

## [Past COVID-19 infection provides some immunity but people may still carry and transmit virus](#)

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## [Consultation launched to improve Manchester's railways](#)

- new consultation launched, focused on improving performance and punctuality of railways for passengers
- proposals will result in increased reliability of services post coronavirus (COVID-19)
- passengers urged to have their say after extensive work between Department for Transport (DfT), rail industry and Transport for the North

A [new consultation on improving the performance on the rail network in and around Manchester](#) has been launched today (14 January 2021).

Passengers are being presented with 3 options that feature increasing levels of change from the pre-COVID service patterns. The 3 options affect different routes, and which routes have direct services to Manchester Oxford Road and Piccadilly stations, and Manchester Airport.

The agreed option, scheduled to be introduced in May 2022, will significantly improve overall reliability while maintaining the pre-COVID travel connections for the vast majority of passengers. Some changes may mean making different choices for travel.

This change will give passengers a more reliable service with less risk of knock-on delays, while longer-term infrastructure changes are developed that

will enable more services to be added in the future in a sustainable way.

Chris Heaton-Harris, Rail Minister, said:

We are putting the power to improve Manchester's rail network in the hands of those that use it daily.

I urge passengers to use this opportunity to comment on the future of your railway.

Improving punctuality and reliability is one of my key priorities. As we continue to build back better from the pandemic, these proposals will ensure that the rail network is more dependable for those who use it every day.

Congestion in the region before the pandemic created regular delays to services around Manchester, with knock-on impacts to reliability across the north. While the public are being asked to stay at home, the rail industry is using this opportunity to plan improvements around Manchester ready for when passengers return in much greater numbers.

This work brings together the DfT, [Transport for the North](#), Network Rail, and the train operators Northern and TransPennine Express (TPE).

The consultation builds on government [investment in electrification schemes](#), and [brand new trains for Northern and TPE](#), as it works together with Transport for the North and Network Rail on the development of a new robust timetable, underpinning a transformed offer to passengers.

Andy Burnham, Mayor of Greater Manchester, said:

I welcome this consultation and the government's focus on this issue. The bottleneck in central Manchester is a problem for the whole of the north – and solving these congestion issues will improve the reliability of rail services for passengers right across the north.

As we look to build back better from the pandemic, we want to work with the government to deliver a reliable and dependable timetable, alongside the much-needed upgrades to our Victorian infrastructure.

Liam Robinson, Transport for The North's Rail North Committee Chair, said:

Passengers need a better deal when it comes to reliability. When they return to the north's trains, they need to step onto services with confidence.

Manchester's congested rail network has long been the source of delays and frustration for passengers, with knock-on effects for

the north's communities. We urge everyone to take a look and give their view on these proposals.

While the goal of these short-term changes is to reduce delays and increase reliability, it is clear that the work we are doing with government and the industry on longer-term investment in rail infrastructure is also critically important, alongside changes to services.

Phil James, Network Rail route director for the North West, said:

The proposed changes to the timetable in Manchester aim to give passengers across the north consistently safe and reliable train services, running to a schedule they can trust.

We look forward to hearing people's views on it.

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## **RWM welcomes launch of second GDF 'Working Group'**

A [Working Group has been formed](#) in Allerdale, Cumbria, to begin discussions about the potential for hosting a deep geological facility for the safe and secure disposal of radioactive waste.

Today's announcement follows two months after the first group was established in neighbouring Copeland. Chaired independently by Jocelyn Manners-Armstrong, the Allerdale Working Group will now begin local discussions and fact-finding about the potential for the future siting of a Geological Disposal Facility (GDF) in Allerdale.

Radioactive Waste Management (RWM) Chief Executive, Karen Wheeler, said: "I'm delighted to see the formation of the GDF Working Group in Allerdale which will start to engage local residents, businesses, and other organisations about the possibility of hosting a GDF. This is the second Working Group to form, following Copeland's announcement in November, with more planned to come across England in the months ahead.

The formation of a Working Group is a very early step in the process, but it demonstrates real progress is being made towards finding a willing community and suitable site for one of the biggest environmental protection projects of our lifetime – disposing of higher activity waste safely and securely in a GDF.

This is a massive infrastructure investment for a local economy, and a vital project for the UK. It will create thousands of jobs over its lifetime, bringing opportunities to develop a local workforce with the skills and expertise that will be needed. A GDF will also attract further inward investment together with supply chain opportunities over the course of many decades and into the next century.

The group will initially focus on gathering information about the local area and views of the local community, and identifying a Search Area for further detailed consideration. As is the position in Copeland, the Lake District National Park will be excluded.

There is no requirement to make any commitment on future willingness to host a GDF. The Working Group will also identify the initial members of a Community Partnership that will continue these early discussions once a search area is identified, sharing information and working alongside RWM as geological investigations take place.

Setting up a Working Group does not mean a GDF will be built in a particular location. Before any final decision is taken, the community must demonstrate its willingness to host a GDF through a test of public support, and it must be shown that the local area has suitable geology such that a GDF could be constructed safely and securely.

