 | Yr orsaf/estyniad yn weithredol erbyn mis Mai 2015, y dyddiad cwblhau ar gyfer gwelliannau i gyflymder y llinell i'w gytuno. |
| Cynllunio prosiect gwella amlder cangen leol Maesteg fel y bydd modd darparu gwasanaeth bob hanner awr i Gaerdydd ac oddi yno, o bosibl (gwasanaeth bob awr ar hyn o bryd). | 0.9 | Erbyn mis Ebrill 2017. |
| Llinell Cwm Rhymini – dolen basio a phlatform a signalau newydd yn Nhir Phil fel y bydd modd darparu gwasanaeth bob hanner awr rhwng Bargod a Chaerffili, o bosibl (gwasanaeth bob awr ar hyn o bryd). | 7.7 (Llywodraeth Cymru ac arian yr Undeb Ewropeaidd) | Wedi'i gwblhau, ac eithrio mân waith ar y platfform yng ngorsaf Tir Phil a gafodd ei oedi ac y disgwylir iddo gael ei gwblhau ym mis Rhagfyr 2016. |
| Cynllun Gwella Amlder Glynebwy (ailddyblu'r llinell rhwng Crosskeys ac Aber-big ynghyd â phlatfformau ychwanegol yn Llanhilledd a Threcelyn fel y gellir darparu gwasanaethau ychwanegol). | 39 (Llywodraeth Cymru ac arian yr Undeb Ewropeaidd) | Dyddiad cwblhau 2017-18. |
| Prosiectau Mynediad i Bawb – y Barri, Trefforest, Ffynnon Taf, Llanelli, Cathays, Treherbert. | 16 (Llywodraeth Cymru ynghyd ag arian gan yr Adran Drafndiaeth) | Cynllunio 2015, cyflawni 2016-17. |
| Prosiectau Mynediad i Bawb – y Fflint, Pengam, Tregatwg - cynllunio yn unig. ² | 0.5 | Cynllunio 2015, cyflawni erbyn mis Ebrill 2019, yn amodol ar gael arian gan yr Adran Drafndiaeth. |
| Cyfleuster parcio a theithio'r Porth. | 1.8 | Disgwylir iddo gael ei gwblhau erbyn mis Gorffennaf 2016. |

| Cynllun | Cost ddangosol £ miliwn | Dyddiad cwblhau tybiedig |
|---|--|--|
| Rhaglen Gwella Gorsafoedd y Metro - pob gorsaf rhwng Cathays a Merthyr Tudful. | 13.7 | Dyddiad cwblhau 2016-17. |
| Rhaglen cau croesfan wastad Talerddig (Llinell y Cambrian). | 7.5 (Llywodraeth Cymru ynghyd ag arian gan yr Adran Drafnidiaeth) | Dyddiad cwblhau 2016-17. |
| Prosiectau Mynediad i Bawb - Codi pont droed hygyrch newydd yn lle'r un bresennol yng ngorsafoedd Radur, Llandaf a Machynlleth. | 7.6 (Llywodraeth Cymru a'r Adran Drafnidiaeth) | Disgwylir iddo gael ei gwblhau ym mis Gorffennaf 2016. |
| Cynllun ar gyfer yr orsaf newydd yn Bow Street, ger Aberystwyth. | 0.25 | Disgwylir iddo gael ei gwblhau ym mis Mehefin 2016. |
| Cynllun ar gyfer gwelliannau i seilwaith yng Ngogledd Cymru | 0.4 | I'w gwblhau ym mis Ebrill 2017. |
| Cyfanswm y prosiectau cyfredol | 155.85 | |

Nodiadau

- 1 Nid yw'r dadansoddiad hwn yn cynnwys prosiectau y mae Llywodraeth Cymru wedi ymrwmo iddynt ond nad ydynt wedi dechrau'n llawn, megis trydaneiddio Llinellau'r Cymoedd.
- 2 Mae Llywodraeth Cymru yn ariannu'r gwaith dylunio ar gyfer gwelliannau i fynediad yn y gorsafoedd hyn. Fodd bynnag, nid yw wedi cadarnhau eto a fydd y gorsafoedd hyn yn cael arian Mynediad i Bawb.

Ffynhonnell: Llywodraeth Cymru

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Llywodraeth Cymru
Welsh Government

Nick Ramsay AM
Chair, Public Accounts Committee
National Assembly for Wales

c/o committeebusiness@wales.gsi.gov.uk

30th September 2016

WELSH GOVERNMENT INVESTMENT IN RAIL SERVICES AND INFRASTRUCTURE

Dear Chair,

Please find enclosed a copy of the Welsh Government's response to the Auditor General for Wales' report on Welsh Government investment in rail services and infrastructure.

I can confirm that we accept or partially accept all the recommendations and work is underway to address them.

Yours sincerely,

A handwritten signature in black ink that reads "James Price," with a comma at the end.

James Price



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Recommendation 1

We recommend that where the Welsh Government wishes Network Rail to deliver a project it is funding, it should seek to develop bespoke contracts. Bespoke contracts should better protect the Welsh Government's interest by recognising the greater assurance that it can give about the financing of contracts as well as reflecting the circumstances and risks of individual projects.

Accept. We accept that the standard contracts do not adequately reflect our role as a government funder and can be improved. We will seek to develop a suite of Welsh Government bespoke model contracts for use on future rail infrastructure projects. We will continue to seek improvements on this issue with the regulator.

However, we also recognise that whilst Welsh Government will seek to develop the recommended bespoke contracts, as powers over rail infrastructure are not devolved there will be no obligation on either Network Rail or the regulator to reciprocate. We cannot therefore provide assurance that this course of action will deliver the desired results.

Recommendation 2

We recommend that as the procurement progresses the Welsh Government review the effectiveness of the Memorandum of Understanding and ensure that any lessons are applied to its ongoing relationship with Network Rail.

Accept. With Network Rail's agreement, we will incorporate a review of the Memorandum of Understanding into the agenda of the Welsh Government and Network Rail joint board meetings, which take place on a 4 weekly basis.

Recommendation 3

Consistent with the recommendations in the Auditor General's January 2011 Major Transport Projects report, we recommend that the Welsh Government:

- A. Record information to track the performance of the Metro phase 2 projects at key stages of their delivery;

Accept. We have made Transport for Wales aware of this report and asked them to propose how this can be achieved. We expect a proposal for taking this work forward within the next TfW business plan.

- B. Incorporate the information needed to facilitate benchmarking project performance against projects in other parts of the UK;

Accept. The regulator monitors Network Rail's performance. The most recent report (issued in July this year) has within it a section dedicated to the railway in Wales. The monitor covers all aspects of Network Rail's performance in Wales, including on project delivery and infrastructure reliability and compares the performance of

Network Rail in Wales to the national benchmarks on certain metrics. This is a relatively new approach from the ORR and they have made a commitment, in the latest report, to continue to develop this. We have previously provided cost information to the ORR relating to the delivery of Pye Corner station for this kind of purpose. We will continue to work with the regulator to assist and obtain relevant benchmark information.

- C. Record all changes in project costs that occur through the lifecycle of the project; and

Accept. Our infrastructure projects invariably have change control processes which record decisions or events that affect project costs. We are working with our supply chain to standardise the format of these processes.

- D. Record and share the reasons for any cost increases and delays to inform other Welsh Government transport projects.

Accept. We have changed the structure of the Transport Department so that one division is responsible for all the Welsh Government's infrastructure projects on both the trunk road network and the railway which will improve sharing of information across projects. We will review our system for sharing information, such as lessons learnt, across this function and strengthen if necessary.

Recommendation 4

We recommend that:

- A. The relevant Welsh Government Audit and Risk Committee scrutinises the governance of the Transport Company and its progress in procuring the integrated Wales and Borders and Metro infrastructure contract and the related development of the approach to managing and acquiring rolling stock to enable it to comply with the requirement to make all trains accessible to persons with reduced mobility by 2020. To include the Audit and Risk Committee assuring itself that the Welsh Government is addressing in a timely manner the recommendations of the March 2016 Gateway review.

Accept in principle. Given the advisory role the Audit and Risk Committee occupies within the Welsh Government, the Principal Accounting Officer will bring this recommendation to the attention of the Chair of the Economy, Skills and Natural Resources Audit and Risk Assurance Committee, which has already initiated a programme of work to scrutinise Transport for Wales and the governance arrangements it has in place.

- B. The Welsh Government should ensure that its project and risk management arrangements for the procurement have taken full account of relevant lessons and recommendations from recent National Audit Office reports on rail franchising and rail-infrastructure programmes, and related reports by the UK Parliament's Public Accounts Committee.

Accept. We have written to Transport for Wales to incorporate these lessons and recommendations into their work to develop and implement the procurement of the Wales and Borders franchise and Metro Phase 2. Transport for Wales is currently finalising one of the key procurement documents – the “Invitation to Submit Outline Solutions“. Once this work is complete, we will write to you again, within the next six weeks, to set out how these lessons and recommendations have been incorporated into the procurement.

- C. The Welsh Government should also actively engage with Department for Transport officials to implement the lessons from both successful franchise procurements and those that have been more challenging.

Accept. Transport for Wales is in regular contact with officials at the Department for Transport. Officials at the Department for Transport have reviewed and provided feedback to Transport for Wales on the documentation relating to the procurement. Furthermore, Transport for Wales' team includes legal, financial and technical experts who have prior experience of successfully procuring recent rail franchises on behalf of the Department for Transport.

- D. Alongside the procurement process, the Welsh Government should develop a mechanism which enables it to demonstrate the value for money of the franchise component of the new contract, when compared with the current and other franchises.

Partially accept. The unique nature of each rail franchise means that finding a metric which will be a fair comparison and an indicator of value for money is not straightforward. We are also conscious that there are fundamental differences in the market since the current franchise was let in 2003. The rail industry has fundamentally changed in that time, in terms of outlook and technology for instance.

Our view is that the best way achieving value for money is to run a fair and open competitive process using a team with the skills and experience. It is also important learning from the latest best practice and recommendations. We are also working closely with the Department for Transport and have replicated their team structures for franchising.

We therefore accept that we should demonstrate value for money in the procurement, but we think that this is best done by focussing on our own process,

rather than by making artificial comparisons with either the past or with other franchises.

Recommendation 5

We recommend that the Welsh Government's planning for the franchise takes into account the recommendations made by the Enterprise and Business Committee's 2013 inquiry into the Future of the Wales and Borders Rail Franchise.

Accept. The Welsh Government accepted the recommendations made by the Enterprise and Business committee in 2013. We have provided the report and our response to Transport for Wales for consideration when developing proposals for the next franchise. As described above, Transport for Wales is currently finalising one of the key procurement documents – the 'Invitation to Submit Outline Solutions'. Once this work is complete, we will write to you again, within the next six weeks, to set out how these recommendations have been incorporated into the procurement.

James Price
Yr Ysgrifennydd Parhaol
Economi, Sgiliau ac Adnoddau Naturiol
Llywodraeth Cymru
Parc Cathays
Cardiff

26 Medi 2016

Adroddiad Archwilydd Cyffredinol Cymru ar Reoli Perygl Llifogydd ac Erydu Arfordirol yng Nghymru

Annwyl Ddirprwy Ysgrifennydd Parhaol

Diolch am eich llythyr yn esbonio ymateb Llywodraeth Cymru i adroddiad Archwilydd Cyffredinol Cymru ar Reoli Perygl Llifogydd ac Erydu Arfordirol yng Nghymru. Ystyriodd y Pwyllgor yr ymateb hwn ochr yn ochr ag adroddiad yr Archwilydd Cyffredinol yn ei gyfarfod ar 19 Medi. Roedd gan y Pwyllgor nifer o bryderon a chwestiynau am fanylion eich ymateb.

1. Mewn ymateb i argymhelliad 1a, nodir bod holl argymhellion adroddiad blaenorol Swyddfa Archwilio Cymru "Erydu Arfordirol a Llifogydd Llanw yng Nghymru 2009" wedi'u cwblhau'n swyddogol erbyn mis Awst 2015. Byddai'r Pwyllgor yn croesawu eglurhad o safbwynt Llywodraeth Cymru. Er ein bod yn cydnabod y gallai rhai materion a oedd wedi'u cynnwys mewn argymhellion blaenorol fod yn feysydd a fyddai'n cael eu gwella'n barhaus, a bod y polisi/strategaeth gyffredinol wedi newidiadau rhywfaint ers 2009, yn ôl adroddiad yr Archwilydd Cyffredinol ymddengys bod rhagor i'w wneud eto i gyflawni rhai o'r argymhellion blaenorol yn llawn, er enghraifft:



- a. gweithio gyda'r prif randdeiliaid i ymgysylltu â chymunedau sydd mewn perygl, a rhoi dealltwriaeth eglur iddynt o'i dull strategol (paragraff 1.16 yn yr adroddiad diweddaraf)
 - b. datblygu strategaeth ar gilio a reolir (paragraff 2.7 yn yr adroddiad diweddaraf a atgyfnerthwyd gan argymhelliad 3).
2. At hynny, er bod y Pwyllgor yn croesawu'r ffaith bod Llywodraeth Cymru yn dweud y bydd yn cyhoeddi'r wybodaeth ddiweddaraf am Gynllun Cyflawni'r Adolygiad o Lifogydd Arfordirol yn ddiweddarach eleni, mae'r ymateb yn awgrymu mai yn yr adolygiad o'r Strategaeth Genedlaethol yn 2017-18 y bydd Llywodraeth Cymru yn pwysu a mesur y cynnydd mewn ymateb i'r materion a godwyd mewn adolygiadau eraill. Nid yw hyn, mewn gwirionedd, yn cyflawni argymhelliad yr Archwilydd Cyffredinol i gynnwys unrhyw faterion gweddilliol yng Nghynllun Cyflawni'r Adolygiad o Lifogydd Arfordirol.
3. O ran Argymhelliad 1b, nododd y Pwyllgor y bwriedir buddsoddi £150 miliwn drwy'r Rhaglen Rheoli Risg Arfordirol ar gyfer y cyfnod rhwng 2018 a 2021. Fodd bynnag, daw adroddiad yr Archwilydd Cyffredinol i'r casgliad bod 'Llywodraeth Cymru wedi nodi cyllid ychwanegol ar gyfer diogelu'r arfordir ond nid yw wedi datblygu strategaeth ariannu hirdymor y tu hwnt i 2020-21 nac wedi helpu cynghorau i sicrhau opsiynau ar gyfer cyllid allanol'. Byddem yn hoffi i Lywodraeth Cymru roi ymrwymiad cliriach ynghylch datblygu strategaeth i nodi cyllid hirdymor ar gyfer diogelu'r arfordir. Nododd yr Aelodau hefyd y bydd y rhaglen Rheoli Risg Arfordirol yn ei gwneud yn ofynnol i gynghorau gyfrannu 25 y cant o'r costau, p'un ai o'u cronfeydd eu hunain neu drwy gyfrwng ffynonellau eraill.
4. Mae argymhelliad 3 yn galw ar Lywodraeth Cymru i '... Ddatblygu opsiynau o fewn y strategaeth genedlaethol i helpu cynghorau i baratoi cymunedau lle y mae'n debygol y bydd angen cilio ar reolir. Dylai'r opsiynau hyn ystyried y trefniadau cyfreithiol ac ariannol sy'n ofynnol i adleoli pobl ac asedau i ffwrdd oddi wrth berygl o lifogydd' a hefyd i 'nodi sut y bydd yn cyfathrebu goblygiadau ei ddull seiliedig ar risg i'r cyhoedd'.

Mae eich ymateb yn nodi sut y bydd y Llywodraeth yn datblygu pecyn cymorth yn ymwneud ag addasu arfordirol, a fydd yn cynnwys arfer gorau



ac enghreifftiau o sut y mae ardaloedd eraill wedi cyflwyno negeseuon anodd, yn enwedig negeseuon yn ymwneud â chilio dan reolaeth. Teimlai'r Pwyllgor yn gryf nad oedd y dulliau gweithredu a amlinellwyd yn ddigonol ac na fyddent yn cwrdd â phrif bwyslais argymhelliad yr Archwilydd Cyffredinol. Er enghraifft ymddengys nad ystyriwyd yr opsiynau a'r trefniadau ariannol angenrheidiol i symud pobl ac asedau o ardaloedd lle mae perygl llifogydd, a phrin yw'r wybodaeth sydd ar gael yn y cyswllt hwn. Byddem yn croesawu gwybodaeth a fyddai'n ein sicrhau bod y Llywodraeth wedi ymrwymo i weithredu yn y cyswllt hwn.

Yn olaf, byddai'r Pwyllgor yn ddiolchgar pe bai'n cael copi o'r diweddariad i Gynllun Cyflawni'r Adolygiad o Lifogydd Arfordirol pan gaiff ei gyhoeddi. Bydd y Pwyllgor yn ystyried y wybodaeth ddiweddaraf honno a'ch sylwadau ar y pwyntiau uchod cyn penderfynu sut y bydd yn mynd ati i graffu ymhellach ar y pwnc hwn.

Edrychaf ymlaen at eich ymateb.

Yn gywir

A handwritten signature in black ink that reads "Nick Ramsay". The signature is fluid and cursive, with a long horizontal flourish at the end.

Nick Ramsay AC
Cadeirydd





Llywodraeth Cymru
Welsh Government

Nick Ramsay AC
Cadeirydd y Pwyllgor Cyfrifon Cyhoeddus
Cynulliad Cenedlaethol Cymru
Bae Caerdydd
Caerdydd, CF99 1NA

24 Hydref 2016

Annwyl Mr Ramsay,

ADRODDIAD ARCHWILYDD CYFFREDINOL CYMRU AR REOLI PERYGL LLIFOGYDD AC ERYDU ARFORDIROL YNG NGHYMURU

Diolch ichi am eich llythyr dyddiedig 26 Medi a anfonwyd ar ôl i'r Pwyllgor fynd ati ar 19 Medi i ystyried ymateb Llywodraeth Cymru i Adroddiad Archwilydd Cyffredinol Cymru ar Reoli Perygl Llifogydd ac Erydu Arfordirol yng Nghymru.

Rwyf yn darparu'r wybodaeth ychwanegol isod mewn ymateb i'ch pryderon a'ch cwestiynau, gan roi'r wybodaeth honno o dan yr un rhifau ag a ddefnyddiwyd ar gyfer eich cwestiynau gwreiddiol:

1. Eglurhad am safbwynt Llywodraeth Cymru ar adroddiad Swyddfa Archwilio Cymru ar gyfer 2009

- Gweithio gyda'r prif randdeiliaid i ymgysylltu â chymunedau sydd mewn perygl, a rhoi dealltwriaeth eglur iddynt o'i dull strategol**

Mae Llywodraeth Cymru yn parhau i gydweithio'n agos â'r prif randdeiliaid, yr awdurdodau lleol a Cyfoeth Naturiol Cymru (CNC) ar bob agwedd ar reoli perygl llifogydd ac erydu arfordirol. Ein safbwynt ni yw mai'r awdurdodau lleol arfordirol a CNC sydd yn y sefyllfa orau i ymgysylltu â chymunedau lleol ar faterion lleol sy'n gysylltiedig â pherygl llifogydd ac erydu arfordirol. Ein dull strategol ni o weithredu yw cefnogi awdurdodau rheoli risg yn hyn o beth ond peidio â rhagnodi sut y dylent weithredu'n lleol.

Mae swyddogion Llywodraeth Cymru yn parhau i gydweithio'n agos â'r holl awdurdodau rheoli risg, gan gynnig cyngor ar bolisi a rhaglenni a chynnal ymweliadau safle pan fo amser yn caniatáu. Mae swyddogion hefyd yn cynnig

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cymorth ac yn rhannu arferion gorau drwy Grŵp Llifogydd Cymru, y Fforwm Grwpiau Arfordirol a chyfarfodydd rhanbarthol yr awdurdodau rheoli risg.

- **Datblygu Strategaeth ar Gilio a Reolir**

Mae dull strategol Llywodraeth Cymru o weithredu yn hyn o beth yn seiliedig ar y Cynlluniau Rheoli Traethlin, lle mae'r holl opsiynau'n cael eu hystyried, gan gynnwys, fel y bo'n briodol 'Adlinio a Reolir' neu 'Dim Ymyrraeth Weithredol'. Mae'n bosibl y bydd adlinio amddiffynfeydd, neu benderfynu peidio â pharhau i amddiffyn rhannau o'r arfordir, yn ystyriaeth strategol na fydd modd ei hosgoi o dan rai amgylchiadau. Ein safbwynt yw nad yw'n ymarferol ar hyn o bryd inni fabwysiadu'r un strategaeth ar Adlinio a Reolir a Dim Ymyrraeth Weithredol ar gyfer pob math o amgylchiadau. Er hynny, rydym wedi ymrwymo i weithio gyda'r awdurdodau lleol i gefnogi strategaethau lleol ac i sicrhau bod modd rhannu'r strategaethau hynny ag eraill.

Byddwn yn dysgu oddi wrth sefydliadau eraill ac yn cydweithio â nhw. Mae hon yn her gyffredin a hyd yma, prin yw'r enghreifftiau o strategaethau datblygedig ar lefel genedlaethol sy'n gwneud mwy nag amlinellu'r darpariaethau cyfreithiol ac ariannol ar gyfer adleoli pobl ac asedau.

Rhan arall o'n dull strategol o weithredu yw sicrhau bod modd rhannu arferion da a gwersi a ddysgwyd â sefydliadau ledled Cymru drwy ddarparu pecyn cymorth addasu arfordirol. Bydd y pecyn hwnnw'n cael ei ddatblygu ar sail canfyddiadau gwaith ymchwil sy'n cael ei wneud ar hyn o bryd yn Fairbourne, Gwynedd, a hefyd ar sail cyfraniadau gan Grwpiau Arfordirol Cymru.

2. **Defnyddio Strategaeth Genedlaethol 2017-18 ar Reoli Perygl Llifogydd ac Erydu Arfordirol yng Nghymru yn hytrach na Chynllun Cyflawni Arfordirol Cymru i bwysu a mesur y cynnydd a fydd wedi'i wneud ar berygl arfordirol a materion cysylltiedig.**

Roedd yr Adolygiad o Llifogydd Arfordirol Cymru (2014) a'r Cynllun Cyflawni cysylltiedig (2015) yn ddogfennau a baratowyd gan CNC ar gais Gweinidogion Cymru er mwyn sicrhau bod y gwersi a ddysgwyd ar ôl y stormydd yn ystod gaeaf 2013-14 yn cael eu nodi a bod camau'n cael eu cymryd ar sail y gwersi hynny. Mae cwmpas y dofennau hynny'n cael ei ddiffinio'n glir. Cafodd yr adroddiad terfynol ar y Cynllun Cyflawni ei gymeradwyo gan Ysgrifennydd y Cabinet dros yr Amgylchedd a Materion Gwledig ddechrau mis Hydref a bydd yn cael ei gyhoeddi gan CNC.

Bydd adolygiad 2017/18 o'r Strategaeth Genedlaethol yn cael ei arwain a'i baratoi gan Lywodraeth Cymru ar y cyd â'r holl awdurdodau rheoli risg. Y Strategaeth Genedlaethol yw'r brif ddogfen ar bolisi llifogydd a'r arfordir yng Nghymru, a dyna'r lle priodol ar gyfer amcanion strategol ac ar gyfer amlinellu sut y byddwn yn rheoli risg. Mae'n gyfle i

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gynnwys unrhyw argymhellion a fydd yn deillio o Adolygiad Arfordirol Cymru yn ogystal ag adolygiadau eraill.

3. Datblygu strategaeth ariannu hirdymor ar gyfer diogelu'r arfordir

Mae'r Cynllun Rheoli Perygl Arfordirol yn gam mawr ymlaen o ran y gallu i gynllunio cyfres o brosiectau am gyfnod o dair blynedd yn y dyfodol. Yn y gorffennol, roedd rhaglenni'n fwy *ad hoc* ac yn ddibynnol ar yr adnoddau a oedd ar gael.

Mae'r rhaglen yn cydnabod y bydd cyflawni'r gwaith hwn yn her o gofio bod llai o arian cyhoeddus ar gael ar lefel y DU ac mae'n ystyried ffynonellau posibl eraill o gyllid megis benthyciadau tymor hir a ffrydiau cyllid refeniw.

Rhaglen tair blynedd yw'r Cynllun Rheoli Perygl Arfordirol ar hyn o bryd ond mae'n beilot ac yn opsiwn strategol posibl ar gyfer yr hirdymor. Mae'r Rhaglen yn ystyried yr hirdymor eisoes, ac un enghraifft o hynny yw ei phenderfyniad strategol i ddarparu cyllid er mwyn datblygu achosion busnes cynnar ar gyfer amrywiaeth eang o brosiectau posibl. Bydd hynny'n golygu y bydd modd bwrw ymlaen â phrosiectau blaenoriaeth drwy'r Cynllun Rheoli Perygl Arfordirol a bydd o gymorth hefyd i nodi cyfres o brosiectau posibl ar gyfer y dyfodol a all helpu i lywio strategaeth a cheisiadau am gyllid.

O ran y rhaglen graidd, rydym yn parhau i weithio'n agos â'r awdurdodau lleol a CNC i ddatblygu a blaenoriaethu cyfres o gynlluniau a fydd yn sail i raglen ddangosol fwy hirdymor.

Ynglŷn â'r gofyniad i'r awdurdodau lleol gyfrannu 25% o gostau'r Rhaglen Rheoli Perygl Arfordirol

O dan y Cynllun Rheoli Perygl Arfordirol, mae Llywodraeth Cymru yn rhoi cyllid refeniw i awdurdodau lleol fedru gwneud y buddsoddiad cyfalaf angenrheidiol yn rhinwedd eu swyddogaeth fel awdurdodau rheoli risg sydd â chyfrifoldeb dros amddiffyn yr arfordir. Mae'r cyllid hwnnw'n ychwanegol at y dyraniadau cyfalaf blynyddol. Mae'n briodol bod yr awdurdod lleol yn gwneud cyfraniad o'r maint hwn. Mae'n golygu bod cyllid Llywodraeth Cymru yn mynd ymhellach ac mae'n sicrhau bod perchenogaeth leol ar y prosiect.

Roedd y penderfyniad ynglŷn â chyd-gyllido'r Cynllun Rheoli Risg Arfordirol ac y dylai'r awdurdodau lleol gyfrannu 25% yn benderfyniad a wnaed ochr yn ochr â phenderfyniadau am raglenni cyfalaf eraill sy'n cael eu hariannu â chyllid refeniw ac mae'n cyd-fynd â'r hyn a wnaed yn achos y rhaglen gyfalaf ar gyfer Rheoli Perygl Llifogydd ac Erydu Arfordirol. Er bod Llywodraeth Cymru yn dibynnu ar fenthycia ac ar daliadau refeniw a fydd yn cael eu had-dalu yn y dyfodol, mae hyblygrwydd o ran y 25% sydd i'w gyfrannu gan yr awdurdod lleol, a gallai gynnwys cyfraniadau partneriaeth gan fuddiolwyr eraill.



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Dylid nodi ein bod wedi cydnabod bod risg yn wynebu awdurdodau lleol wrth ddatblygu achosion busnes cynnar ar gyfer prosiectau yn ystod y flwyddyn ariannol hon a'n bod, o'r herwydd, wedi darparu cyllid grant ar gyfer 100% o'r costau. Mae hynny'n golygu y bydd yr awdurdodau lleol yn gallu mynd ati i ddatblygu eu cynlluniau ac y bydd y rhaglen yn gallu nodi pa rai a ddylai gael blaenoriaeth.

4. Pecyn Cymorth Addasu Arfordirol

Asesiad ar raddfa fawr o'r peryglon sy'n ymwneud â phrosesau arfordirol yw Cynllun Rheoli Traethlin a'i nod yw nodi polisiâu rheoli perygl er mwyn lleihau'r risg i bobl a'r amgylcheddau datblygedig, hanesyddol a naturiol yn yr hirdymor. Mae'r Cynlluniau a'u polisiâu dewisol ym mhob maes yn rhai anstatudol.

Awdurdodau Rheoli Risg sy'n nodi sut y bydd perygl llifogydd mewn ardaloedd arfordirol yn cael eu rheoli ac mae'r Cynlluniau Rheoli Traethlinau yn rhan o'r ystyriaeth honno. Fodd bynnag, dylid hefyd gynnwys mwy o dystiolaeth a monitro lleol. Mae'r Cynlluniau hefyd yn ystyriaeth berthnasol mewn penderfyniadau datblygu a chynlluniau lleol fel y nodwyd mewn llythyr at y Prif Swyddogion Cynllunio a'r arweinwyr llifogydd ym mis Ionawr 2015.

Mae Llywodraeth Cymru yn rhoi cymorth eisoes i awdurdodau lleol helpu cymunedau i feddwl am yr holl opsiynau ar gyfer rheoli perygl arfordirol, gan gynnwys Adlinio dan Reolaeth a Dim Ymyrraeth Weithredol os dyna fydd yn briodol. Nid yw'n briodol inni ragnodi yn yr adolygiad o'r Strategaeth Genedlaethol sut y dylai hynny weithio. Ni fydd byth unrhyw un ateb a fydd yn briodol i bob cymuned arfordirol a bydd materion gwahanol yn codi mewn ardaloedd gwahanol. Trafodwyd y dull hwn o weithredu wrth gynnal yr Adolygiad Arfordirol ac fe'i trafodwyd hefyd gyda'r awdurdodau lleol arfordirol. Mae'n well bod cymorth yn cael ei ddarparu ar y lefel leol, gan ystyried anghenion y gymuned a'r peryglon mewn lleoliad penodol. Mae pecyn addasu arfordirol yn cael ei baratol er mwyn amlinellu materion cyffredin, arferion da ac enghreifftiau. Ni fydd y pecyn yn rhan o'r Strategaeth Genedlaethol newydd ond bydd yn ei hategu. Bydd gwaith ymchwil sy'n mynd rhagddo ym mhentref Fairbourne yn helpu i lywio'r pecyn cymorth a'n gwaith datblygu polisi yn y maes hwn.

Fe'ch cyfeirir hefyd at yr ymateb i **Datblygu Strategaeth ar Gilio a Reolir** o dan bwynt 1.

Amgaeaf gopi o'r fersiwn wedi'i diweddarau o Gynllun Cyflawni'r Adolygiad Arfordirol.

Yn gywir,



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**Natural
Resources**
Wales

Wales Coastal Flooding Review: Delivery Plan for Phase 2 Recommendations

Progress Report August 2016

Prepared by Natural Resources Wales
for Lesley Griffiths AM, Cabinet Secretary for Environment
and Rural Affairs

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Acknowledgement

This progress report has been collated and coordinated by Natural Resources Wales working in partnership with many colleagues across Wales, in particular with the coastal Local Authorities, the Welsh Local Government Association and Welsh Government.

We wish to acknowledge this contribution and thank our colleagues for their continued support with this initiative since its inception in January 2014, whilst they have also continued to deliver activities and services to manage the risks to the communities of Wales.



Delivery Plan Workshop Discussions, 26th March 2015

Executive Summary

Following the flooding to the North Wales Coast on 5th December 2013 and the more widespread coastal storms of early January 2014, Natural Resources Wales, working with partners around Wales, completed a two stage Review as instructed by the Minister for Natural Resources. Phase 1 identified the impacts incurred during the storms and Phase 2 concluded with the identification of 47 individual Recommendations ('the Phase 2 Recommendations'). Natural Resources Wales then published a Delivery Plan in January 2015 that outlined how each of the Recommendations could be taken forward.

At the time of Delivery Plan publication, some notable progress had already been made on the Phase 2 Recommendations, whereby:

- 5 were already complete.
- 35 were ongoing (with some significant progress made since the 2013/14 winter).
- 7 were yet to be commenced.

Consistent progress has been achieved in implementing the Delivery Plan throughout 2015/16 and as documented within this Progress Report. By the end of August 2016 and out of the 47 Phase 2 Recommendations:

- 40 are complete.
- 7 are ongoing (with significant progress made since the 2013/14 winter).

Completion of 35 Recommendations in the 20 month period between January 2015 and August 2016 is a significant achievement by all contributing parties, particularly when considering the demands of fluvial flooding during the 2015/16 winter upon Risk Management Authorities in Wales.

Of the 40 completed Recommendations, some tangible improvements are already benefitting the coastal risk management sector in Wales such as:

- Improvements made through supplying more local, longer-range information within flood forecasts to professional partners as and when required.
- 40 of the flood warning thresholds and flood warning areas have been revised following the December 2013 and January 2014 coastal storms.
- A programme of coastal risk management training courses has been delivered to 90 members of staff from across Welsh Risk Management Authorities (RMAs), the Welsh Local Government Association and Welsh Government in Spring 2016.

Realisation of the full benefits from all completed Recommendations will require further commitment and resources from all parties, including Welsh Government. There needs to

be a sustained effort and continuous improvement to ensure that the intended outcomes are fully delivered.

The 7 currently ongoing Recommendations reflect either inter-linkages with the England and Wales Flood and Coastal Erosion Risk Management (FCERM) Research and Development programme (Recommendation 5), specialised science and resource demand (Recommendations 6 and 8), or through recent best endeavours confirming their more onerous nature as tasks which will take place over much longer timescales (Recommendations 19, 31, 33 and 41).

A monitoring and review action should be established for 2016/17 to safeguard momentum on these 7 ongoing Recommendations. The following routes are suggested to further progress these ongoing Recommendations to completion:

- Recommendations 5 (review guidance design of coastal standards and joint probability), 6 (improvements to longer range forecasts), 8 (improvements to the accuracy of the coastal forecasting service) and 33 (developments in the national coastal modelling and mapping programme) are to be taken forward internally by Natural Resources Wales through integration alongside business as usual activities.
- Recommendation 19 (continue to develop potential 'impact scenario' assessments, maps and/or statements) will require further liaison with the Wales Flood Group to gauge level of need and priority to inform Natural Resources Wales' future Flood Incident Management workstreams.
- Recommendation 31 (a national dataset for all flood risk assets, across all key organisations) will require significant and continued collaboration between Welsh Government and all Risk Management Authorities in Wales to share and securely store asset data. This work is progressing well, but will require sustained effort.
- Recommendation 41 (development of local adaptation 'toolkit', to assist communities predicted to experience natural coastal change) will require further liaison with the Wales Coastal Group Forum and the Coastal Groups in Wales to support creation of a toolkit for local coastal adaptation.

Extensive consultation was undertaken with partners in the summer and autumn of 2015 to determine the existing baseline position upon which suggestions for improvements and the formulation of future options have been based. Reporting has appraised options where necessary and identified solutions for future implementation subject to Welsh Government agreement, supplemented by tangible Recommendation outputs where achievable.

Natural Resources Wales are grateful for the additional funding received from the Minister for Natural Resources for implementation of the Delivery Plan during 2015/16, in order to avoid the demands of this task having any detrimental impact on other Natural Resources Wales' flood risk management work.

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Supporting Information

A number of Annexes are available as separate documents, where necessary to provide supporting information for this Progress Report for 2015/16. The internally produced reports are published alongside this report on our website, whilst the externally produced reports have their hyperlinks within the corresponding Recommendation summary page of this report.

Project Reports List:

- Project 1 Report – Recommendation 7
- Project 2 Report – Recommendations 11 & 12
- Project 3 Report – Recommendation 13, 14, 15, 16 & 17
- Project 4 Report – Recommendation 19
- Project 5 Report – Recommendations 25 & 26
- Project 6 Report – Recommendation 31 & 32
- Project 7a Report – Recommendation 37
- Project 7b Report – Recommendation 38
- Project 8 Report – Recommendation 39
- *Project 10 Report – Recommendation 18, 43, 44, 45, 46 & 47

*There is no Project 9 Report for Recommendations 41 & 42 due to the longer-term, ongoing nature of Recommendation 41. The respective summary pages within this report recognise progress to date and associated external publications.

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Origin and Purpose of this Progress Report for 2015/16

This Progress Report supplements and complements the following four publications within the Wales Coastal Flooding Review initiative produced at the request of the Minister for Natural Resources in response to the coastal flooding events in Wales of December 2013 and January 2014:

- *Wales Coastal Flooding Review, Phase 1 Report – Assessment of Impacts* ('the Phase 1 Report'), was submitted to Welsh Government on 31st January 2014 and published on 14th February 2014.
- *Wales Coastal Flooding Review, Phase 2 Report* ('the Phase 2 Report') submitted to Welsh Government on 28th April 2014 and published on 30th April 2014.
- *Wales Coastal Flooding Review, Delivery Plan for Phase 2 Recommendations* ('Delivery Plan' main report) was submitted to Welsh Government on 2nd December 2014 and published on 5th January 2015.
- *Wales Coastal Flooding Review, Delivery Plan for Phase 2 Recommendations, Supporting Documents* ('Delivery Plan Supporting Documents') was submitted to Welsh Government on 2nd December 2014 and published on 5th January 2015.

The Delivery Plan drew together the Phase 2 Recommendations, considering them collectively, to provide a strategic approach to planning, prioritisation, programming and delivery. For efficiency, the Delivery Plan packaged 30 of the 47 Recommendations into a series of 10 Projects according to common technical themes, with the remaining 12 Recommendations standing outside of these Projects due to their individuality. The 10 Projects were aligned against the following five Priority Areas identified in Phase 2 of the Review where improvements could be made to deliver a more resilient coastal flood and erosion management service in Wales:

Priority Area:

More support to communities to help them become more self-sufficient and resilient

- Project 1 = Recommendations 3 to 8 – Flood Forecasting and Coastal Design
- Project 2 = Recommendations 11 and 12 – Flood Warning and Forecasting
- Project 3 = Recommendations 13 to 17 – Community Resilience
- Project 4 = Recommendations 19 and 20 – Operational Response

Priority Area:

Improved information on coastal flood defence and erosion management systems

- Project 5 = Recommendations 25 and 26 – Coastal Defences
- Project 6 = Recommendations 31 and 32 – National Coastal Defence dataset and inspection

Priority Areas:

Greater clarity of roles and responsibilities, and an assessment of skills and capacity of Risk Management Authorities

Project 7 = Recommendations 37 and 38 - Skills and Capacity Audit and Roles and Responsibilities

Priority Area:

Locally developed and delivered plans for coastal communities and infrastructure operators

Project 8 = Recommendation 39 – Review of Coastal Groups
Project 9 = Recommendations 41 and 42 – Coastal Adaptation
Project 10 = Recommendations 18* and 43 to 47 – Infrastructure Resilience

*Recommendation 18 was originally placed in Project 4 of the Delivery Plan, however practical implementation has moved it into Project 10 due to synergies with the other Recommendations relating to infrastructure resilience.

The Phase 2 Report also identified a sixth Priority Area of ‘Sustained investment to coastal flood and erosion risk management’. This is a core requirement addressed through Recommendation 27.

This Progress Report captures the effort invested in implementing the Delivery Plan in the twenty months following its publication in January 2015 through to the end of August 2016. Appendix 1 provides a list of the 47 Phase 2 Recommendations. For each Recommendation in turn, this Progress Report considers:

- Who has been the lead on delivering the Recommendation.
- If the Recommendation has been completed by the end of August 2016 and if so, by when.
- Summary of the implementation of the Recommendation.

Programme Management and Governance

Implementation of the Delivery Plan has been a considerable body of work which has needed management and prioritisation of the personnel and financial resources available and efficient and effective use of the collective expertise and capacity across Risk Management Authorities (RMAs) in Wales.

A governance structure was established to monitor and direct progress of the Delivery Plan. This governance structure was needed to be appropriate and proportionate and sought to use existing arrangements where possible.

Each of the 10 Projects required the resource of a temporary Project Manager. Collectively the 10 Projects were coordinated by a Natural Resources Wales Programme Manager and Support Officer, alongside their role in tracking progress of the remaining 12 Recommendations outside of the Projects (as 5 were already completed by January 2015). The Programme Manager reported to a Natural Resources Wales Programme Board on a monthly basis and to Welsh Government typically on a quarterly basis.

Consultation and engagement measures to shape progress

Since publication of the Delivery Plan in January 2015, Natural Resources Wales has designed and actioned an extensive consultation programme to gather baseline evidence to inform implementation of each Recommendation and/or Project and to seek views on options where appropriate. This consultation programme has included the following activities:

- Hosting two Wales Coastal Flooding Review: Delivery Plan workshops for RMAs.
- Hosting two workshops regarding community engagement and resilience under Project 3.
- Hosting two Flood Warden Volunteer networking events under Project 3.
- Presenting on coastal risk management assets under Project 6 to the three Regional Flood Risk Management Groups in Wales.
- Managing a comprehensive set of data requests to the 15 coastal LAs (or when considering inland flood risk management, a total of 22 LAs) in summer 2015.
- Data requests to the four Local Resilience Fora in Wales.
- Data requests to the Wales Utility Group, Network Rail and the Trunk Road Agencies under Project 10.
- Holding focused meetings and telephone conversations with partners as appropriate.

Regular updates on progress were given as part of the above activities, supplemented by presentations at the Institution of Civil Engineers Wales' 'Learning to live with flooding' conference of June 2015, to the Wales Flood Group twice, to the Wales Utility Group and at routine Coastal Group meetings. Briefing notes were also issued to stakeholders and Local Resilience Fora / their Severe Weather Groups.

Where an external organisation led implementation of a specific Recommendation(s), similar consultation activities such as questionnaires and discussion at pre-established practitioner group meetings was undertaken to shape direction.

Progress made prior to publication of the Delivery Plan

In addition to the priority given to the repair and restoration of coastal defences in the aftermath of the December 2013 and January 2014 coastal storms, some initial notable progress was made across the Recommendations prior to publication of the Delivery Plan in January 2015. This work was documented in the published Delivery Plan and included:

- Welsh Government worked to protect the flood risk core budgets in face of public spending pressures and the core flood budget was maintained for 2015/16.
- In Rhyl stop logs at stairwell openings have been replaced by pre-cast concrete walls and steel flood gates, and a topographic survey of Rhyl Golf Course has been completed. Work to evaluate longer term options is ongoing.
- Three Shoreline Management Plans were approved by Welsh Government (South Wales, West of Wales and Severn Estuary) by early December 2014.
- Rebranding of the flood warning service in Wales, so the provider is clearly identified as Natural Resources Wales.
- A permanent offshore waverider buoy has been deployed off the West Pembrokeshire coast to help improve flood forecasting.
- Improvements to Flood Forecasting, with 5 day forecast information now available to local Natural Resources Wales officers.
- Continued progress made by the Fairbourne Multi-Agency Project Board and accompanying Task and Finish Groups in identifying valuable lessons for wider application.
- Preparatory work undertaken for Exercise Megacyma Cymru in March 2015.
- Completion and publication of the assessment of environmental change experienced during the December 2013 and January 2014 storms (Duigan C, Rimington N & Howe M (Eds) 2014. *Welsh Coastal Storms, December 2013 & January 2014 – an assessment of environmental change*, NRW Evidence Report).
- Ongoing work to identify and evaluate improvement options at multiple locations around the coast which either experienced flooding or came close to flooding during last winter's storms.
- National Sciencewise Research & Development programme research carried out into the way Natural Resources Wales communicates flood messages to the public.