Information about a GDF:

- Geological Disposal is the internationally recognised way to dispose of higher-activity radioactive waste and involves a series of highly engineered vaults located up to 1,000 metres deep in a suitable rock formation. Combined with manmade barriers, this protects the environment and keeps the waste safe and secure while the radioactivity decays naturally to safe levels.
- Successive UK governments have endorsed deep geological disposal, and there are similar programmes already under way in Canada, Finland, France, Sweden and Switzerland.
- Initial construction is likely to span approximately 10 years and employ up to 2,000 people during the peak phase, with underground construction continuing as the facility expands gradually over its operating life of more than 100 years.
- A GDF is also expected to support thousands of jobs, both at the facility and in the wider supply chain, as well as generating wide-ranging contract opportunities for local businesses.

- The invitation to open discussions and get involved in the GDF programme remains open to any community organisation, local authority, business or individual in England or Wales.

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## RWM yn croesawu lansiad ail 'Weithgor' Cyfleuster Gwaredu Daearegol

Mae Gweithgor wedi cael ei greu yn [Allerdale](#), Cumbria, i ddechrau trafod y posibilrwydd o gynnal cyfleuster daearegol dwfn ar gyfer gwaredu gwastraff ymbelydrol mewn modd diogel.

Daw'r cyhoeddiad heddiw ddau fis ar ôl i'r gweithgor cyntaf gael ei sefydlu yn ardal gyfagos Copeland. Bydd Gweithgor Allerdale, dan gadeiryddiaeth annibynnol Jocelyn Manners-Armstrong, nawr yn dechrau trafod yn lleol a chasglu'r ffeithiau ynghylch y posibilrwydd o leoli Cyfleuster Gwaredu Daearegol (GDF) yn Allerdale yn y dyfodol.

Dyweddodd Prif Weithredwr Radioactive Waste Management (RWM), Karen Wheeler: "Rydw i wrth fy modd bod y Gweithgor GDF wedi cael ei greu yn Allerdale ac y bydd yn dechrau ymgysylltu â thrigolion lleol, busnesau a sefydliadau eraill ynghylch y posibilrwydd o gynnal GDF. Dyma'r ail Weithgor i gael ei greu, yn dilyn cyhoeddi gweithgor Copeland ym mis Tachwedd, ac mae rhagor ar y gweill ledled Lloegr dros y misoedd i ddod.

Mae creu Gweithgor yn gam cynnar iawn yn y broses, ond mae'n dangos bod cynnydd go iawn yn cael ei wneud tuag at ddod o hyd i safle addas a chymuned sy'n barod i gynnal un o'r prosiectau gwarchod yr amgylchedd mwyaf yn ein hanes – gan waredu gwastraff uwch ei actifedd yn ddiogel mewn GDF.

Mae hwn yn fuddsoddiad enfawr mewn seilwaith ar gyfer economi leol, ac yn brosiect allweddol ar gyfer y DU. Bydd yn creu miloedd o swyddi yn ystod ei oes, gan gynnig cyfleoedd i ddatblygu gweithlu lleol sydd â'r sgiliau a'r arbenigedd angenrheidiol. Bydd GDF hefyd yn denu mewnfuddsoddiad pellach ynghyd â chyfleoedd i'r gadwyn gyflenwi dros nifer o ddegawdau ac i mewn i'r ganrif nesaf.

Bydd y grŵp yn canolbwyntio i gychwyn ar gasglu gwybodaeth am yr ardal leol a sylwadau'r gymuned leol, ac ar ganfod Ardal Chwilio i'w hystyried yn fanylach. Yn debyg i'r sefyllfa yn Copeland, ni fydd Parc Cenedlaethol Ardal y Llynnoedd yn cael ei ystyried.

Nid oes gofyniad i ymrwymo i baroddrwydd ardal i gynnal GDF yn y dyfodol. Bydd y Gweithgor hefyd yn nodi aelodau cychwynnol Partneriaeth Gymunedol a fydd yn parhau â'r trafodaethau cynnar hyn unwaith y bydd ardal chwilio wedi cael ei chanfod, gan rannu gwybodaeth a gweithio gyda RWM wrth i ymchwiliadau daearegol fynd rhagddynt.

Nid yw creu Gweithgor yn golygu y bydd GDF yn cael ei adeiladu mewn lleoliad penodol. Cyn gwneud unrhyw benderfyniad terfynol, mae'n rhaid i'r gymuned ddangos paroddrwydd i gynnal GDF drwy brofi cefnogaeth y cyhoedd, ac mae'n rhaid dangos bod gan yr ardal leol y ddaeareg addas er mwyn gallu adeiladu GDF yn ddiogel.