Progress made since publication of the Delivery Plan

Following publication of the Delivery Plan in January 2015, tangible progress has been made to support its implementation to date and in addition to the Project Reports produced to accompany this Progress Report for 2015/16. These successes include:

- A review of the extreme sea level dataset was undertaken by the National Oceanography Centre for Natural Resources Wales, using the UK Coastal Monitoring & Forecasting partnership, and concluded that the inclusion of the more recent peak sea level data does not make a statistically significant difference to the design sea level estimates around Wales.
- On-going engagement with the joint Wales and England Flood and Coastal Erosion Risk Management (FCERM) Research and Development programme working with UK partners to consider joint probability analysis.
- Improvements made through supplying more local, longer-range information within flood forecasts to professional partners as and when required.
- 40 of the flood warning thresholds and flood warning areas have been revised following the December 2013 and January 2014 coastal storms.
- Continued work on the Flood Awareness Wales Programme has increased registrations of at-risk members of the public to Flood Warnings Direct, with 866 full registrations between January 2015 and June 2016.
- Continued work developing community flood plans through Flood Awareness Wales.
- Completion of a Research and Development project focusing upon greater engagement of the youth sector in community flood resilience activities.
- NRW Flood Incident Management teams are now developing a training programme to improve staff confidence in their role in the decision-making process for issuing a Severe Flood Warning.
- 'Exercise Megacyma Cymru', being the national coastal evacuation exercise, was held in March 2015 to test capabilities and resources in dealing with a large scale flooding event in Wales.
- Option appraisal has been undertaken to result in a Project Appraisal Report for a future East Rhyl Coast Protection Scheme for determination by Welsh Government.
- Development of Welsh Government's Coastal Risk Management Programme providing a £150 million programme to Local Authorities to deliver coastal risk management activities between 2018 and 2021.
- Additional funding for 2016/17 has been secured for coastal local authorities to undertake project appraisals and detailed design work in preparation for the Coastal Risk Management Programme.
- Additional funding has been secured for NRW and local authority schemes, maintenance and emergency repairs in light of the December 2015 storms.

- Natural Resources Wales has updated the North Wales tidal defence survey which now offers valuable data to inform a future national dataset of coastal protection and defence assets.
- Completion of a national skills and capacity audit for all Risk Management Authorities to assess and quantify the scale of the issue plus to assess the size of the skills and capacity gap.
- A programme of coastal risk management training courses has been delivered to 90 members of staff from across RMAs, the Welsh Local Government Association and Welsh Government.
- The fourth and final Shoreline Management Plan for North Wales and North West England was approved by the Minister for Natural Resources in late December 2014.
- Progress has continued within the Fairbourne: Moving Forward project, with publication of the project's first Annual Report in May 2015 and Welsh Government's appointment of a researcher to work alongside the project through to the end of 2017.
- The National Trust published their '*Shifting Shores – playing our part at the coast*' in November 2015 that captures progress made in the ten years since their original 'Shifting Shores' publication and identified the opportunities and challenges facing delivery of coastal adaptation.
- In December 2015, the joint Wales and England Flood and Coastal Erosion Risk Management (FCERM) Research and Development programme published a report entitled '*Adapting to Coastal Erosion: Evaluation of rollback and leaseback schemes in Coastal Change Pathfinder projects*'.

Recommendations – Completion status and progress

At the time of Delivery Plan publication in January 2015, some notable progress had already been made on the Phase 2 Recommendations, whereby:

- 5 were already complete.
- 35 were ongoing (with some significant progress made since the 2013/14 winter).
- 7 were yet to be commenced.

Consistent progress has been achieved in implementing the Delivery Plan throughout 2015/16. By the end of August 2016 and out of the 47 Phase 2 Recommendations:

- 40 are complete.
- 7 are ongoing (with significant progress made since the 2013/14 winter).

Completion of 35 Recommendations in the twenty month period between January 2015 and August 2016 is a significant achievement by all contributing parties, particularly when considering the unforeseen demands of fluvial flooding during the 2015/16 winter upon Risk Management Authorities in Wales.

Table 1 overleaf provides a summary of completion status and/or progress made against each individual Recommendation or Project.

Key to Table 1: Classification of Recommendation Progress Status

| RECOMMENDATION PROGRESS STATUS | |
|---------------------------------------|---|
| 35 | Recommendations complete following the publishing of the Delivery Plan (Jan 2015 to August 2016) |
| 5 | Recommendations complete when the Delivery Plan was published (Jan 2014 to Jan2015) |
| 7 | Recommendations ongoing (Aug 2016 onwards – Ongoing) |
| 47 | Total |

Table 1: Summary of Recommendation and Project Status

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| Rec. no. | Report available ? Yes / No | Completion status | Summary of individual Recommendation / Project status | Delivery Lead | Delivery Plan target completion date | Actual completion date | |
|----------|--------------------------------|-------------------|--|--|--|------------------------|----------|
| 1 | No | | Recommendation completed prior to Delivery Plan publication. | NRW | Dec 2014 | Dec 2014 | |
| 2 | No | | Recommendation completed prior to Delivery Plan publication. | NRW | Dec 2014 | Dec 2014 | |
| 3 | No | | Project 1 – Flood Forecasting and Coastal Design See progress summarised within this report and supplementary Project 1 Report for Recommendation 7. | NRW | Ongoing and linked to progress of joint Research & Development Programme | Dec 2015 | |
| 4 | Yes | Jan 2016 | | | | | |
| 5 | No | Ongoing | | | | | |
| 6 | No | | | NRW | Summer 2015 | Ongoing | |
| 7 | Yes | | | NRW | | Oct 2015 | |
| 8 | No | | | NRW | | Ongoing | |
| 9 | No | | | Recommendation completed prior to Delivery Plan publication. | NRW | Dec 2014 | Dec 2014 |
| 10 | No | | | Recommendation completed prior to Delivery Plan publication. | NRW | Sep 2014 | Sep 2014 |
| 11 | Yes | | Project 2 – Flood Warning and Forecasting See progress summarised within this report and supplementary Project 2 Report. | NRW | Autumn 2015 | Oct 2015 | |
| 12 | Yes | | | NRW | | Oct 2015 | |
| 13 | Yes | | Project 3 – Community Resilience | NRW | Winter 2015 | Mar 2016 | |
| 14 | Yes | | | | | Mar 2016 | |

| | | | | | | |
|-----------------|-----|--|--|-----------------------------|---|----------|
| 15 | Yes | | See progress summarised within this report and supplementary Project 3 Report. | | | Mar 2016 |
| 16 | Yes | | | | | Mar 2016 |
| 17 | Yes | | | | | Mar 2016 |
| 18 ¹ | Yes | | Project 4 – Operational Response See progress summarised within this report and supplementary Project 4 Report for Rec 19 and presentation for Rec 20. | NRW | Winter 2015 | Nov 2015 |
| 19 | Yes | | | | | Ongoing |
| 20 | No | | | | | Mar 2016 |
| 21 | Yes | | 'Exercise Megacyma Cymru', a coastal mass evacuation exercise, was held in March 2015. | LRF | After Spring 2015 | Jun 2015 |
| 22 | Yes | | | Wales Flood Group | Spring 2015 | Jun 2015 |
| 23 | Yes | | Recommendation was informed by the coastal exercise above. | LRFs | After Spring 2015 | Jun 2015 |
| 24 | Yes | | Recommendation specific to Garford Road area Rhyl. | Denbighshire County Council | Ongoing and dependent upon completion of options appraisal work | Mar 2016 |
| 25 | Yes | | Project 5 – Coastal Defences See progress summarised within this report and supplementary Project 5 Report. | WLGA | Winter 2015 | Jan 2016 |
| 26 | Yes | | | | | Jan 2016 |
| 27 | No | | Welsh Government continually works to protect budgets and the core flood budget was maintained for 2015/16. | WG | Ongoing | Jun 2015 |
| 28 | No | | | | | Jun 2015 |

¹Recommendation 18 has been moved from Project 4 to Project 10 due to the links with infrastructure resilience.

| | | | | | | |
|----|-----|--|--|------|--|----------|
| 29 | No | | National Programme of Investment, now called Flood and Coastal Investment Programme (FaCIP), was consulted upon in early 2015. | WG | End 2014 | Jun 2015 |
| 30 | No | | Announcements have been made regarding Welsh Government's Coastal Risk Management Programme and bids are currently being determined. | WG | Spring 2015 | Jun 2015 |
| 31 | Yes | | Project 6 – National Coastal Defence dataset and inspection See progress summarised within this report and supplementary Project 6 Report. | NRW | Winter 2015 | Ongoing |
| 32 | Yes | | | | | Nov 2015 |
| 33 | No | | Continue to develop a Flood Risk Modelling and Mapping Strategy/Work plan for Wales. | NRW | Spring 2016 | Ongoing |
| 34 | No | | Risk based review of flooded locations is completed. See progress summarised within this report. | NRW | Varies According to location | Nov 2015 |
| 35 | No | | Risk based review of 'near miss' locations is completed. See progress summarised within this report. | NRW | Varies According to location | Nov 2015 |
| 36 | Yes | | Recommendation completed prior to Delivery Plan publication. | NRW | Linked to other individual Recommendations | Dec 2014 |
| 37 | Yes | | Project 7 Skills and Capacity audit and roles and responsibilities See progress summarised within this report and supplementary Project 7a Report for Recommendation 37 and Project 7b Report for Recommendation 38. | WLGA | Winter 2015 (Rec. 37) | Dec 2015 |
| 38 | Yes | | | NRW | Summer 2015 (Rec. 38) | Mar 2016 |

| | | | | | | |
|----|-----|--|---|------------------|----------------|-----------|
| 39 | Yes | | Project 8 – Review of Coastal Groups See progress summarised within this report. | WG | By Winter 2015 | July 2016 |
| 40 | No | | WCMC future business case determined. | WG | Spring 2015 | Feb 2016 |
| 41 | No | | Project 9 – Coastal Adaptation See progress summarised within this report. | *WG and LLFAs | Long term | Ongoing |
| 42 | No | | | *WG | Summer 2015 | Mar 2016 |
| 43 | Yes | | Project 10 – Infrastructure Resilience See progress summarised within this report and supplementary Project 10 Report. | *WG | Spring 2015 | Nov 2015 |
| 44 | Yes | | | *WG | Spring 2015 | Nov 2015 |
| 45 | Yes | | | *WG | Spring 2015 | Nov 2015 |
| 46 | Yes | | | *WG | Ongoing | Nov 2015 |
| 47 | Yes | | | *WG | Ongoing | Nov 2015 |

Table 1 - Summary of Recommendations and Project Status

Table 1 Acronyms: NRW – Natural Resources Wales, LRF – Local Resilience Forum, WLGA – Welsh Local Government Association, WG – Welsh Government, RMA - Risk Management Authority.

*The Delivery Plan named Welsh Government as the lead for Recommendations 41 to 47, however NRW have overseen progress and reporting on these Projects during 2015/16, in collaboration with Welsh Government.

As identified in Table 1, the 7 ongoing Recommendations are numbers 5, 6, 8, 19, 31, 33, and 41. The ongoing nature of these Recommendations reflect either inter-linkages with the Wales and England Flood and Coastal Erosion Risk Management (FCERM) Research and Development programme (Recommendation 5), specialised science and resource demand (Recommendations 6 and 8), or through recent best endeavours confirming their more onerous nature as tasks which will take place over much longer timescales (Recommendations 19, 31, 33 and 41).

Progress summaries for each Recommendation

Progress made by end of August 2016 is summarised in this section. Each summary confirms who has been the lead on delivering the Recommendation, the completion date for the Recommendation where applicable and outlines the methodology followed to implement the Recommendation. These progress summaries are supplemented as appropriate by a separate report within the Supporting Information.

Supporting Information

A number of Annexes are available as separate documents, where necessary to provide supporting information for this Progress Report for 2015/16. The internally produced reports are published alongside this report on our website, whilst the externally produced reports have their hyperlinks within the corresponding Recommendation summary page of this report.

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- Project 5 Report – Recommendations 25 & 26
- Project 6 Report – Recommendation 31 & 32
- Project 7a Report – Recommendation 37
- Project 7b Report – Recommendation 38
- Project 8 Report – Recommendation 39
- *Project 10 Report – Recommendation 18, 43, 44, 45, 46 & 47

*There is no Project 9 Report for Recommendations 41 & 42 due to the longer-term, ongoing nature of Recommendation 41. The respective summary pages within this report recognise progress to date and associated external publications.

Recommendation 1 – Progressing the Recommendations

Rec 1: The recommendations included in this report are compiled into a Delivery Plan. This Delivery Plan will identify how the recommendations will be progressed. It will consider matters such as; the parties to be involved lead responsibility, priorities, governance and resources and capacity to deliver.

Recommendation Lead: Natural Resources Wales

Project Reference: Outside Projects

Completion Date: December 2014

Summary of Recommendation Implementation

Following the flooding to the North Wales Coast on 5th December 2013 and the more widespread coastal storms of early January 2014, Natural Resources Wales, working with partners around Wales, completed a two stage Review as instructed by the Minister for Natural Resources. This Review concluded with the identification of 47 individual recommendations in April 2014.

In January 2015, we published the Coastal Flooding Review Delivery Plan, which proposed how each recommendation can be taken forward and implemented.

Delivery Plan can be found at:

<http://naturalresources.wales/our-evidence-and-reports/flooding-reports/wales-coastal-flooding-review-delivery-plan-phase-2-recommendations/?lang=en>

The Delivery Plan identified that thirty recommendations have been packaged into ten Projects to reflect common themes. The remaining seventeen recommendations are being addressed independently outside of projects by individual leads.

The 10 Projects and their broad technical themes are listed below:

- Project 1 – Flood Forecasting and Coastal Design
- Project 2 – Flood Warning and Forecasting
- Project 3 – Community Resilience
- Project 4 – Operational Response
- Project 5 – Coastal Defences
- Project 6 – National Coastal Defence Dataset and Inspection
- Project 7 – Skills and Capacity Audit and Roles and Responsibilities
- Project 8 – Review of Coastal Groups
- Project 9 – Coastal Adaptation
- Project 10 – Infrastructure Resilience

Within the Delivery Plan a methodology has been proposed to take forwards and progress each Recommendation. These have been developed through liaison with coastal practitioners across Wales, to draw on the expertise and experience of the key people managing flood and erosion risk across the country.

Recommendation 2 – Progressing the Recommendations

Rec 2: The Delivery Plan should consider opportunities to expand the recommendations beyond just coastal flooding and erosion risks and to consider the link to risks from other sources of flooding.

Recommendation Lead: Natural Resources Wales

Project Reference: Outside Projects

Completion Date: December 2014

Summary of Recommendation Implementation

Following the flooding to the North Wales Coast on 5th December 2013 and the more widespread coastal storms of early January 2014, Natural Resources Wales, working with partners around Wales, completed a two stage Review as instructed by the Minister for Natural Resources. This Review concluded with the identification of 47 individual Recommendations in April 2014.

In January 2015, we published the Coastal Flooding Review Delivery Plan, which proposed how each Recommendation could be taken forward and implemented.

Delivery Plan can be found at:

<http://naturalresources.wales/our-evidence-and-reports/flooding-reports/wales-coastal-flooding-review-delivery-plan-phase-2-recommendations/?lang=en>

The potential to expand each Recommendation to include additional sources of flood risk was determined within the Delivery Plan and hence this Recommendation is complete.

Where linkages were identified to other sources of flooding, the impact of including other flood sources upon the proposed methodology for a specific Recommendation has been considered.

Additional non-coastal sources of flooding increased the number of partners involved in developing and implementing the Delivery Plan, this required more liaison with partners and incorporating more ideas. This increased the cost and time required to implement Recommendations. Expanding a Recommendation to consider other non-coastal sources generated access to additional funding and resources. Such avenues were investigated where possible.

Recommendation 3 – Storm Severity

Rec 3: Further work is required to assess the joint probability of wind, waves and tides for these recent winter storms. This may take the form of an initial assessment coupled with consideration of more thorough analysis. The scope of this work will require further technical discussion.

Recommendation Lead: Natural Resources Wales

Project Reference: Project 1

Completion Date: December 2015

Summary of Recommendation Implementation

The UK Coastal Monitoring and Forecasting Service (UKCMF) Factual Report into the Coastal Storms of December 2013 and January 2014 including Joint Sea Level and Wave Analysis was commissioned by Natural Resources Wales and produced by JBA Consulting. It was shared with RMAs on 9th June 2014 ^[1]. The joint probability assessment for that study used the “Desk Study” spreadsheet method within the Defra Best Practice Guide and the results gave very high estimates of joint return period which were deemed implausible. The JBA report recommended that:

“Return periods calculated for the coincident sea levels and wave heights seen in December 2013 and January 2014 are extreme and very uncertain. We recommend that they are quoted with this in mind. We recommend more robust statistical modelling to determine a more reliable estimate of return period”.

And that: *“We recommend further research to develop methods of joint probability assessment along the lines of those discussed in Environment Agency science project SC060088.”*³

JBA Consulting were also commissioned by Denbighshire County Council in 2015 to undertake a joint probability analysis focusing for Rhyl to support the development of a flood risk management scheme. For this, a detailed statistical analysis of the December 2013 coastal event was undertaken using the Heffernan and Tawn method for multivariate probability. The analysis indicated that the conditions on the 5th of December 2013 were the largest in the month, and were a relatively uncommon tidal event in their own regard. The probability of the offshore wave and skew surge conditions occurring during this extremely large tide was calculated to have a 0.005% AEP, representing an approximate 1 in 200-year return period.

JBA consulting also undertook a comparison of the Heffernan and Tawn multivariate probability assessment and the Defra “Desk Study” spreadsheet method. This identified that the Defra “Desk Study” method tended to under predict the range and magnitude of coastal storm events. This could lead to the under estimation of risk and the under design of structures. Further details of the work undertaken by JBA Consulting for Denbighshire County Council are provided under Recommendation 24.

It has become clear from the work carried out following the 2013/14 storms and further detailed modelling carried out at Rhyl that this is a very specialist area of work with a range of methods available, from the relatively simple to the more complex. There is the potential for misunderstanding on how to apply the methods and the situations in which the various methods should be used.

Following the initial assessment of the joint probability of wind, waves and tides for the 2013/2014 storms and the subsequent analysis of joint probability carried out for the Rhyl flood

Recommendation 3 – Storm Severity

risk management scheme, Recommendation 3 concludes that further specialist work is required to review and update standard methods of joint probability analysis and best practice guidance.

We believe this is best achieved by working at a UK level, because of the need to establish best practice which RMAs and their consultants can use across England and Wales, in a similar vein to the approach taken for fluvial flood frequency (where the Flood Estimation Handbook has become established as the UK wide industry standard).

We also share coastal waters with England (Liverpool Bay and Severn Estuary) so consistency becomes an issues for assessment of storm severity and joint probability in these locations.

To begin to take this forward, NRW have engaged through the Defra-Welsh Government Flood and Coastal Erosion Risk Management Joint Research Development (R&D) Programme with two projects which are developing new techniques related to joint probability assessment:

- Planning scenarios for FCRM and the National Risk Assessment (H21 widespread inland flooding) Capturing the true spatial nature and joint probability of flood risk across all sources
- Defra National Risk Assessment H19 extreme coastal flooding.

Further work engaging with these R&D projects will continue as part of Recommendation 5 (see page 29) with a view to using these projects as a platform for establishing best practice methodologies and supporting guidance, including the assessment of the joint probability of sources of coastal flooding. It is likely that any new guidance will need to be supported by practitioner workshops.

Until these projects are complete and best practice methodologies and guidance implemented, there would be little further benefit in trying to undertake further joint probability assessments on the severity of the 2013/2014 storm events at other sites across Wales.

^[1] JBA (2014) UKCMF Factual Report into the Coastal Storms of December 2013 and January 2014 Including Joint Sea Level and Wave Analysis

^[2] Heffernan, J.E., Tawn, J.A., 2004. A conditional approach for multivariate extreme values (with discussion). *J. R. Stat. Soc. Ser. B Stat Methodol.* 66 (3), 497–546

^[3] Environment Agency R&D project SC060088 “*The Risk of widespread flooding – capturing spatial patterns in flood risk from rivers and coasts*” was a scoping study to identify, develop and trial a method for assessing flood risk when aggregated over large spatial scales”. This work was a predecessor to the R&D project “*Planning scenarios for FCRM and the National Risk Assessment (H21 widespread inland flooding) Capturing the true spatial nature and joint probability of flood risk across all sources*” which is currently in progress.

Recommendation 4 – Storm Severity

Rec 4: Review and update if required, the extreme sea level dataset around the Welsh coast. The recent tidal conditions are amongst the highest for many years. This dataset may need to be amended.

This is to include methods for assessment of joint probability for storm severity.

Recommendation Lead: Natural Resources Wales

Project Reference: Project 1

Completion Date: January 2016

Summary of Recommendation Implementation

The December 2013 and early January 2014 sea levels were significant in terms of the available records from the UK national tide gauge network.

The Phase 1 Report identified that the peak sea level experienced in December 2013 was the highest recorded in Liverpool Bay in over 20 years since the tide gauge was established. The level exceeded the previous highest value by a considerable amount (0.3m or 1 ft.).

In January 2014, the peak recorded sea level at:

- Milford Haven was 4.51mAOD. This was the highest level since at least February 1997 and exceeded the March 2008 level (another notable event) by 0.14m.
- Newport was 8.03mAOD. This was the highest level since at least February 1997 and exceeded the February 1997 level by 0.20m.
- Barmouth was 3.92mAOD. This was marginally higher than the February 1997 level.
- Liverpool was 5.86mAOD. This was 0.36m lower than the peak level on 5th December 2013.

The Coastal Flood Boundary conditions for UK mainland and islands: design sea levels, completed in 2010, published in February 2011, is the industry standard, best practice dataset used in coastal flood risk management across England and Wales. This Environment Agency (EA) R&D project, which worked in partnership with the Scottish Environment Protection Agency (SEPA), provided an up-to-date scientifically robust national evidence base and practical guidance on appropriate design sea level and swell wave conditions around the country and how to use them.

Following the 2013/14 coastal storms and the significant sea levels recorded around Wales, we needed to understand whether inclusion of the more recent 2013/14 peak sea levels in the datasets and analysis used for the 2010 published research would alter the design estimates of extreme sea levels at key locations around the Welsh coast. Put another way, would the 1 in 200 year and 1 in 1,000 year design levels frequently used in coastal modelling and asset design significantly change with inclusion of the 2013/14 peak data.

A study was commissioned by Natural Resources Wales, using the UK Coastal Monitoring & Forecasting partnership, and undertaken by the National Oceanography Centre (NOC), Liverpool.

This study carried out a re-analysis of the extreme sea level estimates for seven locations on the national tide gauge network around, or close to, the Welsh coastline (Liverpool, Llandudno,

Recommendation 4 – Storm Severity

Barmouth, Milford Haven, Mumbles, Newport and Avonmouth) using the same methodology as used in the 2011 published research.

The conclusion of the study was that inclusion of the more recent peak sea level data does not make a statistically significant difference to the design sea level estimates around Wales.

The table below, extracted from the report, shows the 200 year return period sea levels at all seven locations as calculated in the original 2011 published research, the change from including the 2013/14 recorded sea levels and the 95% confidence intervals.

Table 2. 200 year return level from McMillan et al. (2010), confidence interval, and change due to 2013/2014 data

| | 200 year level (m) | Change to 200 year level (m) | 95% confidence interval (m) |
|---------------|--------------------|------------------------------|-----------------------------|
| Liverpool | 6.03 | 0 | 0.2 |
| Llandudno | 5.38 | +0.01 | 0.2 |
| Barmouth | 4.22 | +0.05 | 0.2 |
| Milford Haven | 4.75 | 0 | 0.2 |
| Mumbles | 6.15 | +0.04 | 0.3 |
| Newport | 8.41 | +0.10 | 0.3 |
| Avonmouth | 9.11 | +0.10 | 0.3 |

It would be reasonable to extrapolate these results, and hence the conclusions, to the entire Welsh coastline since the seven tide gauge locations (a) provide the best data available and (b) are well distributed around the entire Welsh coastline.

The full report from this study is provided at <http://nora.nerc.ac.uk/512661/>. It has been published as NOC Research & Consultancy Report No. 54.

We have therefore concluded that following this review of the extreme sea level data set around Wales, there is no immediate need to update the 2011 published coastal flood boundary design sea levels on account of the peak sea levels recorded around Wales during the 2013/14 winter.

However, the NOC study we commissioned has highlighted that whilst the methods used in the 2010 research remain valid, further recommended improvements could be made, in particular to:

- Refine the statistical models used at some locations for the most extreme sea levels;
- Include the seasonal dependencies between storm surges and tides within the 'skew surge' methodology which underpins the 2010 research.

These recommendations are beyond the scope of the Recommendation 4 project but will be picked up by Natural Resources Wales through:

- Ongoing engagement with the joint Defra-Welsh Government Flood & Coastal Erosion Risk Management R&D Programme;
- Our working relationships with the EA and SEPA, so we ensure design sea level estimates and supporting research remain coherent around the UK coastline.

Recommendation 5 – Storm Severity

Rec 5: Review and update if required, the guidance used for the assessment and design of coastal standard of service against flooding. The review should consider whether more clarification is needed, in particular on the issues of the treatment of joint probabilities, in combination effects and appropriate national consistency.

Recommendation Lead: Natural Resources Wales

Project Reference: Project 1

Completion Date: Ongoing

Summary of Recommendation Implementation

There is a close dependency with Recommendation 3 which states:

“Further work is required to assess the joint probability of wind, waves and tides for these recent winter storms. This may take the form of an initial assessment coupled with consideration of more thorough analysis. The scope of this work will require further technical discussion.”

Following the initial assessment of the joint probability of wind, waves and tides for the 2013/2014 storms and the subsequent analysis of joint probability carried out for the Rhyl flood risk management scheme, Recommendation 3 concluded that further specialist work is required to review and update standard methods of joint probability analysis and best practice guidance.

As stated in the summary report for Recommendation 3, we believe this is best achieved by working at a UK level, because of the need to establish best practice which RMAs and their consultants can use across England and Wales, in a similar vein to the approach taken for fluvial flood frequency (where the Flood Estimation Handbook has become established as the UK wide industry standard).

We also share coastal waters with England (Liverpool Bay and Severn Estuary) so consistency becomes an issues for assessment of storm severity and joint probability in these locations.

To begin to take this forward, NRW have engaged through the Defra-Welsh Government Flood and Coastal Erosion Risk Management Joint Research Development (R&D) Programme with two projects which are developing new techniques related to joint probability assessment:

- Planning scenarios for FCRM and the National Risk Assessment (H21 widespread inland flooding) Capturing the true spatial nature and joint probability of flood risk across all sources.
- Defra National Risk Assessment H19 extreme coastal flooding.

NRW will continue to engage with these R&D projects to support delivery of this Recommendation with a view to using these projects as a platform for establishing best practice methodologies and supporting guidance for coastal design standards of service, including the assessment of the joint probability of sources of coastal flooding. It is likely that any new guidance will need to be supported by practitioner workshops.

Once these R&D projects are complete, we will review if further work is required to take forward the R&D outputs and/or develop best practice guidance based in order to deliver the Recommendation.

Recommendation 6 – Flood Forecasting

Rec 6: Continue to identify and implement risk based opportunities to deliver further improvements to longer range forecasts.

Recommendation Lead: Natural Resources Wales

Project Reference: Project 1

Completion Date: Ongoing

Summary of Recommendation Implementation

This is addressed as part of ongoing work, including collaborative work with the Met Office, utilising emerging science. This enhancement and improvement to Natural Resources Wales' long range coastal forecasting capability enables earlier discussion around the scale, impacts and location of coastal flood events. Some illustrations of the ongoing work include:

- Natural Resources Wales input into the United Kingdom Coastal Flood Forecasting (UKCFF) partnership which provides a strategic overview of the current and future needs of those who provide coastal warnings. Natural Resources Wales contribute to, propose and lead, UKCFF work.

As part of the ongoing portfolio of the work of UKCFF, there are several examples of how Natural Resources Wales both input into the work and benefit from the collaborative work undertaken, including:

- A project to better align Met Office, Environment Agency and Natural Resources Wales' forecast data, enabling better sharing of data and discussions around specific forecasts – instigated by Natural Resources Wales;
 - A project to better understand coastal processes within the Bristol Channel – also instigated by Natural Resources Wales;
 - A project to review the potential benefit of, and implement the operation use of, wave ensemble forecasts, providing improved long range forecasting ability.
- Surge, wind and wave data provided by the Met Office, now extend to 5 days' worth of forecasts (compared to 48 hours' previously). This data is processed through Natural Resources Wales' bespoke forecasting models, providing site specific forecast at 80 locations around Wales to better inform the flood warning service.
 - Surge ensemble data has been implemented, in collaboration with the Met Office, to give a greater understanding of uncertainty in the current forecast and flagging potential events earlier.

These improvements provide a greater lead-in time to coastal flood events, giving a greater understanding of the potential risks earlier. This enables earlier discussions between professional partners around the scale and potential impacts of coastal flood events. Earlier and more informed discussions increase the effectiveness of both preparatory action and the resulting response.

Rec 7: Review with partners what additional forecast information could be provided to support local incident management decisions. Identify options and recommendations.

Recommendation Lead: Natural Resources Wales

Project Reference: Project 1

Completion Date: October 2015

Summary of Recommendation Implementation

A Natural Resources Wales working group was set up to undertake this recommendation, comprising a Flood Incident Management team technical specialist from each area within Wales (North, South West and South East) and a member of the national Flood Forecasting team to advise on the forecast data which could be provided and how this could be done.

The first step was to consult with professional partners to identify what additional forecast information they felt would be useful for local incident management decisions. Professional Partners were asked three questions:

1. What forecasting information do you currently receive and in what format?
2. What additional forecast information would be beneficial to your operations and why?
3. Can you identify any situations when forecast information is diluted through onward sharing within organisations and may therefore not fully reach all the intended recipients?

A total of 20 consultation responses were received. The responses indicated that:

- There is a variety in the type and amount of forecast information received by partners across different areas within Wales.
- A large proportion of partners would like to receive additional forecast information.
- There are no current concerns over the dilution of information through onward sharing within organisations.

Based on this information the working group developed and discussed potential solutions to provide additional forecast information and achieve greater consistency in the forecast data provided across Wales.

This led to the development of a two-stage solution to achieve the Recommendation, which was reviewed and agreed with the NRW national forecasting team:

- Stage 1 - Short Term Response: Provide generic information on a more local level to partners via email
- Stage 2 - Long Term Response: Provide more detailed forecast information to partners

Stage 1, the short term solution, aims to provide professional partners with more local, longer-range information via email correspondence. Emails will be provided on a Local Resilience Forum basis, covering the geographical area associated with the each LRF in a similar style to those of the Met. Office Advisor emails. The contents of these emails will vary in detail depending on the conditions forecast, but templates and examples have been developed to enable this to be a consistent process across Wales. This solution can be implemented immediately and is already being implemented under some events.

Recommendation 7 – Flood Forecasting

Stage 2, the long term solution, is the provision of more detailed forecast information, such as site specific forecasts. This is technically more difficult to implement due to the need to ensure that uncertainty in the forecast is fully communicated and the need for development of a user friendly and efficient data dissemination process. A feasibility study should be undertaken by NRW to progress this task. Decisions on the level of data provided and the manner in which it is presented are key for this to work successfully.

Further information on this Recommendation can be found within the accompanying Project Report 1 - Recommendation 7.

Recommendation 8 – Flood Forecasting

Rec 8: Continue to progress risk based opportunities to deliver improvements to the accuracy of the coastal forecasting service. Develop and deliver a programme of improvement works.

Recommendation Lead: Natural Resources Wales

Project Reference: Project 1

Completion Date: Ongoing

Summary of Recommendation Implementation

This is ongoing work and forms part of the continuous improvement, review and recalibration of Natural Resources Wales’ coastal forecasting models. Improvements to the accuracy of the coastal forecasting service directly influences the coastal flood warning service, leading to more effective action in the lead up to coastal flood events. Some examples of the ongoing work to improve the accuracy of the coastal forecasting service include:

- Continuing to utilise improvements in forecast data available to Natural Resources Wales. This involves working with the Met. Office and the Flood Forecasting Centre, as well as the United Kingdom Coastal Flood Forecasting partnership (UKCFF) of which Natural Resources Wales is a member, to both identify our needs and understand advancing scientific forecasting methods. Examples of this include the empirical re-tuning of astronomic data, and the manual assessment of surge performance, both of which are done during flood events to improve the accuracy of the raw model outputs.
- Continuing to improve Natural Resources Wales’ site specific coastal flood forecasting modelling capabilities by:
 - Updating forecasts for individual locations using the latest forecast modelling techniques to improve accuracy;
 - Continuing to capture site observations where possible to verify the model output, better understand model performance and recalibrate where necessary.
- Improving the understanding of strengths and limitations of current coastal forecasting techniques. Whilst Natural Resources Wales utilises the latest coastal flood forecasting modelling methods, this is still an emerging science. By delivering in-house training to duty officers on the nuances and assumptions of coastal flood modelling, the forecasting service benefits from detailed interpretation of the model outputs.

This work provides an enhancement to the coastal flood forecasting service, better informing the flood warning service and hence Natural Resources Wales’ ability to advise and respond to coastal flood events. The understanding of coastal processes and hence the modelling of these is an emerging and evolving science – inputting into the development of coastal flood forecasting methods, and utilising the outputs enhances Natural Resources Wales’ coastal flood warning capability.

Recommendation 9 – Flood Forecasting

Rec 9: Review the whole wave buoy network around the Welsh coast, including working with UKCMF to address a strategic gap in the offshore wave buoy network in the Irish Sea. This is required to better validate offshore wave forecasts, leading to improvements to the Wales forecasting service. (UKCMF- UK Coastal Monitoring and Forecasting Service).

Recommendation Lead: Natural Resources Wales

Project Reference: Outside Projects

Completion Date: December 2014

Summary of Recommendation Implementation

A new wave rider buoy was installed off the West Pembrokeshire Coast on 11th September 2014.

The method followed to reach this outcome comprised:

- The wave buoy network around the Welsh coast was reviewed and a gap identified in the network in the Irish Sea.
- Centre for Environment, Fisheries & Aquaculture Science (Cefas) helped assess locations and prepare for the operational deployment of the new buoy.
- Funding was secured via UKCMF (from the UK Government flood recovery funds).
- The optimal location was identified by Natural Resources Wales through consultation with professional partners and the new installation will provide directional wave data as well as wave height and wave period.

A live telemetry feed supplies instantaneous data and will be used to routinely calibrate Natural Resources Wales' forecast data, as well as monitor wave conditions during storm events. The resilience and suitability of the wave buoy network will continue to be assessed including the impact of the new buoy. Any issues or strategic gaps will continue to be raised as appropriate.

Recommendation 10 – Flood Warning and Community Response

Rec 10: Complete the ongoing work by summer 2014 to ‘rebrand’ the flood warning service in Wales so that the provider is clearly identified as Natural Resources Wales.

Recommendation Lead: Natural Resources Wales

Project Reference: Outside Projects

Completion Date: September 2014

Summary of Recommendation Implementation

All flood warnings issued in Wales clearly identify Natural Resources Wales as the provider of the service.

- The work was completed in September 2014.
- We have continued to develop our own web products in the meantime, while continuing the partnership with the Environment Agency for certain products such as the 3 day flood forecast, live flood warnings and registration to the service.
- We developed a live flood warning map which went live in March 2015:
<http://naturalresources.wales/flooding/flood-warnings/?lang=en>
- We are developing our own pages for live flood warnings and the 3 day flood forecast - which is due to be live by the end of March 2016.
- We are procuring this system in partnership with the Environment Agency but the service for Wales will be entirely hosted by Natural Resources Wales’ website.

Natural Resources Wales continue to work in partnership with the Environment Agency for provision of online supporting information and we are working with them to improve their webpages to further help with this clarity.

Recommendation 11 – Flood Warning and Community Response

Rec 11: Develop and implement a prioritised programme of improvement works to flood warning areas and thresholds, using the experience and data gathered from these storms. This should include engagement with professional partners and communities as appropriate.

Recommendation Lead: Natural Resources Wales

Project Reference: Project 2

Completion Date: December 2015

Summary of Recommendation Implementation

A Natural Resources Wales working group was set up to undertake these Recommendations, comprising a Flood Incident Management Team technical specialist from each local team within Wales (North, South West and South East).

Recommendations 11 and 12 are inherently linked, as to improve the Flood Warning Service, in particular the setting of flood warning areas and flood warning thresholds, validation information from real storm events is required. These two Recommendations were combined into one report.

The methodology involved consultation with Professional Partners to identify any concerns they may have with the current flood warning areas and thresholds including any specific locations.

Professional Partners were asked three questions with regards to Recommendation 11. From the replies received the Professional Partners had no concerns with the issue and timeliness of the flood warnings, but do have some concerns over the tone and wording of the messages. There were some specific locations which partners have raised, NRW are aware of these and are addressing these locations apart from two flood warning areas where further study is taking place (Caldicot and Wentlooge Levels in South East Wales).

Based on the responses from our Professional Partners the working group concluded that following review of the December 2013 and January 2014 flood events, the flood warning areas that required changes to them have already been undertaken and these areas are summarised within appendices to the report.

To help NRW improve our Flood Warning Service and our understanding of flood risk, for future events, we encourage anyone to send any evidence of flooding to the following email addresses so that we have all the available information to support any decisions taken.

South East Wales – flinese@cyfoethnaturiolcymru.gov.uk

South West Wales – flinesw@cyfoethnaturiolcymru.gov.uk

North Wales - flinen@cyfoethnaturiolcymru.gov.uk

Further information on this Recommendation can be found within the accompanying Project Report 2 - Recommendations 11 & 12.

Recommendation 12 – Flood Warning and Community Response

Rec 12: Review and consider additional sources of validation information for future incidents. This has potential to improve confidence in both forecasting and warning. This may involve seeking feedback from professional partners and others.

Recommendation Lead: Natural Resources Wales

Project Reference: Project 2

Completion Date: December 2015

Summary of Recommendation Implementation

A Natural Resources Wales working group was set up to undertake these Recommendations, comprising a Flood Incident Management Team technical specialist from each local team within Wales (North, South West and South East).

Recommendations 11 and 12 are inherently linked, as to improve the Flood Warning Service, in particular the setting of flood warning areas and flood warning thresholds, validation information from real storm events is required. These two Recommendations were combined into one report.

The methodology to Recommendation 12 involved consultation. Professional Partners were consulted to identify what validation techniques they currently use, if any. There were five questions asked as part of Recommendation 12.

From the replies received the majority of the Professional Partners do not carry out formal validation of impacts following flood events, though a few replied that they do carry out site inspections following receipt of flood warnings. From the replies received only police drones were suggested as capturing event data that NRW doesn't currently use. Gaps within validation data relate more to the sharing of data rather than the data collection itself. The replies suggest that there are no formal triggers for carrying out data validation and there are a variety of systems used for validation data and that approximate 40% of the replies share their data with NRW.

Validation is already carried out and will continue to be used within NRW. The working group concluded that all available methods of validation are being used. These validation techniques have been shared within NRW to ensure best practices are followed and the group concluded that new technologies when they become available should always be explored to see if further validation methods can be used.

To help NRW improve our Flood Warning Service and our understanding of flood risk, for future events, we encourage anyone to send any evidence of flooding to the following email addresses so that we have all the available information to support any decisions taken.

South East Wales – flinese@cyfoethnaturiolcymru.gov.uk

South West Wales – flinesw@cyfoethnaturiolcymru.gov.uk

North Wales - flinen@cyfoethnaturiolcymru.gov.uk

Further information on this Recommendation can be found within the accompanying Project Report 2 - Recommendations 11 & 12.

Recommendation 13 – Flood Warning and Community Response

Rec 13: Work with sample communities to identify options to help sustain an effective local response to flood warnings. This should consider communities where effective response and or confidence in the warning system is low.

Recommendation Lead: Natural Resources Wales

Project Reference: Project 3

Completion Date: March 2016

Summary of Recommendation Implementation

Natural Resources Wales led a series of participatory workshops which involved a wide range of professional partners along with members of the public who had experienced flooding, or who represented communities at risk from across Wales.

An assessment of barriers and ways to overcome them was considered which resulted in the identification of the following 5 options as key to achieving recommendation 13;

1. Better education about risks
2. Improve local gathering of information
3. Better local communication
4. Improve the quality of warnings
5. Improve the response to warnings

Summary:

There are interdependencies between all 5 options above, so they need to be progressed as part of an ongoing 'before during and after' a flood cycle.

They need to be achieved through better local engagement (see Recommendation 14) availability of good information and advice which details what warnings sound and look like what to do and when (Recommendation 15) and supported locally by volunteers as part of flood planning processes (Recommendation 16 & 17).

Organisations are already making improvements to existing warning services and using learning from Sciencewise and Ipsos Mori Flood communications research and public feedback to improve quality and accessibility of warning messages.

The recommended option: Better education about risks.

This needs to be led on a National Level by NRW, supported by a range of others, specifically the 4 newly formed LRF Community Resilience groups and locally by a wide range of interest groups and individuals.

Further information on this Recommendation can be found within the accompanying Project 3 Report – Recommendations 13, 14, 15, 16 & 17.

Recommendation 14 – Flood Warning and Community Response

Rec 14: Identify and evaluate options to help communities to become more self-sufficient and resilient and identify a recommended option

Recommendation Lead: Natural Resources Wales

Project Reference: Project 3

Completion Date: March 2016

Summary of Recommendation Implementation

Natural Resources Wales led a series of participatory workshops which involved a wide range of professional partners along with members of the public who had experienced flooding, or who represented communities at risk from across Wales.

The aims of the workshops were to;

- Bring together representatives of Risk Management Authorities, the public and other key delivery organisations within Wales who contribute to Recommendations 13 - 17.
- Act as a technical multi-partner advisory group, considering evidence, identifying gaps and opportunities which help to create more self-sufficient and resilient communities in Wales.
- Contribute practical ideas and suggestions as to how the recommendations are best taken forward, by identifying who should lead and support and the timescales involved (short, medium or long term).

Agreement was reached at an early stage of the project that;

- The scope of Project 3 work should be expanded to include all sources of flooding (not just coastal).
- Recommendations 13,15,16 & 17 should sit under the umbrella of Recommendation 14, as they are all essential components that contribute to achieving longer term sustainable resilience.

Findings were clear in that all 5 options listed below need to be delivered concurrently, delivering just one or two will not fully deliver Recommendation 14. This is due to the causal links that emerged.

- Improved Inter-Agency Working
- Better Engagement (current)
- Better public information about options
- Develop a broader community resilience plan – not just flooding
- Better engagement with future generations (education of young people)

Recommendation 14 – Flood Warning and Community Response

Summary:

As a result of a 4 stage consultative process, which was informed by existing and newly commissioned research, including 2 pilot Volunteer events, a set of practical suggestions for delivering recommendation 14's agreed vision '*Self-supporting communities that are resilient to flooding*' have been identified;

The recommended option (what needs to be done First):

Improved Inter-Agency Working, which needs to be supported by Better Engagement at local level

Improved Inter-Agency working needs to start with direction from Welsh Government – through the All Wales Community Resilience Group to implement the identified actions within this report. The new Flood and Coastal Risk Erosion Committee would also have a key role to play in supporting and progressing these recommendations.

Better Engagement at local level can also be improved by sharing of existing best practice and local resources. The mechanism for this is the same as above.

Further information on this Recommendation can be found within the accompanying Project 3 Report – Recommendations 13, 14, 15, 16 & 17.

Recommendation 15 – Flood Warning and Community Response

Rec 15: Produce and communicate nationally consistent, public focused information on the types and availability of property level protection measures and the support available.

Recommendation Lead: Natural Resources Wales

Project Reference: Project 3

Completion Date: March 2016

Summary of Recommendation Implementation

There is a clear need to;

- Produce separate tailored advice for professional and public audiences.
- Consider and address issues regarding data protection, commercial sensitivity and confidentiality around sharing of information when storing and sharing advice for and between professionals.