Gwybodaeth am Gyfleusterau Gwaredu Daearegol:

- Gwaredu Daearegol yw'r dull a gydnabyddir yn rhyngwladol o waredu gwastraff ymbelydrol uwch ei actifedd ac mae'n cynnwys cyfres o gladdgelloedd o'r radd flaenaf hyd at 1,000 metr yn ddwfn mewn craig addas. Ar y cyd â rhwystrau dynol, mae hyn yn gwarchod yr amgylchedd ac yn cadw'r gwastraff yn ddiogel tra bo'r ymbelydredd yn dadfeilio'n naturiol i lefelau diogel.
- Mae llywodraethau olynol y DU wedi cefnogi gwaredu daearegol dwfn, ac mae rhaglenni tebyg eisoes yn mynd rhagddynt yn Canada, y Ffindir, Ffrainc, Sweden a'r Swistir.
- Mae'r gwaith adeiladu cychwynnol yn debygol o bara tua 10 mlynedd a chyflogi hyd at 2,000 o bobl yn ystod y cyfnod prysuraf, gyda'r gwaith adeiladu tanddaearol yn parhau wrth i'r cyfleuster ehangu'n raddol dros ei oes weithredol sef dros 100 mlynedd.
- Mae disgwyl i GDF gefnogi miloedd o swyddi, yn y cyfleuster ei hun ac yn y gadwyn gyflenwi ehangach, yn ogystal â chynnig cyfleoedd am gontractau amrywiol i fusnesau lleol.
- Mae'r gwahoddiad i ddechrau trafod a chymryd rhan yn y rhaglen GDF yno o hyd i unrhyw sefydliad cymunedol, awdurdod lleol, busnes neu unigolyn yng Nghymru neu Loegr.

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**State-of-the-art robot seeks out**

# chemical agents

Dstl, the science inside UK defence and security, has developed a prototype robot so that humans and machines can now share the burden of detecting and report dangerous chemicals over large areas.

The Merlin Robot, developed by industry partner HORIBA-MIRA with funding from the MOD and the Home Office, autonomously carried out simulated chemical reconnaissance tasks over test areas covering up to 10,000 square metres. Currently a single prototype, the Merlin robot operated continuously on tasks for several hours with ease, allowing personnel to monitor and manage the test incident scene from a safe distance, away from potential harm.

[Watch the Merlin robot in action](#)

Chemical reconnaissance (recce) on foot and in specially modified vehicles is currently carried out by specialist personnel in the event of suspected or confirmed use of chemical agents, both in military battlefield and homeland security scenarios. It is a dangerous and laborious task requiring high levels of specialist training. In the future, however, autonomous systems could enable the task with significantly less burden on personnel and at lower risk to the deployed teams.

The trial, run under Dstl's Project Servitus, was a follow-on to successful previous work conducted under Project Minerva, which investigated the use of ground-based and airborne autonomous systems to tackle hazardous scene assessment in areas contaminated with chemical agents, on behalf of the MOD and the Home Office.

Initially developed as part of Project Minerva, under Servitus the Merlin robot had an off-the-shelf chemical vapour sensor mounted so that it can be accurately positioned close to the ground. The robot's AI-based object recognition and search and detection techniques were also further developed, including drawing on other Dstl-funded work on MIRA's Viking re-supply and recce unmanned ground vehicle (UGV), enhancing the system's autonomous behaviours and capability.

The Servitus trial tested different autonomous behaviours for search and mapping operations in exploring an area, obstacle avoidance and chemical mapping. The operationally realistic trial was undertaken with support from specialist C-CBRN operators from 27 Squadron RAF Regiment RAF Honington. Non-toxic chemical simulants were sprayed onto the ground within a simulated operational activity, and both the military recce teams and the robot undertook the task of searching the areas to find and map the chemicals and plot clean routes.

27 Squadron RAF Regiment operators were provided with basic training on the Merlin and its tablet-based human machine interface, and given the opportunity to operate the robot, setup Merlin missions, monitor progress and re-task the robot as required. The users were quickly able to absorb the

training and become proficient in commanding the robot, relishing the chance to work with the system.

Commenting on working with Dstl and MIRA, a spokesperson from 27 Squadron RAF Regiment said:

It was a hugely interesting project to be part of within the early development stages, and it was a pleasure to work alongside the MIRA and Dstl personnel who were very engaged, approachable and keen to listen to our observations and experience. The system has a lot of potential and testing our personnel against the AI of the robot was a good benchmark.

By the end of the trial, Merlin had successfully demonstrated autonomous operation in area recce tasks that were both clean and contaminated, and had performed tasks to find clean routes through contaminated areas. Throughout the trial the embedded AI was pushed to the limits of object and obstacle recognition and successfully demonstrated its utility within a cluttered environment.

Dstl's project technical lead, Andy Martin said:

Project Servitus has demonstrated the clear potential to make the job of military and emergency services users safer, more effective and future looking. The technology has significant potential in a number of fields, and work to explore the exploitation pathways within CBR and elsewhere is well underway. Building on Project Minerva, Servitus is another exemplar of cross-department and industry collaboration, with close working between government technical experts, industry and the military user community. It has been highly successful because of that.