Recommendations identified;

- Pilot an annual Wales Flood Conference for public, professionals and all partner organisations. Consider using the Institution of Civil Engineers (ICE) event.
- Strengthen Joint Communications meetings between NRW, EA, SEPA, Met Office and DARDNI.
- Establish All Wales Professional Partner Network training events.
- Increase access to and use of Resilience Direct for professional partners including voluntary orgs, and promote this through the Wales Flood Group, Warning and Informing Group, Community Resilience Group and LRF Community Resilience subgroups.
- Develop an online public microsite and ensure the content addresses **known** information gaps including, for example, how to access and how to use Property/Individual Level Protection (PLP/IPP);

The recommended option: All of the above are relevant, but the recommended next step is to establish an online ‘micro site’ for Wales that all organisations can signpost public to for consistent advice and information that covers before during and after a flood cycle.

This should be taken in the first instance to the All Wales Community Resilience Group (Welsh Government).

The rationale for this is that this group functions at all Wales Level, its membership includes representation from many of the relevant organisations including the LRFs and has a wider remit that allows for consideration of the whole flood cycle in the context of longer term social and emotional resilience. NRW and other organisations can assist with the micro-site development.

Further information on this Recommendation can be found within the accompanying Project 3 Report – Recommendations 13, 14, 15, 16 & 17.

Recommendation 16 – Flood Warning and Community Response

Rec 16: Using the experience from these recent storms, identify and evaluate options for the future development of local Flood Plans in coastal areas and identify a recommended option to help these be more effective at improving community resilience.

Recommendation Lead: Natural Resources Wales

Project Reference: Project 3

Completion Date: March 2016

Summary of Recommendation Implementation

Natural Resources Wales led a series of participatory workshops which involved a wide range of Professional Partners along with members of the public who had experienced flooding, or who represented communities at risk from across Wales.

The following 5 options were identified as key to delivering Recommendation 16, with the acknowledgement that there are interdependencies with other Project 3 Recommendations (see Recommendation 14) ;

- Better understanding of who does what in the local community flood plan.
- Improve the engagement of communities in planning.
- Maintain community engagement if there is no flood, or after a flood.
- Better implementation of the local community flood plan.
- Learn and implement lessons after the event.

Recommendations identified;

- Consider and disseminate learning from Flood Awareness Wales' Independent Review commissioned by NRW which looks at flood plans and volunteers.
- Develop broader resilience plans that incorporate flooding (see Recommendation 14).
- Share emergency plans with relevant agencies and increase communication links with the public and partners on a more local level. (see Recommendation 14)

The recommended option: A combination of the above is required, starting with raising awareness of a better understanding of who does what in all resilience plans, and particularly local community flood plans.

This should be led at National Level by Welsh Government – through the Wales Flood Group and Local Resilience Forum structures. NRW can and will assist with this, but it needs buy-in from all parties.

Further information on this Recommendation can be found within the accompanying Project 3 Report – Recommendations 13, 14, 15, 16 & 17.

Recommendation 17 – Flood Warning and Community Response

Rec 17: Using the experience from these recent storms, identify and evaluate options for the future development of local Flood Plan Leads / Warden Volunteers in coastal areas and identify a recommended option.

Recommendation Lead: Natural Resources Wales

Project Reference: Project 3

Completion Date: March 2016

Summary of Recommendation Implementation

Natural Resources Wales led a series of participatory workshops which involved a wide range of Professional Partners along with members of the public who had experienced flooding, or who represented communities at risk from across Wales. This included 2 pilot Volunteer Network events which aimed to ;

1. Provide an opportunity for Volunteers to meet others carrying out similar roles and share best practice.
2. Share advice from specialist partner organisations to obtain an increased understanding of roles and responsibilities at the 3 stages; before, during and after a Flood.
3. Discuss health and safety risks associated with flood volunteer roles and identify ways to mitigate them.

As there are strong linkages and interdependencies between this Recommendation and others within Project 3, (specifically Recommendation 16) the options and Recommendations should be considered together.

Options identified (specific to Volunteers):

- Consider and disseminate learning from Flood Awareness Wales' Independent Review commissioned by NRW which looks at flood plans and volunteers.
- Hold Flood Plan Volunteer Network events.
- Develop Volunteer Health and Safety Checklists.

These options should be considered in the first instance at National Level by Welsh Government – through the All Wales Community Resilience Group and its member organisations.

The rationale for this is that this group functions at all Wales Level, its membership includes representation from many of the relevant organisations including the LRFs and organisations that specialise in supporting volunteers. NRW can and will assist with this process.

Further information on this Recommendation can be found within the accompanying Project 3 Report – Recommendations 13, 14, 15, 16 & 17.

Recommendation 18 – Operational Response

Rec 18: Review and identify how to improve involvement of infrastructure operators and managers in the coastal flood risk incident management process.

Recommendation Lead: Natural Resources Wales

Project Reference: Project 10

Completion Date: November 2015

Summary of Recommendation Implementation

Natural Resources Wales created a questionnaire which was sent out to 15 Coastal Risk Management Authorities (RMAs), Local Resilience Forums (LRFs), the Wales Utility Group (WUG), Network Rail (NR) and the Trunk Road Agencies within Wales.

This consultation process was to help identify:

- Current levels of awareness and involvement from infrastructure operators and managers;
- Concerns or barriers that restrict the involvement of other organisations;
- Suggestions on how improved involvement can be achieved and implemented.

A total of 26 consultation responses were received. The key points raised were that:

- There is a need for awareness raising and more regular contact / involvement between organisations;
- Infrastructure operators, utility providers and RMAs should be able to share appropriate contact details;
- There should be improved sharing and understanding of infrastructure and utility asset inspection and maintenance regimes at a local level;
- There should be a greater shared understanding at a local level of infrastructure and utility assets that are at risk of flooding.

Summary:

All groups consulted felt that more needed to be done, and could be done, to improve the involvement of infrastructure providers and utility operators in the flood risk management process from forward planning to incident response. The starting point for improved involvement was suggested to be better information sharing between organisations.

After considering the information gathered, the following solution has been proposed:

Resilience Direct is explored as an option for all parties to share and store information at the 'official sensitive' level.

Further information on this Recommendation can be found within the accompanying Project 10 Report – Recommendations 18, 43, 44, 45, 46 & 47.

Recommendation 19 – Operational Response

Rec 19: Continue to develop potential ‘impact scenario’ assessments, maps and/or statements. This work must be developed in close discussion with professional partners to ensure it meets all parties’ requirements.

Recommendation Lead: Natural Resources Wales

Project Reference: Project 4

Completion Date: Ongoing

Summary of Recommendation Implementation

An internal Natural Resources Wales (NRW) working group was set up to undertake this Recommendation, which included a Flood Incident Management (FIM) team technical specialist from each area within Wales (North, South West and South East).

Static impact scenario assessment maps have previously been produced for South West and South East Wales, but there are currently no similar maps available for North Wales. These impact scenario maps were produced by the local FIM teams based on documented flood depths and extents which occurred during previous flood events.

The working group discussed whether these static maps should be extended to the North Wales area. During the discussion it was identified that North Wales would prefer a more dynamic approach to the mapping, with maps produced automatically each time a flood event is forecast to occur, based on the forecast condition triggering activation of the flood warning areas. Consultation has been undertaken with Risk Management Authorities (RMAs) to identify their opinion on the existing static mapping approach and the new more dynamic mapping methodology proposed for North Wales.

For this Recommendation, a pilot study has been undertaken to trial the new dynamic mapping for a number of sites in North Wales. This has involved work being undertaken by the FIM teams with help from NRW GIS specialists. A review of the pros and cons of the existing static mapping and the pros and cons of the proposed dynamic mapping has been undertaken.

The scope of this work needs to be considered within NRW’s future mapping and modelling programme. The merits of these proposals need to be gauged against other priorities within the business before engaging externally with Welsh Government and the Wales Flood Group as end users of the maps via Local Resilience Forum activities and access to the Resilience Direct website.

Further information on this Recommendation can be found within the accompanying Project Report 4 - Recommendation 19.

Recommendation 20 – Operational Response

Rec 20: Review the local decision making process associated with the issue of Severe Flood Warnings and evacuation procedures in December 2013 and early January 2014. Identify improvements and share at an all Wales level.

Recommendation Lead: Natural Resources Wales

Project Reference: Project 4

Completion Date: March 2016

Summary of Recommendation Implementation

A working group was set up to undertake this Recommendation internally within Natural Resources Wales (NRW), which included a Flood Incident Management (FIM) team technical specialist from each area within Wales (North, South West and South East) with a Senior Advisor in Flood Warning and Informing to steer the Recommendation.

“Severe Flood Warnings (SFW) are reserved for exceptional flooding situations. They should not be used when flooding of property is expected, even if evacuation may be necessary, unless at least one of the following criteria are met:

- *Significant risk to life, or*
- *Significant disruption to the community caused by widespread or prolonged flooding.”*

The first stage included consultation with our Professional Partners through a short questionnaire to establish the level of understanding of the meaning and purpose of a Severe Flood Warning as well as their role in the decision making process. Responses to the questionnaire highlighted varying degrees of understanding.

A review of NRW processes confirm that the decision making process was consistently applied. However it was felt that staff and duty officer confidence in their role in the decision-making process varied.

The SFW is a nationally consistent message and there is no clear driver for changing it.

Levels of understanding within both NRW and Partner organisations could however be improved. This led to an action plan to deliver training and table-top exercising to both groups. A training presentation has been developed and will be rolled through internal NRW duty officer training along with presentations and (light-touch) table-top exercises to multi-agency groups.

NRW Flood Incident Management teams are now developing a programme of training for these groups with the aim to complete by Autumn 2016.

Recommendation 21 – Operational Response

Rec 21: Assess our national capacity to respond to a widespread and sustained period of coastal flooding. This should include consideration of when the current national resource pool will no longer function effectively. This should also consider post incident recovery issues.

Provide a report with recommendations for improvement.

Recommendation Lead: Welsh Government

Project Reference: Outside Projects

Completion Date: June 2015

Summary of Recommendation Implementation

Wales Flood Group is best placed to lead on this work as each agency within the group has emergency plans in place, which they have tested against flood scenarios.

Recommendation 22 and the coastal evacuation exercise ('Exercise Megacyma) held in March 2015 helped inform the process of how we prepare for major incidents but ultimately this Recommendation relates to local multi-agency planning which is already taking place; particularly in the high risk areas.

In terms of national capacity, the emergency services have national arrangements for wide-area support for all emergencies but nothing like this exists for Local Authorities. In taking forward planning at the local level, the LRFs also need to consider how Local Authorities broker mutual aid not only with neighbouring authorities but also with those from further afield.

- Review output and lessons learnt from Exercise Megacyma in March 2015. There are 10 recommendations within the Exercise's de-brief report which will be ongoing and monitored by the Wales Flood Group.
- Link with Recommendation 22 and 37.

Further information on this Recommendation can be found within the linked summary page of the Megacyma Exercise.

Recommendation 22 – Operational Response

Rec 22: Assess the collective ability to provide an effective response to a potential large scale evacuation scenario in either north east or south east Wales. This should also consider post incident recovery issues.

Provide a report with recommendations for improvement.

Recommendation Lead: Wales Flood Group

Project Reference: Outside Projects

Completion Date: June 2015

Summary of Recommendation Implementation

Wales Flood Group is best placed to lead on this work as each area of the agencies within the group have emergency plans in place, which they have tested against flood scenarios.

Recommendation 22 and the coastal evacuation exercise ('Exercise Megacyma') held in March 2015 helped inform the process of how we prepare for major incidents but ultimately this Recommendation relates to local multi-agency planning which is already taking place; particularly in the high risk areas.

In terms of national capacity, the emergency services have national arrangements for wide-area support for all emergencies but nothing like this exists for Local Authorities. In taking forward planning at the local level the LRFs also need to consider how Local Authorities broker mutual aid not only with neighbouring authorities but also with those from further afield.

- Review output and lessons learnt from Exercise Megacyma. There are 10 Recommendations within the Exercise's de-brief report which will be ongoing and monitored by the Wales Flood Group.
- Link with Recommendation 22 (and 37).

Further information on this Recommendation can be found within the linked summary page on Exercise Megacyma.

Recommendation 23 – Operational Response

Rec 23: Review the Wales resilience structures and ways of working to identify what changes may be needed to enable us to collectively be better prepared and resilient to future coastal flooding.

Recommendation Lead: Local Resilience Forums

Project Reference: Outside Projects

Completion Date: June 2015

Summary of Recommendation Implementation

The Local Resilience Forums (LRFs) and their Severe Weather Groups were best placed to lead on this work as each area has recovery plans in place, which they have tested against flood scenarios.

The findings of Phase 2 of the Compact for Change were accepted by the Wales Resilience Forum on 13th November 2014. The LRFs now have responsibility for implementing these changes.

The proposed changes to the Wales resilience structures under the Compact for Change were tested through Exercise Megacyma Cymru in March 2015. The Exercise generated a further ten recommendations for change and these will be ongoing and monitored by the Wales Flood Group. Learning from the Exercise will be applied to ensure we are better prepared for future coastal flooding incidents.

The Exercise Megacyma summary page can be found at:

<http://gov.wales/topics/environmentcountryside/epq/flooding/planning/exercisemegacyma/?ctx=rO0ABXNyAA5qYXZhLmxhbmcuTG9uZzuL5JDMjyPFAgABSgAFdmFsdWV4cGQamF2YS5sYW5nLk51bWJlcoasIR0LIOCLAgAAeHAAAAAAAAAACwA&view=Standard&skip=1&lang=en>

There is work to be done to make the Exercise's recommendations a reality, with the following key points being of note:

1. An update to the Wales Flood Response Framework.
2. The principles of a joint-Strategic Coordination Group (SCG) should be considered across all Welsh LRFs, where this is practicable, and the Pan-Wales Response Plan should reflect any changes at the local and regional level– A Task and Finish Group has been established and a concept paper produced. The LRFs will be consulted on the outcome with a view to embedding the principles in local plans.
3. Further work is required in drawing together all existing initiatives of dealing with vulnerable people into a single, national planning group to take this work forward in a co-ordinated way – A pilot project is currently being undertaken in West Wales to develop a GIS system to provide real time data on the location of vulnerable people during flooding incidents.
4. The principle of wide-area recovery groups should also be explored – A Task and Finish Group has been established and its findings are currently with the LRFs for consultation.
 - Review output and lessons learnt from Megacyma Cymru exercise 2015.

Further information on this Recommendation can be found within the linked summary page on Exercise Megacyma.

Recommendation 24 – Operational Response

Rec 24: Options to seek improvements to the standard of protection at the Garford Road area of Rhyl should be identified and evaluated. This should include detailed hydraulic analysis of the capacity and performance of the storage lagoon. This should include an assessment of the stairwell and slipway openings and the interaction with the adjacent golf course area.

Recommendation Lead: Denbighshire County Council

Project Reference: Outside Projects.

Completion Date: March 2016

Summary of Recommendation Implementation

During the early stages of carrying out this recommendation, it was recognised by Denbighshire County Council that there was the possibility of achieving some ‘quick wins’ by carrying out some quite basic, but highly effective, improvements to the existing coastal defences. These improvements included:

1. The replacement of timber stop logs at stairwell and slipway openings by steel flood gates, thus significantly reducing the risk of a breach scenario.
2. The construction of a new steel flood gate at Splash Point to prevent overtopping waves being driven in an easterly direction along the promenade and towards properties (as happened on 5th December 2013).
3. The introduction of a formal channel at the east end of the Garford Road flood storage lagoon to encourage the passage of flood water towards Rhyl golf course and away from properties.
4. The replacement of the chain link fence between the storage lagoon and the golf course by a collapsible fence (debris which built up on the fence during the 2013 storm probably contributed to the flooding problem).

Whilst the overtopping that took place in 2013 was sufficient to completely overwhelm the defences, and inundate the golf course, it was apparent from studying topographical surveys of the golf course that additional temporary storage capacity could be found fairly easily by constructing a wall and/or bund around the golf course and carrying out some relatively minor re-shaping of the course itself. In addition, a system has been designed whereby flood water can be released back out to sea at low tide via a culvert and penstock arrangement. This work is ongoing and should be complete by summer 2016.

Notwithstanding the particular requirements of Recommendation 24, as a Lead Local Flood Authority Denbighshire County Council has an overarching aim to understand why the flood occurred, the chances of a flood of a similar magnitude happening again and measures that can be taken to reduce the risk. To this end, the Council appointed consultants to carry out a detailed assessment of the 5th December 2013 event and to carry out a project appraisal study to identify options to reduce the risk to an acceptable level. The findings of the consultant’s work are as follows.

- i. In order to determine the return period of the event, the consultant carried out a multi-variate probability assessment, which examined the likelihood of a number relatively unusual events all occurring at the same time, for instance, a high astronomical tide

Recommendation 24 – Operational Response

- combined with an atmospheric surge with gale force onshore winds. The assessment concluded that the event had approximately a 0.5% annual probability.
- ii. Using the outputs from the multi-variate probability assessment, the consultant has been able to establish a set of 'design events' from 100% to 0.1% annual probability, which has enabled an assessment of the current standard of protection in the Garford Road area. The conclusion from this work is that flooding of property is likely to occur during events of between a 2% and 1% annual probability. When sea level predictions are applied, the likelihood of flooding increases significantly.
 - iii. The project appraisal study has considered a number of possible options to reduce flood risk to an acceptable level; these include:
 - a) Beach Recharge
 - b) An offshore breakwater
 - c) A new sea defence consisting of a higher sea wall with concrete stepped revetment
 - d) Rock armour
 - e) A sand engine

The recommended option is (b) an offshore breakwater. Not only does this provide the most economical solution, when considering the whole life costs of the option, it also reduces the likelihood of beach erosion and the consequential increased risk of breach and overtopping. The Project Appraisal Report is currently with the Welsh Government for its comment and approval.

Further information on this Recommendation can be found within the linked Report by Denbighshire County Council.

Recommendation 25 – Operational Response

Rec 25: All Risk Management Authorities (RMAs) around Wales should review their local use of stop boards, stop logs, temporary barriers or moveable gates. The purpose of this review is for RMAs to satisfy themselves that existing arrangements are appropriate and robust. Consideration should be given to replacing existing arrangements with more permanent or more robust temporary solutions. This review should be ‘risk based’ and focused on the locations with highest local risk.

Recommendation Lead: Welsh Local Government Association

Project Reference: Project 5

Completion Date: January 2016

Summary of Recommendation Implementation

The initial exercise was to assess current arrangements with regards to temporary installations across all Risk Management Authorities (RMAs). This included locations of use, when are the structures installed and removed, current inspection and maintenance regimes and gathering good practice from across Wales.

A data request in the form of a brief questionnaire was sent out to Coastal RMAs to gather information relevant to Recommendation 25 (and shares links with Rec 26 & 31).

The survey was sent out to 16 RMAs and 13 responses were received. The responses indicated that:

- There is a good confidence level on the location of high flood risk areas across Wales.
- There are some inconsistencies in the way data related to temporary defences is recorded.
- There are solid and consistent inspection and maintenance regimes in place within all RMAs.

Based on the responses a report has been produced that addresses Recommendations 25 and 26 in combination. The report comprises of 2 parts:

- Review of the findings.
- Conclusion and recommendations.

Five recommendations have been put forward within the report:

1. Creation of systems to record information related to temporary and secondary defences (for those who haven't already done so).
2. Compare inspection regimes between LLFAs and NRW to avoid duplication and overlap.
3. Share relevant information between RMAs on temporary or secondary defences (locally or regionally).
4. Focus on the performance of whole defence systems instead of focussing on individual sections.
5. Welsh Government to review Schedule 1 of the Flood Water Management Act 2010 to enable RMAs to designate third party townscape or landscape assets as secondary defences.

Further information on this Recommendation can be found within the accompanying Project Report 5 – Recommendations 25 & 26.

Recommendation 26 – Coastal Defences

Rec 26: All Risk Management Authorities (RMAs) around Wales should review locations where they have secondary defence systems in place. The purpose of this review is for RMAs to satisfy themselves that the secondary systems will operate as designed when required. This review should be ‘risk based’ and focused on the locations with highest local risk.

Recommendation Lead: Welsh Local Government Association

Project Reference: Project 5

Completion Date: January 2016

Summary of Recommendation Implementation

The initial exercise was to assess current arrangements with regards to secondary defences across all Risk Management Authorities (RMAs). This included locations of use, when are the structures installed and removed, current inspection and maintenance regimes and gathering good practice from across Wales.

A data request in the form of a brief questionnaire was sent out to Coastal RMAs to gather information relevant to Recommendation 26 (and shares links with Rec 25 & 31).

The survey was sent out to 16 RMAs and 13 responses were received. The responses indicated that:

- There is a good confidence level on the location of high flood risk areas across Wales.
- There are some inconsistencies in the way data related to secondary defences is recorded.
- There is low confidence level in the identification of secondary flood defences.

Based on the responses a report has been produced that addresses Recommendations 25 and 26 in combination. The report comprises of 2 parts:

- Review of the findings.
- Conclusion and recommendations.

Five recommendations have been put forward within the report:

1. Creation of systems to record information related to temporary and secondary defences (for those who haven't already done so).
2. Compare inspection regimes between LLFAs and NRW to avoid duplication and overlap.
3. Share relevant information between RMAs on temporary or secondary defences (locally or regionally).
4. Focus on the performance of whole defence systems instead of focussing on individual sections.
5. Welsh Government to review Schedule 1 of the Flood Water Management Act 2010 to enable RMAs to designate third party townscape or landscape assets as secondary defences.

Further information on this Recommendation can be found within the accompanying Project Report 5 – Recommendations 25 & 26.

Recommendation 27 – Coastal Defences

Rec 27: There needs to be continued sustained investment to manage the national coastal risks to acceptable levels.

This must include flood forecasting, warning, awareness, response and recovery, as well as flood defences. Particular focus has to be on the existing defences to ensure they continue to be fit for purpose, as well as investment in new defences to reduce the flood risk for more locations.

Recommendation Lead: Welsh Government – Flood and Coastal Erosion Risk Management

Project Reference: Outside Projects

Completion Date: June 2015

Summary of Recommendation Implementation

- The flood and coastal risk management budget for 2016/17 has seen an increase thanks to additional funding from central capital.
- The focus remains on maximising the funding available to deliver the flood and coastal erosion risk management programme.
- Additional funding for 2016/17 has been secured for coastal local authorities to undertake project appraisals and detailed design work in preparation for the Coastal Risk Management Programme.
- Additional funding has been secured for NRW and local authority schemes, maintenance and emergency repairs in light of the December 2015 storms.

Flood and coastal erosion risk management (FCERM) remains a priority for this Government. All indications are that public spending constraints are likely to continue but flood budgets have been sustained and are currently complemented by an injection of funds for the Coastal Risk Management Programme.

Welsh Government will continue to maximise opportunities to sustain investment within the funding envelope available. Welsh Government FCERM team hold regular discussions with finance colleagues and have successfully bid for additional capital resulting in an increase in FCERM funding for 2016/17.

Whilst investment needs to continue to ensure existing defences continue to be fit for purpose, investment will also focus on improved flood risk mapping, forecasting and warning, community resilience and awareness, response and recovery as well as new flood and coastal risk management schemes and adaptation.

Any flood and coastal erosion risk management investment will consider all types of flooding.

Delivery of this Recommendation should include consideration of Recommendations from 'the Welsh Coastal Storms, December 2013 & January 2014 – an assessment of environmental change' report delivered under Recommendation 36.

Recommendation 28 – Coastal Defences

Rec 28: Review and identify options to maximise certainty in flood and coastal erosion risk management funding over a longer timeframe and to maximise flexibility in the use of this funding.

This would mean less focus on annual and in year budgets and more focus on delivery and budget management of 3-5 years.

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| Recommendation Lead: | Welsh Government – Flood and Coastal Erosion Risk Management |
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| Project Reference: | Outside Projects |
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| Completion Date: | June 2015 |
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Summary of Recommendation Implementation

Existing funding for flood and coastal erosion risk management considers all types of flood risk management and interventions.

The Flood and Coast Investment Programme will consider all sources of flooding. Further development of the Programme will provide a methodology for prioritisation of funding and a long term schedule of schemes for future investment. Improvements are already being made to the programme. Welsh Government are working with NRW to refine the Communities at Risk Register so that it can be shared with all RMAs and used to prioritise areas for investment.

Developing the Coastal Risk Management Programme providing a £150 million capital value programme to Local Authorities to deliver coastal risk management activities between 2018 and 2021. Welsh Government is working with local authorities supporting the development of investment cases for potential projects. Programme improvements are underway to create a longer pipeline of schemes and improve the claims and appraisal process.

Recommendation 29 – Coastal Defences

Rec 29: The development of the National Programme of Investment should be progressed as a matter of importance and its development should seek a wide range of ways of working and technical improvements to the flood and coastal erosion risk management investment allocation, decision making and prioritisation process.

Recommendation Lead: Welsh Government – Flood and Coastal Erosion Risk Management

Project Reference: Outside Projects

Completion Date: June 2015

Summary of Recommendation Implementation

Welsh Government held a consultation on the proposed Flood and Coast Investment Programme between December 2014 and March 2015. A summary of consultation responses received was published in June 2015.

Full details about this consultation exercise are available at:

<http://gov.wales/consultations/environmentandcountryside/flood-and-coast-investment-programme-facip/?lang=en> .

This programme will set out a prioritisation methodology to enable areas of Wales to be ranked according to risk from all sources of flooding. An index will be created for use in helping to identify schemes and prioritise funding.

The Flood and Coast Investment Programme will consider all sources of flooding. Further development of the Programme will provide a methodology for prioritisation of funding and a long term schedule of schemes for future investment. Improvements are already being made to the programme. The next step will be to work with NRW to consider how the Communities at Risk Register can be used to prioritise areas for investment and ensuring that asset/defence data is accurate and reflected in the maps.

Recommendation 30 – Coastal Defences

Rec 30: Review and identify options to gain additional funding to supplement core FCERM investment. This must be closely aligned with the development of the National Programme for Investment.

Recommendation Lead: Welsh Government – Flood and Coastal Erosion Risk Management

Project Reference: Outside Projects

Completion Date: June 2015

Summary of Recommendation Implementation

Ministers have announced a £150 million capital value programme of investment in flood risk infrastructure projects with construction scheduled to taking place 2018-2021. This is being taken forward as the Coastal Risk Management Programme. This will be co-financed between local authorities and Welsh Government with Welsh Government contributing 75% to construction costs. This additional funding will be achieved using borrowing powers and is additional to the core grant-funded national programme of investment.

Alignment with the development of the core national programme is achieved by shared ministerial oversight and overlapping governance structures.

An initial list of projects has been identified for further development and prioritisation through feasibility studies, project appraisals and detailed design.

Whilst the Coastal Risk Management Programme will directly benefit coastal/tidal projects it will also indirectly benefit fluvial and surface water flood risk schemes by allowing core funding to concentrate on these areas.

Recommendation 31 – Coastal Defences

Rec 31: Produce a complete national dataset of coastal protection and defence assets including details of areas benefitting.

It is essential that this dataset becomes a ‘live management tool’ and not merely a representative picture of a snapshot in time. This dataset must therefore be associated with a process for ensuring the information is maintained.

Recommendation Lead: Natural Resources Wales

Project Reference: Project 6

Completion Date: Ongoing

Summary of Recommendation Implementation

At an early stage, it was decided that the asset data issues highlighted in the Wales Coastal Review Delivery Plan Recommendation 31 were also applicable to fluvial watercourses. As a result, it was decided that Project 6 would address asset data across the whole of Wales and include ‘landlocked’ Risk Management Authorities (RMAs) as well as those with interests on the coast.

The first phase of addressing the issues raised in Recommendation 31 was to get a sound understanding of how asset data management is currently being carried out amongst all RMAs. A questionnaire to capture this information was created for RMAs to complete in July 2015. While the main focus was on Natural Resources Wales (NRW) and Local Authorities (LAs), organisations such as Welsh Water, Network Rail and both Trunk Road Agents for Wales were also consulted. The survey targeted key information such as:

- How many assets are maintained?
- The type of assets maintained?
- What information is stored and in what format?
- Do you have plans to upgrade your current asset database?

There was a good response to the survey with around 85% completing the survey. The main findings of the survey were:

- All stored information on assets in some format.
- Fundamental asset data is in place e.g. asset owners, asset type, location, National Grid Reference.
- Over 60% are interested in using AMX.
- Information on maintenance and inspection is patchy.
- There is little in the way of data showing the people and property benefitting from flood risk assets.

Using the information provided a number of options were put forward. It was identified that there was no perfect solution in achieving the aim of a nationally consistent asset dataset. All options had their relative merits and drawbacks.

The main areas addressed were in relation to how data would be accessed and managed in the future, along with ensuring a consistent data format. Also, the availability of resources was a major factor in identifying the most viable solution.

Recommendation 31 – Coastal Defences

The issue of the asset database needing to be a 'live management tool' was also considered. Whilst it is important that asset data should be kept up-to-date and accurate, it should be remembered that there is relatively little change in the basic asset data over time. While it is important that changes are logged, the need for updates on a daily/weekly basis should not be the most influential factor in a future solution.

Recommendations

The recommendations put forward to address Recommendation 31 are:

- The NRW AMX asset management system should be used to store flood risk asset information for all RMAs in Wales. Other RMAs to supply NRW with asset data in a suitable format for placement on the NRW AMX system.
- Where AMX is being purchased by other RMAs, the same AMX system architecture currently used in NRW, should be used. This will ensure that all asset data fields are consistent across RMAs in Wales.
- NRW Area flood risk teams to review their respective coastal asset datasets on AMX. This is to ensure that all flood risk assets have been captured and have the correct inspection frequency assigned to it.

Conclusion

The views of senior Flood Risk Managers at NRW, WLGA and the AMX Project team have been taken into account to assess the viability of the options put forward. The general opinion is that AMX can be used to provide a consistent national asset dataset in Wales. WLGA, WG and NRW will need to collectively agree on which option is to be taken forward.

Further information on this Recommendation can be found within the accompanying Project Report 6 – Recommendations 31 & 32.

Recommendation 32 – Coastal Defences

Rec 32: Review and identify options to achieve a more consistent approach to the inspection of the network of coastal defence systems. This must include recommendations to improve the efficiency and effectiveness of the asset inspection process.

Recommendation Lead: Natural Resources Wales

Project Reference: Project 6

Completion Date: November 2015

Summary of Recommendation Implementation

As with Recommendation 31, the decision was made at an early stage to address the issue across all Risk Management Authorities (RMAs) in Wales, not only those with a coastal element. Once again, the starting point for this piece of work was to investigate what inspections regimes are currently being employed. To capture this information, an additional section was added to the asset data management questionnaire.

The asset inspection section focussed on:

- The method and tools RMAs use to inspect flood risk assets in Wales.
- The frequency of inspection and what information is collected.
- Who carries out the inspections and their qualifications.

Again, there was a good response from the RMAs with both positive and negative trends identified, the main findings were:

- Inspections are being carried out in some form e.g. during culvert grid clearance.
- The majority of assets have at least an annual inspection.
- Few RMAs have a dedicated inspection resource.
- There is little in the way of inspection of third party assets on Ordinary Watercourses.
- There is no consistency in asset condition assessment methodology.
- There is no like-for-like comparison of asset condition between RMAs.

An evaluation exercise looking at the options available in creating a consistent and risk based asset inspection process was carried out. As with the options appraisal made under Recommendation 31, each option identified has its inherent benefits and drawbacks.

Recommendations

The following recommendations are put forward in the main report to create a consistent and effective asset inspection process in Wales:

- The current inspection methodology used in NRW should be adopted across all RMAs in assessing the condition of flood risk assets. This would include the 5 point asset condition grading system.
- T98 accreditation courses in asset inspection to be arranged to train other RMA representatives to carry out flood risk asset inspections for their respective areas.

Recommendation 32 – Coastal Defences

- In the short term, NRW asset inspectors to carry out inspection of the key flood risk assets identified by the other RMAs. It is proposed that inspections in low flood risk areas on Main Rivers will be temporarily stopped or reduced. This will be until representatives of the other RMAs achieve the T98 accreditation in asset inspection and can carry out inspections themselves.
- A rebranded version of the EA Condition Assessment Manual (CAM) to be developed for use across all RMAs in Wales.

Review of coastal asset data on AMX

Whilst the scope of Project 6 covers asset data management and inspection for all of Wales, coastal data stored on AMX was given specific focus. A desk-top exercise was carried out of asset data on the coast with particular interest given to the relationship between inspection frequency and ownership. The main findings of this review were:

- The majority of NRW maintained coastal assets are inspected on a 6 or 12 month frequency. However, there is evidence that Local Authority and third party assets on the coast do not get inspected at the same frequency. Some of these assets provide flood and erosion protection to key infrastructure and industry.

Recommendations following the coastal asset data review:

- South East Area and South West Area of NRW to review their respective coastal datasets to ensure that all flood risk assets have been identified and placed on AMX.
- Blanket annual inspection for all flood risk assets on the coast - irrespective of ownership.

Further information on this Recommendation can be found within the accompanying Project Report 6 – Recommendations 31 & 32.

Recommendation 33 – Coastal Defences

Rec 33: Continue to develop a nationally prioritised programme of coastal modelling and mapping improvements. This must be nationally risk based and consistent.

Recommendation Lead: Natural Resources Wales

Project Reference: Outside Projects

Completion Date: Ongoing

Summary of Recommendation Implementation

We will aim to develop and implement a National prioritised programme or Work plan of modelling and mapping within Natural Resources Wales.

This will use the Communities at Risk Register to provide an All-Wales view of risk to develop the National Work plan.

We will aim to balance National-scale projects against local priority projects but using the register ranking to assign priority scores.

The work plan will improve our datasets to provide a more consistent description of risk both fluvial (broad scale) and coastally.

The method for using resources in this National format is still to be agreed, and is subject to the ongoing Business Area Review in Flood Risk Management.

We will also continue to develop our suite of online flood risk information products, which will align with the improvement of the flood risk datasets.

Recommendation 34 – Coastal Defences

Rec 34: Locations and communities which experienced flooding in December 2013 and early January 2014 should be subjected to a risk based assessment to determine if further risk management activity/intervention is needed and can be justified.

Recommendation Lead: Natural Resources Wales

Project Reference: Outside Projects

Completion Date: November 2015

Summary of Recommendation Implementation

The Wales Coastal Flooding Review Phase 1 Report identified areas around the coast that suffered impacts from the December 2013 and January 2014 storms. The Phase 2 Report defined this Recommendation, listing different locations around Wales that were flooded in these winter storms.

To complete this Recommendation Natural Resources Wales periodically sought information from Risk Management Authorities for these flooded locations regarding:

- a) Any additional works that have been implemented at this site since the winter 2013/14 storms, or,
- b) Any works that are planned to be implemented at this site in the near future.

These requests were issued in:

- October 2014.
- June 2015.
- October 2015.

Responses have been collated and summarised into the accompanying *Table 2* to show works that have been carried out at these locations between January 2014 and November 2015, together with identification of any further works planned for these locations.

Table 2 - Overview of Flooded Locations

This table has been drawn from Table 5 of the Wales Coastal Flooding Review: Phase 2 Report in providing an overview of locations that experienced the higher numbers of property flooding in December 2013 and January 2014, with a final column added to the right that summarises the updates received from Risk Management Authority partners. This table is not intended to be fully inclusive of all property flooding.

| Community name | No properties flooded | Local Authority | Which Event | Status of works carried out |
|---|--|-----------------|-------------|---|
| Rhyl (Splash Point) | 138 homes | Denbighshire | Dec'13 | Denbighshire County Council has developed a Project Appraisal Report for a future East Rhyl Coastal Defence Scheme that is being considered under Welsh Government's Coastal Risk Management Programme. See Recommendation 24 for details. |
| Kinmel Bay | 8 homes, 1 supermarket | Conwy | Dec'13 | Repair works completed and no further work planned. |
| East of Pwllheli | Caravan park | Gwynedd | Jan'14 | Repair works completed and identified scope for possible further work. |
| Llanbedr | 4 homes plus farms | Gwynedd | Jan'14 | Repair works completed and no further work planned. |
| Barmouth | 15 homes, 2 commercial | Gwynedd | Jan'14 | Gwynedd Council is seeking to progress coastal defence schemes at both the north promenade area and Viaduct Gardens via Welsh Government's Coastal Risk Management Programme. |
| Borth | 12 homes, 2 non-residential | Ceredigion | Jan'14 | Repair/reinstatement works were undertaken at Borth, Aberystwyth, Aberaeron and Llangrannog following the storms. Ceredigion County Council is seeking to progress coastal defence schemes at Aberystwyth and Aberaeron via Welsh Government's Coastal Risk Management Programme and is looking to develop future management proposals at Borth and Llangrannog. NRW are promoting a scheme to address tidal inundation and associated flooding problems at Cardigan in conjunction with Dwr Cymru Welsh Water and Ceredigion County Council. |
| Aberystwyth | 23 properties (typically basement flats) | Ceredigion | Jan'14 | |
| Aberaeron | 7 properties | Ceredigion | Jan'14 | |
| Cardigan | 30 properties | Ceredigion | Jan'14 | |
| Lower Town Fishguard | 13 homes, 2 non-residential | Pembrokeshire | Jan'14 | Ongoing community resilience project. All planned works now complete. |
| Little Haven | 4 homes, 3 non-residential | Pembrokeshire | Jan'14 | Repair works now complete and no further work planned. |
| Amroth | 4 homes, 1 caravan park, 1 non-residential | Pembrokeshire | Jan'14 | Repair works now complete and no further work planned. |
| Carmarthen Bay Holiday Park near Kidwelly | 70 chalets, 6 static caravans flooded. | Carmarthenshire | Jan'14 | Privately owned defence. Unknown whether structural repairs were carried out at this location. |

Table 2- Overview of Flooded Locations

Recommendation 35 – Coastal Defences

Rec 35: Near miss locations and locations subjected to substantial foreshore change should be identified and subjected to a risk based assessment to determine if further risk management activity/intervention is needed and can be justified.

Recommendation Lead: Natural Resources Wales

Project Reference: Outside Projects

Completion Date: November 2015

Summary of Recommendation Implementation

The Wales Coastal Flooding Review Phase 1 Report identified areas around the coast that suffered impacts from the December 2013 and January 2014 storms. The Phase 2 Report outlined this recommendation, listing over 30 different locations around Wales that had experienced 'near misses' in these winter storms.

To complete this Recommendation Natural Resources Wales periodically sought information from Risk Management Authorities for these 'near miss' locations regarding:

- a) Any additional works that have been implemented at this site since the winter 2013/14 storms, or,
- b) Any works that are planned to be implemented at this site in the near future.

These requests were issued in:

- October 2014.
- June 2015.
- October 2015.

Responses have been collated and summarised into the accompanying *Table 3* to show works that have been carried out at these locations between January 2014 and November 2015, together with identification of any further works planned for these locations.

This table has been drawn from Table 6 of the Wales Coastal Flooding Review: Phase 2 Report in providing an overview of 'near miss' locations that came close to more significant flooding in either December 2013 or January 2014, with a final column added to the right that summarises the updates received from Risk Management Authority partners.

| Community name | County/Authority | Which event | Status work carried out |
|---|-------------------|-------------|--|
| Prestatyn (Tower Gardens, Central Beach) | Denbighshire | Dec'13 | Flood walls and a steel flood gate at the crest of the beach access ramp have been installed to replace stop logs at Tower Gardens, Prestatyn. |
| Llanfairfechan | Conwy | Dec'13 | Repair works now complete and no further work planned. |
| Hen Wrych | Conwy | Dec'13 | Repair works now complete and no further work planned. |
| Pensarn Shingle Bank | Conwy | Dec'13 | Repair works now complete and no further work planned. |
| Abererch and Traeth Crugan | Gwynedd | Jan'14 | Repair works now complete and no further work planned. |
| Borth-y-Gest | Gwynedd | Jan'14 | Repair works now complete and no further work planned. |
| Ceredigion – various locations | Ceredigion | Jan'14 | Repair/reinstatement works were undertaken at Aberaeron South and Tresaith following the storms and no further work planned. |
| Loughor, Burry Port, Llansteffan, Pendine and Machynys. | Carmarthenshire | Jan'14 | Works have been undertaken at Burry Port. Minor repairs have been undertaken at Llansteffan and Pendine, with no further work planned. Minor repairs completed and regular inspection and monitoring undertaken at Loughor and Machynys. |
| Mumbles | Swansea | Jan'14 | Repair works now complete and no further work planned. |
| Swanbridge | Vale of Glamorgan | Jan'14 | Repair works now complete and no further work planned. |
| Sandy Bay, Porthcawl | Bridgend | Jan'14 | Repair works now complete and no further work planned. |
| Shaftesbury and Crindau | Newport | Jan'14 | Repair works now complete and no further work planned. |
| Northern and Hawarden Embankments along Dee from Connah's Quay to Chester | NRW | Dec'13 | Repair works now complete and no further work planned. |
| Abererch | NRW | Jan'14 | Repair works now complete and no further work planned. |
| Newton (near Porthcawl) | NRW | Jan'14 | Repair and improvement works completed, with no further work planned. |
| Caerleon | NRW | Jan'14 | Works are currently ongoing by NRW to raise the standard of protection around the Isca Road area of Caerleon. |

Table 3 - Overview of 'near miss' locations

Recommendation 36 – Coastal Defences

Rec 36: Complete the ongoing update to the Phase 1 ‘rapid’ assessment of environmental changes experienced during the December 2013 and January 2014 storms.

Recommendation Lead: Natural Resources Wales

Project Reference: Outside Projects

Completion Date: December 2014

Summary of Recommendation Implementation

In December 2013 and January 2014, significant storm surges and relatively powerful waves, in combination with high tides, caused considerable disruption along the Welsh coast.

Following the storms, we carried out an environmental audit of the storms' impact on wildlife and coastal conservation sites.

This report identifies a number of areas of further work, through the creation of fifteen recommendations.

Recommendation 36 has been completed via publication of Duigan C, Rimington N & Howe M (Eds) 2014. *Welsh Coastal Storms, December 2013 & January 2014 – an assessment of environmental change*, NRW Evidence Report 33.

The report can be found at:

<http://naturalresources.wales/media/1069/welsh-coastal-storms-december-2013-and-january-2014-an-assessment-of-environmental-change.pdf>

Recommendation 37 – Coastal Defences

Rec 37: Carry out a national skills and capacity audit for all Risk Management Authorities to assess and quantify the scale of the issue – to assess the size of the skills and capacity gap.

Produce an options document for how the skills and capacity gap could be addressed to meet present day flood risk management needs and future challenges.

Recommendation Lead: Welsh Local Government Association

Project Reference: Project 7a

Completion Date: December 2015

Summary of Recommendation Implementation

An online survey was the preferred option to collate the information required to produce rec 37 report. It was sent out to all 22 Lead Local Flood Authority (LLFAs) and Natural Resources Wales (NRW) on June 10th 2015 with a 4 week window to complete and return.

The survey was completed by 45 respondents: 44 Flood Risk Management (FRM) practitioners from 22 LLFAs and 1 from NRW covering their full Flood Coastal Erosion Management (FCERM) function. The survey didn't include Operations and Emergency Planning but mostly focussed on those delivering FCERM duties under the Flood & Water Management Act.

A findings report was consequently produced and presented to Welsh Government (via email) on January 27th 2016 following a review and approval from The Coastal Delivery Board. The report includes 6 short-term recommendations and 2 long-term. RMAs, WG and the WLGA have been highlighted as the key players to take forward these recommendations.

Conclusion

It is apparent that only providing training to practitioners to '*fill in the knowledge gap*' is not going to reverse the current trend but merely turn practitioners into knowledgeable clients although this approach is necessary to enable practitioners to challenge contractors' proposal and ensure best use of public monies.

Flood risk management is a long-term issue currently being tackled with a short-term solution. To ensure long-term planning, succession and resilience Risk Management Authorities and Welsh Government need to look at a more sustainable approach to flood risk management.

Next steps

- One of the recommendation highlighted in the report: Providing an initial round of coastal training to LLFAs and NRW has already been completed.
- The WLGA has engaged with Institute of Civil Engineers (ICE) and Chartered Institution of Water and Environmental Management (CIWEM) to look at developing long-term and up to date training and to give LLFAs officers the opportunity to gain membership with these organisations and continuous support and training through reviews.
- We will be starting in the 3rd quarter of 2016 an awareness raising campaign with Head of Service and Directors on the importance of succession planning.
- We have been in discussion with NRW to develop a Project Management Toolkit more specific to FCERM or Highways type scheme.
- The remaining of our recommendations will be embedded in the WLGA Flood & Water Work Programme which is currently funded until March 2018.

Further information on this Recommendation can be found within the accompanying Project Report 7a – Recommendations 37.

Recommendation 38 – Coastal Defences

Rec 38: Clarify roles and responsibilities amongst risk management authorities at both the local and national level as required.

Develop consistent and common communication messages and tools to convey roles and responsibilities to communities.

Recommendation Lead: Natural Resources Wales

Project Reference: Project 7b

Completion Date: March 2016

Summary of Recommendation Implementation

This Recommendation was one of the top six priority themes from the Phase 2 Review and arises from the Coastal Review identifying that the national network of coastal defences and the flood risk management service as a whole in Wales is complex and multi-faceted. In some locations and aspects of work this has contributed to a lack of clarity about roles and responsibilities within risk management authorities. This lack of clarity can in part contribute to community confusion and frustration. Improved clarity of roles and responsibilities will also improve the efficient and effective delivery of flood and coastal risk management outcomes.

Practical delivery of this Recommendation has focused on coastal rather than all flood risk sources and on routine asset management considerations rather than those related to operational incident response as covered under Project 4 - Recommendation 20.

Consultation to inform delivery of this Recommendation has occurred through a workshop with Risk Management Authority partners in March 2015, a questionnaire exercise from July to September 2015 and ad-hoc feedback gathered from routine meetings of Regional Flood Risk Management Groups and Coastal Groups in Wales.

The overall view from consultation was that a clarification of roles and responsibilities at the coast would be helpful but that the extent of current issues and queries amongst Risk Management Authorities did not appear to merit any formal change to the existing arrangements. Consultees demonstrated a good level of understanding of existing legislation and Welsh Government's National FCERM Strategy. Collectively, the three main concerns noted in the consultation were:

- Resource limitations impacting upon effective delivery of roles and responsibilities;
- The need to mitigate organisational risk when conducting routine operations at the coast, and;
- How to optimise collaborative working at the local level.

The following two future Recommendations are generated in this report:

Recommendation 1: A national coastal overview map for Wales should be produced which can be used as a management tool by all Risk Management Authorities and to inform the public and other organisations.

Recommendation 2: NRW develop and maintain a national register of third party owned coastal flood and erosion assets.

Further information on this Recommendation can be found within the accompanying Project Report 7b – Recommendations 38.

Recommendation 39 – Coastal Defences

Rec 39: Undertake a review of Welsh Coastal Groups and the Wales Coastal Group Forum. This review should include, as appropriate, links and relationships with other similar groups who have a role in the management of flood and coastal erosion risks.

This review should identify improvement options to maximise efficient and effective delivery of flood and coastal risk management.

Recommendation Lead: Welsh Government

Project Reference: Outside Projects

Completion Date: July 2016

Summary of Recommendation Implementation

Project 8 is fully implemented through Recommendation 39. This recommendation charges the Welsh Government to:

Undertake a review of Welsh Coastal Groups and the Wales Coastal Group Forum. This review should include, as appropriate, links and relationships with other similar groups who have a role in the management of flood and coastal erosion risks.

This review should identify improvement options to maximise efficient and effective delivery of flood and coastal risk management.

The review was undertaken through 3 stages:

Stage 1: A questionnaire was sent to the 15 Welsh Maritime Local Authorities (MLAs), Natural Resources Wales (NRW) and the Welsh Local Government Association (WLGA) during June 2015 with responses received by July 2015. As part of this exercise, a request for the Terms of Reference (ToR) of each Coastal Group was also sent during July 2015.

Stage 2: Informal interviews with individuals from selected organisations including NRW and WLGA.

Stage 3: Desk based analysis of the summary of questionnaire responses, ToRs and a wider desk based literature review of the governance around coastal flood risk management in Wales was undertaken through the Winter 2015 & Spring 2016.

The following actions were proposed:

Action 1: Coastal Groups and Forum to form part of the wider governance structure around the planned Flood and Coastal Erosion Committee. This would involve a two way process, with the Coastal Groups providing information and advice, while taking account of the strategic priorities of the Committee.

Action 2: Coastal Groups seek to contribute towards the following national strategic aims:

- a) Contributing along with Local Authorities, Welsh Government and NRW towards the development of a toolkit for coastal adaption of communities for SMP implementation;
- b) Working with a re-established Wales Coastal Monitoring Centre (WCMC) to enable the collation and standardisation of Welsh coastal monitoring data.

Action 3: Coastal Forum to standardise the Terms of Reference of the Coastal Groups, including encouraging consistency in the calculation of subscription rate and membership organisations.

Further information on this Recommendation can be found within the accompanying Project Report 8 – Recommendations 39.

Recommendation 40 – Coastal Defences

Rec 40: The Wales Coastal Monitoring Centre submitted a business case for the future of the centre to Welsh Government in December 2013. This business case should be determined by Welsh Government.

Recommendation Lead: Natural Resources Wales

Project Reference: Outside Projects

Completion Date: Winter 2015

Summary of Recommendation Implementation

The business case was assessed by the Welsh Government during 2015 with the result that the need for a Wales Coastal Monitoring Centre was accepted.

The financial and operational implications of the business case were however deemed to be unsustainable given the uncertainty on the flood programme budget during Autumn/Winter of 2015.

Welsh Government is working with local authorities, the Welsh Local Government and NRW to establish a sustainable operating model that meets user requirements. It is intended to complete this within FY 2016-17.

Recommendation 41 – Coastal Defences

Rec 41: Welsh Government should endorse the strategic framework established by the Shoreline Management Plans (SMP2). This should be accompanied by more national and local support to communities and community involvement in the development of local adaptation options and plans.

Develop a ‘local adaptation toolkit’ to better support communities. This may include technical guidance, templates, and engagement and communication tools and policy positions.

Local discussions in all coastal communities need to begin now, involving professional partners and the community. These discussions should consider communities on a risk basis. These discussions need to explore and develop local plans to adapt and increase resilience over time.

Support and draw upon the experience of the Fairbourne multi-agency group to help inform adaptation and community resilience discussions at other locations.

Recommendation Lead: Natural Resources Wales

Project Reference: Project 9

Completion Date: Ongoing

Summary of Recommendation Implementation

The Minister for Natural Resources signed-off each of the four second edition Shoreline Management Plans (SMP2) for Wales between October and December 2014. Welsh Government has confirmed this documentation equates to approval of both the IROPI (imperative reasons of overriding public interest) test and the coastal management policies contained within the SMP2s.

Delivery and communication of SMP2s needs to be done at a local level, understanding local issues and needs and involving local communities. Welsh Government can provide strategic direction and support, however decision making, planning and adaptation needs to be delivered locally.

In spring 2014, Gwynedd Council initiated the Fairbourne: Moving Forward project (<http://fairbourne.info/>) with the project’s vision being ‘to ensure that the community of Fairbourne get the help they need in relation to matters affected by the SMP2’ and the project’s mission being to ‘work on a multi-agency basis, facilitating access to the necessary information and resource required to guide and support the community of Fairbourne, over the next 40 years’. Phase 1 of the project aimed to address immediate problems including communication, emergency response and planning procedures, the impact of the information provided by the SMP2 and co-ordinating the short term response to the storms that occurred during the early part of 2014. Fairbourne: Moving Forward produced their first Annual Report in May 2015, reflecting on progress made. Structure to the project has evolved over time, with five task and finish groups that achieved their initial objectives having merged into one working group that meets monthly and reports quarterly to a multi-agency Project Board. The project has submitted bids to Welsh Government for funding of work streams including the scoping of a ‘buy to let’ scheme, investigating ‘the effect the SMP2 has and will have on the people an community of Fairbourne, ‘building community resilience and self-sufficiency’ and routine project management. The current Phase 2 of the project aims to focus

Recommendation 41 – Coastal Defences

on further understanding risk to the community through development of a draft Masterplan in 2016/17 to support implementation of change in the medium term.

In autumn 2015, Welsh Government appointed JBA Consulting Ltd and Icarus on a research contract through to the end of 2017 to support learning from the experience of the SMP2 at Fairbourne. The first, reflective stage of the research aims to get a good independent understanding of the impact on the community of the SMP2 and the subsequent process of engagement and consultation, appraising what went well and what could be improved. In the second stage, the researchers will form a 'critical friend' to the Fairbourne: Moving Forward project and the Fairbourne Facing Change Community Action Group, via attending key meetings, talking to everyone involved and feeding back learning and recommendations from observations in Fairbourne and elsewhere on a regular basis. It is hoped the research findings will not only support the community engagement process in Fairbourne, but also help other coastal communities at risk across Wales and beyond.

In November 2015 the National Trust published their 'Shifting Shores - playing our part at the coast' (<https://www.nationaltrust.org.uk/documents/shifting-shores-report-2015.pdf>) capturing collectively the progress made against goals set out in its 2005 'Shifting Shores' report. The wider challenges posed within the report for Wales focused upon a) long-term planning (to review the Coastal Groups (see Recommendation 39); to re-establish a coastal monitoring facility (see Recommendation 40); to develop a coastal adaptation toolkit to support local change (as per this Recommendation 41), and; to turn policy into action and establish a target against which progress in moving the coastal adaptation agenda forward can be assessed) and b) Government co-ordination and innovation (including to review Technical Advice Notes (TAN) 14 and 15 (see Recommendation 42); to make SMP2 implementation a requirement within the development of local plans; to develop a national policy to support adaptive coastal change management, and; to implement Welsh Government's Coastal Risk Management Programme (see Recommendation 28 and 30). An associated 'Shifting Shores' seminar was held in Swansea on 26th November 2015. An important seminar outcome was the need for early, transparent community engagement, especially involving the process of building of trust between the statutory bodies, other stakeholders and residents. The National Trust's coastal adaptation sites have great potential to demonstrate managed realignment in the future, which in turn could inspire other similar projects. Consequently, the National Trust is promoting the concept of coastal adaptation strategies for their most at risk sites, with projects being currently initiated for Cemlyn on Anglesey and at Aberdaron, Porthdinllaen and Llandanwg in Gwynedd, in collaboration with the relevant Local Authorities and NRW.

It is hoped that findings from the above initiatives over the coming years will feed into 1) any future change to coastal planning policy by Welsh Government, and 2) future development of a 'local adaptation toolkit' to better support communities and the practical delivery of coastal adaptation on the ground. This should be prepared and led by the Coastal Groups, with support from Natural Resources Wales, the Welsh Local Government Association and Welsh Government. For this reason, Recommendation 41 remains ongoing.

Rec 42: Review and evaluate existing barriers and gaps to supporting coastal adaptation and make recommendations for improvement.

Review, where necessary, existing climate change guidance to ensure the most appropriate approach is being used by all parties involved in all aspects of flood and coastal erosion risk management (i.e. all Government departments, RMAs infrastructure and utility operators).

Recommendation Lead: Natural Resources Wales

Project Reference: Project 9

Completion Date: March 2016

Summary of Recommendation Implementation

This Recommendation has been addressed in two parts, as described below:

i) Reflection on relevant external publications.

May 2015 saw publication of Fairbourne: Moving Forward's '*first Annual Report*', which noted a key barrier to effective planning as the uncertainty associated with SMP2 timescales. This uncertainty is recognised as a core concern to residents, affecting the way in which they can plan for and invest in their future, and has negative impacts upon: people (loss of asset value, reduced mobility and reliance on health and basic services); community coherence (a lack of clarity on actions needed brings apathy, and reduced confidence in the community); investment (negative perception and decreasing business opportunities detract from investment and economic prosperity); planning (in the absence of a clear adaptation management plan, planning constraints would apply in a manner potentially not reflecting the specific time limited needs of the community), and; risk management (without a future plan there is a real risk that investment in defences is reduced and that improvements are made in a piecemeal, reactive manner, bringing higher risk, earlier damages or inappropriate over investment giving asset redundancy). A further barrier is the challenge of 'eventuality planning' i.e. the inevitable lack of understanding of what the future will look like in reality and how best to prepare for that scenario. This barrier that will be tackled through development of a draft masterplan for Fairbourne in 2016/17.

In November 2015, the National Trust published '*Shifting Shores – playing our part at the coast*' (<https://www.nationaltrust.org.uk/documents/shifting-shores-report-2015.pdf>) capturing its own performance against goals set out in its 2005 '*Shifting Shores*' report, as well as overall progress by Government and RMAs in managing and adapting to coastal change. An associated seminar was held in Swansea on 26th November 2015. Outputs identified a key barrier to coastal adaptation as being the understandable reluctance of local authorities and/or landowners to embark on community engagement relating to potentially controversial issues, in view of the recognition that any future loss of funding on community engagement projects would cause a serious setback in relations and cooperation. A further barrier was funding, where the long-term financial implications of SMP2s policies should be flagged as part of long-term budget needs, especially where relating to managed realignment causing impact on communities.

The England & Wales FCERM R&D programme published '*Adapting to Coastal Erosion: Evaluation of rollback and leaseback schemes in Coastal Change Pathfinder projects*': (<http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&ProjectID=19218&FromSearch=Y&Publisher=1&SearchText=FD2679&SortString=ProjectCode&SortOrder=Asc&Paging=10#Description>) in December 2015. This research looked at key mechanisms

Recommendation 42 – Coastal Defences

explored by local authorities in five of the English coastal change adaptation pathfinders relating to 'rollback' (the relocation/replacement of at risk property and infrastructure to areas inland away from the eroding coastline). Barriers to undertaking rollback varied, with the most common being problems associated with 1) selecting land for rollback, 2) a lack of community awareness or understanding of erosion and the rollback process and 3) funding constraints e.g. the ability for property owners to afford to buy land and rebuild. The research identified three planning policies with the potential to enable rollback, being: allow for conversion of at risk buildings to temporary, alternative use e.g. holiday lets; make rollback development an exception to avoid excessive development; and enable development with clear policies and legal obligations to avoid misuse.

A common theme from the above research, and therefore a recommendation for future improvement, is for informed RMAs to increase their effective communication and engagement with coastal communities at risk, the media, planners, estate agents and mortgage providers on the challenge and opportunities for coastal adaptation.

ii) Discussion with Welsh Government (WG).

NRW are working closely with WG to review the climate change guidance used for FCERM and development planning purposes. In line with planning policy, new development decisions should take into account the potential effects of climate change over the lifetime of a development, including a flood event which has a 0.1% annual probability of occurrence. This planning policy requirement was clarified in a Chief Planning Officers letter in January 2014. The letter acted as a catalyst for NRW and WG to further discuss the implications climate change may have on future development, particularly at the coast. There is also a requirement on RMAs to factor in the predicted effects of climate change on future sea and river levels in FCERM scheme design.

Although current planning policy advises that the climate change allowances provided in the latest project appraisal guidance should be used, there is currently no aligned set of climate change guidance for FCERM and development planning. This is a priority issue to be addressed.

NRW and WG are now working together on a task that will provide clarity to Local Planning Authorities on the climate change allowances that should be using for planning purposes. These will be informed by the latest available information on climate change projections and will align with allowances used in England and Scotland, as well as those used by RMAs in Wales for FCERM projects. Guidance will be developed and issued with an accompanying Chief Planning Officers letter confirming which set of figures should be used. It is anticipated that this will be issued in September 2016, with adoption of the revised allowances taking full effect by 1st October 2016. The guidance will be reviewed when more up-to-date climate change research is available.

WG have also confirmed the intention to undertake a factual update of Planning Policy Wales Technical Advice Note 15 (TAN15): Development and Flood Risk (July 2004). The update will not be an amendment to planning policy, but intends to bring the document up to date with current thinking and provide clarity on certain aspects that are open to interpretation. This task should help deliver a consistent and appropriate approach to decision making for future development, helping to reduce long term flood risk to people and communities. NRW has been invited to contribute to this work, which is scheduled for completion in 2017.

Through delivery of these two tasks, much of Recommendation 42 will have been carried out.

Recommendation 43 – Infrastructure Resilience

Rec 43: Review and make recommendations for how Risk Management Authorities and infrastructure and utility operators can work together operationally more efficiently and effectively. This should consider a range of working agreements to ensure clarity of roles and responsibilities between professional partners and for communities.

Recommendation Lead: Natural Resources Wales

Project Reference: Project 10

Completion Date: November 2015

Summary of Recommendation Implementation

Natural Resources Wales created a questionnaire which was sent out to 15 Coastal Risk Management Authorities (RMAs), Local Resilience Forums (LRFs), the Wales Utility Group (WUG), Network Rail (NR) and the Trunk Road Agencies within Wales.

This consultation process was to help identify:

- Current levels of awareness and involvement from infrastructure operators and managers;
- Concerns or barriers that restrict the involvement of other organisations;
- Suggestions on how improved involvement can be achieved and implemented.

A total of 26 consultation responses were received. The key points raised were that:

- There needs to be greater clarity on roles and responsibilities in the flood incident management processes.
- There needs to be better working relationships between RMAs and Infrastructure providers and utility operators.
- There should be an annual commitment to developing and undertaking flooding exercises.

Summary:

The consultees for how RMAs, infrastructure providers and utilities operators can work together more efficiently and effectively provided a variety of recommendations. The recurring themes were clarity on roles and responsibilities, working agreements between organisations, a mechanism to store and share information and annual exercises or training undertaken jointly.

After considering the information gathered, the following solution has been proposed in addition to the solution proposed for Recommendation 18:

A structured programme of incident response exercises is developed by the Wales Learning and Development Group to test strategies and develop greater links.

Further information on this Recommendation can be found within the accompanying Project 10 Report – Recommendations 18, 43, 44, 45, 46 & 47.

Recommendation 44 – Infrastructure Resilience

Rec 44: Review and make recommendations if more needs to be done to enable infrastructure and utility operators to effectively work together and interact on issues of mutual interest. This may include a review of the role and remit of the Wales Utility Group and other options.

Recommendation Lead: Natural Resources Wales

Project Reference: Project 10

Completion Date: November 2015

Summary of Recommendation Implementation

Natural Resources Wales created a questionnaire which was sent out to 15 Coastal Risk Management Authorities (RMAs), Local Resilience Forums (LRFs), the Wales Utility Group (WUG), Network Rail (NR) and the Trunk Road Agencies within Wales.

This consultation process was to help identify:

- Current levels of awareness and involvement from infrastructure operators and managers;
- Concerns or barriers that restrict the involvement of other organisations;
- Suggestions on how improved involvement can be achieved and implemented.

A total of 26 consultation responses were received. The key points raised were that:

- There is a need for clarity on the role and remit of WUG.
- There needs to be a reinvigoration of the group to include the transport sector and RMAs.
- RMAs reported limited awareness and interaction with WUG.
- WUG can be a good forum if the right members are together.

After considering the information gathered, the following solution has been proposed:

The Wales Utilities Group is reinvigorated as the Wales Infrastructure Group (WIG) with Network Rail and the Trunk Road Agents invited to attend as new members. A representative for Flood and Coastal Risk Management Authorities is also invited to attend on behalf of all 22 Lead Local Flood Authorities across Wales. The broader membership will help establish better understanding between organisations and better working relationships. The reinvigoration needs to be supported by a new chair elected within the group with Welsh Government taking on a supportive role by providing administrative and secretariat support to the group.

Further information on this Recommendation can be found within the accompanying Project Report 10 - Recommendations 18, 43, 44, 45, 46 & 47.

Recommendation 45 – Infrastructure Resilience

Rec 45: Encourage and support the development of programmes of works to increase resilience of infrastructure and utility assets. These must be aligned with local community adaptation planning.

Review where appropriate if there are regulatory barriers to obstruct this process of adaptation and identify regulatory improvements, which could help adaptation.

Recommendation Lead: Natural Resources Wales

Project Reference: Project 10

Completion Date: November 2015

Summary of Recommendation Implementation

Natural Resources Wales created a questionnaire which was sent to the Wales Utility Group (WUG), Network Rail (NR) and the Trunk Road Agencies within Wales.

This consultation process was to help identify:

- Current programmes of work to increase resilience;
- Regulatory barriers that obstruct the process of adaptation;
- Suggestions of how improved involvement can be achieved and implemented.

The key findings were that:

- Most infrastructure operators and utility providers have work programmes to increase resilience.
- There were no barriers identified that could obstruct the process.

Summary:

Most infrastructure providers and utility operators in Wales have work programmes to some extent to help increase resilience to all sources of flooding. Opportunities could be gained through joint forward planning between organisations.

Further information on this Recommendation can be found within the accompanying Project Report 10 - Recommendations 18, 43, 44, 45, 46 & 47.

Recommendation 46 – Infrastructure Resilience

Rec 46: Review and evaluate at the national Wales level, the impacts of climate change scenarios on Network Rail infrastructure and highways infrastructure around the Welsh coastline and the long-term adaptation options.

Recommendation Lead: Natural Resources Wales

Project Reference: Project 10

Completion Date: November 2015

Summary of Recommendation Implementation

Natural Resources Wales created a questionnaire which was sent to Network Rail and the Trunk Road Agencies within Wales for completion. Separate meetings were held with both parties. This consultation process was to help identify:

- Current awareness and planning by each organisation for climate change;
- Concerns or barriers that restrict long term adaptation planning, and;
- Suggestions for how greater infrastructure resilience can be encouraged and delivered.

Both Network Rail and the Trunk Road Agencies are reviewing the impact of climate change scenarios on their infrastructure around the Welsh coastline. Both are also considering long-term adaptation options to protect their networks in the future. Both organisations acknowledge that financial pressures can restrict the present level of work and planning for climate change.

After considering the information gathered, it is suggested that this Recommendation remains ongoing to monitor long term adaptation options.

Further information on this Recommendation can be found within the accompanying Project Report 10 - Recommendations 18, 43, 44, 45, 46 & 47.

Recommendation 47 – Infrastructure Resilience

Rec 47: Undertake a periodic national assessment of infrastructure and utility resilience across Wales, in order to provide assurance of a national progress towards increased resilience to coastal flooding and erosion risks.

Recommendation Lead: Natural Resources Wales

Project Reference: Project 10

Completion Date: November 2015

Summary of Recommendation Implementation

Natural Resources Wales undertook an online assessment study of infrastructure operators and utilities providers to assess what they are currently doing to address resilience and climate change. This information was collated into a table which captures whether operators and providers have produced and promoted their own resilience and climate change programmes for the short and long term.

The study indicated that many operators and providers have plans in place to increase resilience to coastal flooding and erosion risks.

After considering the information gathered, the following solutions have been proposed: In order to demonstrate progress towards increased resilience, this assessment should be undertaken annually with involvement from organisations to provide assurance of progress.

The newly revised Wales Infrastructure Group (see summary sheet R44) will take on the responsibility of undertaking an annual National assessment of infrastructure and utility resilience to flood and coastal erosion risks to demonstrate progress towards a more resilient Wales. This should be reported to the Welsh Government Resilience department annually as evidence.

Further information on this Recommendation can be found within the accompanying Project 10 Report – Recommendations 18, 43, 44, 45, 46 & 47.

Outputs from all Phase 2 Recommendations

Through implementation of the Delivery Plan in 2015/16, some Recommendations have been entirely completed through closure of an action (e.g. Recommendations 1 and 2 were completed through publication of the Delivery Plan) where no further work is necessary. Some Recommendations however are deemed complete through the creation of an output that presents a preferred option or proposal(s) for future consideration. Progression of the 7 ongoing Recommendations may also have identified proposals for future consideration to date despite only being currently incomplete.

Table 4 below captures the proposals for future consideration that have been generated during 2015/16 from the above scenarios:

| Delivery Plan Rec. No | Proposal for future consideration |
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| Rec. 7 | <ul style="list-style-type: none"> • Stage 1 - Short Term Response: Provide generic information on a more local level to partners via email. • Stage 2 - Long Term Response: Provide more detailed forecast information to partners. |
| Rec. 13 | <ul style="list-style-type: none"> • Better education about risks. This needs to be led on a National Level by NRW, supported by a range of others, specifically the 4 newly formed LRF Community Resilience groups and locally by a wide range of interest groups and individuals. |
| Rec. 14 | <ul style="list-style-type: none"> • Improved Inter-Agency Working, which needs to be supported by Better Engagement at local level. |
| Rec. 15 | <ul style="list-style-type: none"> • Establish an online 'micro site' for Wales that all organisations can signpost public to for consistent advice and information that covers before during and after a flood cycle. • This should be led by the All Wales Community Resilience Group (Welsh Government). |
| Rec. 16 | <ul style="list-style-type: none"> • Consider and disseminate learning from Flood Awareness Wales' Independent Review commissioned by NRW which looks at flood plans and volunteers. • Develop broader resilience plans that incorporate flooding (see Recommendation 14). • Share emergency plans with relevant agencies and increase communication links with the public and partners on a more local level. (See Recommendation 14). |
| Rec. 17 | <ul style="list-style-type: none"> • Consider and disseminate learning from Flood Awareness Wales' Independent Review commissioned by NRW which looks at flood plans and volunteers. • Hold Flood Plan Volunteer Network events. • Develop Volunteer Health and Safety Checklists. |
| Rec. 18 | <ul style="list-style-type: none"> • Resilience Direct is explored as an option for all parties to share and store information at the 'official sensitive' level. |

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| Rec. 21,22 & 23 | <ul style="list-style-type: none"> • There are 10 recommendations within the Megacyma Exercise's de-brief report which will be ongoing and monitored by the Wales Flood Group. |
| Rec. 24 | <ul style="list-style-type: none"> • Welsh Government to determine the PAR for the future of East Rhyl Coast Protection Scheme. |
| Rec 25 & 26 | <ul style="list-style-type: none"> • Creation of systems to record information related to temporary and secondary defences (for those who haven't already done so). • Compare inspection regimes between LLFAs and NRW to avoid duplication and overlap. • Share relevant information between RMAs on temporary or secondary defences (locally or regionally). • Focus on the performance of whole defence systems instead of focussing on individual sections. • Welsh Government to review Schedule 1 of the Flood Water Management Act 2010 to enable RMAs to designate third party townscape or landscape assets as secondary defences. |
| Rec. 31 | <ul style="list-style-type: none"> • The NRW AMX asset management system should be used to store flood risk asset information for all RMAs in Wales. Other RMAs to supply NRW with asset data in a suitable format for placement on the NRW AMX system. • Where AMX is being purchased by other RMAs, the same AMX system architecture currently used in NRW, should be used. This will ensure that all asset data fields are consistent across RMAs in Wales. • NRW Area flood risk teams to review their respective coastal asset datasets on AMX. This is to ensure that all flood risk assets have been captured and have the correct inspection frequency assigned to it. |
| Rec. 32 | <ul style="list-style-type: none"> • The current inspection methodology used in NRW should be adopted across all RMAs in assessing the condition of flood risk assets. This would include the 5 point asset condition grading system. • T98 accreditation courses in asset inspection to be arranged to train other RMA representatives to carry out flood risk asset inspections for their respective areas. • In the short term, NRW asset inspectors to carry out inspection of the key flood risk assets identified by the other RMAs. It is proposed that inspections in low flood risk areas on Main Rivers will be temporarily stopped or reduced. This will be until representatives of the other RMAs achieve the T98 accreditation in asset inspection and can carry out inspections themselves. • A rebranded version of the EA Condition Assessment Manual (CAM) to be developed for use across all RMAs in Wales. |
| Rec. 37 | <ul style="list-style-type: none"> • Providing an initial round of coastal training to LLFAs and NRW has already been completed. • The WLGA has engaged with Institute of Civil Engineers (ICE) and Chartered Institution of Water and Environmental Management (CIWEM) to look at developing long-term and up to date training and to give LLFAs officers the opportunity to gain membership with these organisations and continuous support and training through reviews. • We will be starting in the 3rd quarter of 2016 an awareness raising campaign with Head of Service and Directors on the importance of succession planning. |

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| | <ul style="list-style-type: none"> • We have been in discussion with NRW to develop a Project Management Toolkit more specific to FCERM or Highways type scheme. • The remaining of our recommendations will be embedded in the WLGA Flood & Water Work Programme which is currently funded until March 2018. |
| Rec. 38 | <ul style="list-style-type: none"> • A national coastal overview map for Wales should be produced which can be used as a management tool by all Risk Management Authorities and to inform the public and other organisations. • NRW to develop and maintain a national register of third party owned coastal flood and erosion assets. |
| Rec. 39 | <ul style="list-style-type: none"> • Coastal Groups and Forum to form part of the wider governance structure around the planned Flood and Coastal Erosion Committee. This would involve the Coastal Groups taking a strategic lead from the Committee and the Minister, while providing information and advice to the Committee via the Coastal Forum. • Coastal Groups seek to contribute towards the following national strategic aims: <ul style="list-style-type: none"> – Contributing along with Local Authorities, Welsh Government and NRW towards the development of a toolkit for coastal adaption of communities for SMP implementation; – Working with a re-established Wales Coastal Monitoring Centre (WCMC) to enable the collation and standardisation of Welsh coastal monitoring data. • Coastal Forum to standardise the Terms of Reference of the Coastal Groups, including encouraging consistency in the calculation of subscription rate and membership organisations. |
| Rec. 40 | <ul style="list-style-type: none"> • Welsh Government to commence procurement process for Wales Coastal Monitoring Centre. |
| Rec. 41 | <ul style="list-style-type: none"> • To ensure recent and ongoing research will feed into any future change to coastal planning policy by Welsh Government, and future development of a 'local adaptation toolkit' to better support communities and the practical delivery of coastal adaptation on the ground. This should be prepared and led by the Coastal Groups, with support from Natural Resources Wales, the Welsh Local Government Association and Welsh Government. |
| Rec. 42 | <ul style="list-style-type: none"> • Risk Management Authorities to increase their effective communication and engagement with coastal communities at risk, the media, planners, estate agents and mortgage providers on the challenge and opportunities for coastal adaptation. • Welsh Government to develop guidance and issue it to Local Planning Authorities with an accompanying Chief Planning Officers letter confirming which climate change figures should be used by autumn 2016. • Welsh Government to undertake a factual update of Planning Policy Wales Technical Advice Note 15 (TAN15): Development and Flood Risk (July 2004) by end of 2016. |
| Rec. 43 | <ul style="list-style-type: none"> • A structured programme of incident response exercises is developed by the Wales Learning and Development Group to test strategies and develop greater links. |

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| Rec. 44 | <ul style="list-style-type: none"> • The Wales Utilities Group is reinvigorated as the Wales Infrastructure Group (WIG) with Network Rail and the Trunk Road Agents invited to attend as new members. • A representative for Flood and Coastal Risk Management Authorities is also invited to attend on behalf of all 22 Lead Local Flood Authorities across Wales. |
| Rec. 47 | <ul style="list-style-type: none"> • The newly revised Wales Infrastructure Group (see above and summary sheet R44) will take on the responsibility of undertaking an annual National assessment of infrastructure and utility resilience to flood and coastal erosion risks to demonstrate progress towards a more resilient Wales. This should be reported to the Welsh Government Resilience department annually as evidence. |

Table 4 - Outputs from all Phase 2 Recommendations

Next Steps for the Wales Coastal Flooding Review

There is value in quoting from the Delivery Plan as a reminder of the aspirations behind the Wales Coastal Flooding Review initiative:

'The current flood risk management service in Wales is multi-faceted and in parts complex. Although collectively the Risk Management Authorities (RMAs) performed well during the winter storms of 2013/14, there are challenges and opportunities across all aspects of the service and a collective response, sustained over time, is required to enable Wales to become more resilient to coastal flooding. There is no simple or quick fix solution. These challenges and opportunities are reflected by the scope and scale of the 47 Phase 2 Recommendations.'

The Recommendations are a positive reflection of the ambition and aspiration of Welsh Government and the coastal risk management partners in Wales. They set out a shared framework of practical activities, which over time will deliver increased resilience to communities at risk from coastal flooding and/or coastal erosion in Wales.'

The Wales Coastal Flooding Review initiative has achieved considerable success in promoting collaborative working between RMAs in Wales. Realisation of the full benefits of the 40 completed Recommendations during 2016/17 and beyond will require sustained commitment from RMAs and a focus on continuous improvement opportunities to aim for the intended outcomes to be fully achieved (i.e. through due consideration of the proposals in Table 4 above).

A monitoring and review action should be established for 2016/17 to safeguard momentum of the 7 ongoing Recommendations. The following routes are suggested to further progress these ongoing Recommendations to completion:

- Recommendations 5 (review guidance design of coastal standards and joint probability), 6 (improvements to longer range forecasts), 8 (improvements to the accuracy of the coastal forecasting service) and 33 (developments in the national coastal modelling and mapping programme) are to be taken forward internally by Natural Resources Wales through integration alongside business as usual activities.
- Recommendation 19 (continue to develop potential 'impact scenario' assessments, maps and/or statements) will require further liaison with the Wales Flood Group to gauge level of need and priority to inform Natural Resources Wales' future Flood Incident Management workstreams.
- Recommendation 31 (a national dataset for all flood risk assets, across all key organisations) will require significant and continued collaboration between Welsh Government and all Risk Management Authorities in Wales to share and securely store asset data. This work is progressing well, but will require sustained effort.
- Recommendation 41 (development of local adaptation 'toolkit', to assist communities predicted to experience natural coastal change) will require further liaison with the Wales Coastal Group Forum and the Coastal Groups in Wales to support creation of a toolkit for local coastal adaptation.

Appendix 1: List of Phase 2 Recommendations

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| | Progressing the Recommendations |
| 1. | <p>The recommendations included in this report are compiled into a Delivery Plan.</p> <p>This Delivery Plan will identify how the recommendations will be progressed. It will consider matters such as; the parties to be involved lead responsibility, priorities, governance and resources and capacity to deliver.</p> |
| 2. | <p>The Delivery Plan should consider opportunities to expand the recommendations beyond just coastal flooding and erosion risks and to consider the link to risks from other sources of flooding.</p> |
| | Recommendations – Storm Severity |
| 3. | <p>Further work is required to assess the joint probability of wind, waves and tides for these recent winter storms. This may take the form of an initial assessment coupled with consideration of more thorough analysis. The scope of this work will require further technical discussion.</p> |
| 4. | <p>Review and update if required, the extreme sea level dataset around the Welsh coast. The recent tidal conditions are amongst the highest for many years. This dataset may need to be amended.</p> <p>This is to include methods for assessment of joint probability for storm severity.</p> |
| 5. | <p>Review and update if required, the guidance used for the assessment and design of coastal standard of service against flooding. The review should consider whether more clarification is needed, in particular on the issues of the treatment of joint probabilities, in combination effects and appropriate national consistency.</p> |
| | Recommendations – Flood Forecasting |
| 6. | <p>Continue to identify and implement risk based opportunities to deliver further improvements to longer range forecasts.</p> |

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| 7. | Review with partners what additional forecast information could be provided to support local incident management decisions. Identify options and recommendations. |
| 8. | Continue to progress risk based opportunities to deliver improvements to the accuracy of the coastal forecasting service. Develop and deliver a programme of improvement works. |
| 9. | Review the whole wave buoy network around the Welsh coast, including working with UKCMF to address a strategic gap in the offshore wave buoy network in the Irish Sea. This is required to better validate offshore wave forecasts, leading to improvements to the Wales forecasting service. <i>(UKCMF- UK Coastal Monitoring and Forecasting Service)</i> |
| Recommendations – Flood Warning and Community Response | |
| 10 | Complete the ongoing work by summer 2014 to ‘rebrand’ the flood warning service in Wales so that the provider is clearly identified as Natural Resources Wales. |
| 11. | Develop and implement a prioritised programme of improvement works to flood warning areas and thresholds, using the experience and data gathered from these storms. This should include engagement with professional partners and communities as appropriate. |
| 12. | Review and consider additional sources of validation information for future incidents. This has potential to improve confidence in both forecasting and warning. This may involve seeking feedback from professional partners and others. |
| 13. | Work with sample communities to identify options to help sustain an effective local response to flood warnings. This should consider communities where effective response and or confidence in the warning system is low. |
| 14. | Identify and evaluate options to help communities to become more self-sufficient and resilient and identify a recommended option |

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| 15. | Produce and communicate nationally consistent, public focused information on the types and availability of property level protection measures and the support available. |
| 16. | Using the experience from these recent storms, identify and evaluate options for the future development of local Flood Plans in coastal areas and identify a recommended option to help these be more effective at improving community resilience. |
| 17. | Using the experience from these recent storms, identify and evaluate options for the future development of local Flood Plan Leads / Warden Volunteers in coastal areas and identify a recommended option. |
| Recommendations – Operational Response | |
| 18. | Review and identify how to improve involvement of infrastructure operators and managers in the coastal flood risk incident management process. |
| 19. | Continue to develop potential ‘<i>impact scenario</i>’ assessments, maps and/or statements. This work must be developed in close discussion with professional partners to ensure it meets all parties’ requirements. |
| 20. | Review the local decision making process associated with the issue of Severe Flood Warnings and evacuation procedures in December 2013 and early January 2014. Identify improvements and share at an all Wales level. |
| 21. | Assess our national capacity to respond to a widespread and sustained period of coastal flooding. This should include consideration of when the current national resource pool will no longer function effectively. This should also consider post incident recovery issues. Provide a report with recommendations for improvement. |
| 22. | Assess the collective ability to provide an effective response to a potential large scale evacuation scenario in either north east or south east Wales. This should also consider post incident recovery issues. Provide a report with recommendations for improvement. |

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| 23. | Review the Wales resilience structures and ways of working to identify what changes may be needed to enable us to collectively be better prepared and resilient to future coastal flooding. |
| 24. | Options to seek improvements to the standard of protection at the Garford Road area of Rhyl should be identified and evaluated. This should include detailed hydraulic analysis of the capacity and performance of the storage lagoon. This should include an assessment of the stairwell and slipway openings and the interaction with the adjacent golf course area. |
| 25. | All Risk Management Authorities (RMAs) around Wales should review their local use of stop boards, stop logs, temporary barriers or moveable gates. The purpose of this review is for RMAs to satisfy themselves that existing arrangements are appropriate and robust. Consideration should be given to replacing existing arrangements with more permanent or more robust temporary solutions. This review should be 'risk based' and focused on the locations with highest local risk. |
| 26. | All Risk Management Authorities (RMAs) around Wales should review locations where they have secondary defence systems in place. The purpose of this review is for RMAs to satisfy themselves that the secondary systems will operate as designed when required. This review should be ' <i>risk based</i> ' and focused on the locations with highest local risk. |
| Recommendations – Coastal Defences | |
| 27. | <p>There needs to be continued sustained investment to manage the national coastal risks to acceptable levels.</p> <p>This must include flood forecasting, warning, awareness, response and recovery, as well as flood defences. Particular focus has to be on the existing defences to ensure they continue to be fit for purpose, as well as investment in new defences to reduce the flood risk for more locations.</p> |
| 28. | Review and identify options to maximise certainty in flood and coastal erosion risk management funding over a longer timeframe and to maximise flexibility in the use of this funding. This would mean less focus on annual and in year budgets and more focus on delivery and budget management of 3-5 years. |

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| 29. | The development of the National Programme of Investment should be progressed as a matter of importance and its development should seek a wide range of ways of working and technical improvements to the flood and coastal erosion risk management investment allocation, decision making and prioritisation process. |
| 30. | Review and identify options to gain additional funding to supplement core flood and coastal erosion risk management investment. This must be closely aligned with the development of the National Programme for Investment. |
| 31. | <p>Produce a complete national dataset of coastal protection and defence assets including details of areas benefitting.</p> <p>It is essential that this dataset becomes a '<i>live management tool</i>' and not merely a representative picture of a snapshot in time. This dataset must therefore be associated with a process for ensuring the information is maintained.</p> |
| 32. | Review and identify options to achieve a more consistent approach to the inspection of the network of coastal defence systems. This must include recommendations to improve the efficiency and effectiveness of the asset inspection process. |
| 33. | Continue to develop a nationally prioritised programme of coastal modelling and mapping improvements. This must be nationally risk based and consistent. |
| 34. | Locations and communities which experienced flooding in December 2013 and early January 2014 should be subjected to a risk based assessment to determine if further risk management activity/intervention is needed and can be justified. |
| 35. | Near miss locations and locations subjected to substantial foreshore change should be identified and subjected to a risk based assessment to determine if further risk management activity/intervention is needed and can be justified. |
| 36. | Complete the ongoing update to the Phase 1 ' <i>rapid</i> ' assessment of environmental changes experienced during the December 2013 and January 2014 storms. |
| 37. | Carry out a national skills and capacity audit for all Risk Management Authorities to assess and quantify the scale of the issue – to assess the size of the skills and capacity gap |

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| | <p>Produce an options document for how the skills and capacity gap could be addressed to meet present day flood risk management needs and future challenges.</p> |
| 38. | <p>Clarify roles and responsibilities amongst risk management authorities at both the local and national level as required.</p> <p>Develop consistent and common communication messages and tools to convey roles and responsibilities to communities.</p> |
| 39. | <p>Undertake a review of Welsh Coastal Groups and the Wales Coastal Group Forum. This review should include, as appropriate, links and relationships with other similar groups who have a role in the management of flood and coastal erosion risks.</p> <p>This review should identify improvement options to maximise efficient and effective delivery of flood and coastal risk management.</p> |
| 40. | <p>The Wales Coastal Monitoring Centre submitted a business case for the future of the centre to Welsh Government in December 2013. This business case should be determined by Welsh Government.</p> |
| 41. | <p>Welsh Government should endorse the strategic framework established by the Shoreline Management Plans (SMP2). This should be accompanied by more national and local support to communities and community involvement in the development of local adaptation options and plans.</p> <p>Develop a ‘local adaptation toolkit’ to better support communities. This may include technical guidance, templates, and engagement and communication tools and policy positions.</p> <p>Local discussions in all coastal communities need to begin now, involving professional partners and the community. These discussions should consider communities on a risk basis. These discussions need to explore and develop local plans to adapt and increase resilience over time.</p> <p>Support and draw upon the experience of the Fairbourne multi-agency group to help inform adaptation and community resilience discussions at other locations.</p> |
| 42. | <p>Review and evaluate existing barriers and gaps to supporting coastal adaptation and make recommendations for improvement.</p> <p>Review, where necessary, existing climate change guidance to ensure the most appropriate approach is being used by all parties involved in all aspects of flood and</p> |

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| | coastal erosion risk management (i.e. all Government departments, RMAs infrastructure and utility operators). |
| | Recommendations – Infrastructure Resilience |
| 43. | Review and make recommendations for how Risk Management Authorities and infrastructure and utility operators can work together operationally more efficiently and effectively. This should consider a range of working agreements to ensure clarity of roles and responsibilities between professional partners and for communities. |
| 44. | Review and make recommendations if more needs to be done to enable infrastructure and utility operators to effectively work together and interact on issues of mutual interest. This may include a review of the role and remit of the Wales Utility Group and other options. |
| 45. | Encourage and support the development of programmes of works to increase resilience of infrastructure and utility assets. These must be aligned with local community adaptation planning. Review where appropriate if there are regulatory barriers to obstruct this process of adaptation and identify regulatory improvements which could help adaptation. |
| 46. | Review and evaluate at the national Wales level, the impacts of climate change scenarios on Network Rail infrastructure and highways infrastructure around the Welsh coastline and the long term adaptation options. |
| 47. | Undertake a periodic national assessment of infrastructure and utility resilience across Wales, in order to provide assurance of national progress towards increased resilience to coastal flood and erosion risks. |

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