- Increased testing capacity for surgical mask tests to BS EN 14683: Since the start of the outbreak, two UK companies have brought forward new testing facilities for key tests for surgical masks (IIR)[5] and a third is intending to do so in early 2021[6]. Two European Notified Bodies have also brought on capacity[7]. We therefore consider that this is likely to be sufficient to enable the UK to cope with testing requirements for IIR masks in the event of a second wave.
- Approved Template designs: OPSS is working with manufacturers to develop approved designs for visors and re-usable isolation gowns, which has the potential to reduce the demand for testing for these items;
- Re-usable PPE: The increased use of re-usable PPE will reduce the requirement for testing. NHS England has set a target of 80% of isolation gowns to be reusable by the end of 2020, with further aspirations to extend this target to surgical gowns in 2021 depending on funding for increasing laundry capacity. Reusable visors are already being supplied. Trials have been undertaken on re-use of FFP3 respirators, but the potential impact on testing is much lower.

Despite these three factors, there is still no UK capacity for two key tests for surgical gowns (wet and dry microbial penetration ISO 22610 and 22612). Overseas capacity for testing of surgical gowns is also limited and wait times of 3 months to 1 year have been reported. These specific tests require the ability to handle biological hazards and are expensive to bring forward.

There is also limited testing capacity in the UK for testing FFP3 respirators to BS EN 149 (only one UKAS accredited testing house and one other, non-accredited test house). Much of this capacity relies on "emergency" measures such as shift working and redeployment of staff that may not be sustainable long term. In June and July, FFP3 respirators were in very short supply.

Re-usable isolation gowns require pre-treatment according to ISO 15797 before testing and these tests are time-consuming (5-10 weeks). NHS England has identified expanding laundry capacity for these tests as an important enabler for its policy of reusing isolation gowns.

There are no standards for the testing of isolation gowns outside the PPE Regulatory Easement. This has the potential to cause confusion once the easement ends.

The UK has no capacity for one of the key tests for coveralls and there are few overseas labs qualified to do this. In the long term, this is less important, as the NHS has a low demand for these items (ambulance and specialist cleaning only). The stocks at Daventry will, however, require testing and we should anticipate some delays for this.

We recommend that:

- The NHS should stockpile surgical gowns and FFP3 respirators in order to reduce the likelihood that testing delays will impact on delivery times to the NHS. In particular, it should stockpile those designs of FFP3 respirators which have been found to have a high fit rate[8].

Commented [NR]: Be mindful on how long stockpiles can be held before a products 'use by' date is reached. I know this time we had examples of masks that were passed their stated date and had to be retested. Some of which did not yield satisfactory results. There can also be confusion if a product is supplied to the NHS with the use by date scrubbed out and overwritten with a new one.

[5] All tests in BS EN 14683, but particularly the "splash resistance test", ISO 22609, for which there was no accredited UK capacity prior to the covid-19 outbreak and little capacity in the EU.

Irrelevant & Sensitive

[8] According to HSE experience and research, a really good FFP3 design might fit around 60% of the staff population. (Source HSE); NHS' typical stock respirators fit around 40% of the population. (Source HSE and NHS E&I).

Clearly, stockpiling needs to be done with care, to ensure that equipment does not pass its expiry date;

- The Government should support the development of new facilities for the testing of surgical gowns to BS EN 13795, specifically the ISO 22610 and 22612 wet and dry microbial penetration tests. State Aid rules would allow this (under section 3.7 – "Investment aid for testing and upscaling infrastructures" of the "EU Commission's Temporary Framework for State Aid", put in place to support EU economies during the period of disruption caused by the coronavirus epidemic). Note that State Aid rules will cease to apply at the end of the transition period on 31/12/2020.
- The Government should consider supporting the expansion of capacity to test FFP3 respirators to BS EN 149 (see above comments on State Aid);
- The Government should supporting laundry facilities for pre-treatment of reusable isolation gowns prior to testing;
- HSE should develop clear standards for testing isolation gowns after the end of the PPE Regulatory Easement;
- DHSC should ensure that information on products that fail testing is fed back promptly to procurement teams (both national and regional) to reduce the chances of purchasing faulty equipment.

Commented [NR]
Commented [NR]: In collaboration with BSI?
Commented [NR]: HSE is already aware of this. I would say in collaboration with test house and standard experts.

Long Term Future

As pointed out above, our work has identified a number of issues that if addressed could significantly improve any future responses to similar crises, such as the Covid-19 pandemic, in the long term. This section points towards these issues, which are discussed in greater detail within the respective topical papers provided alongside this document.

UK competitiveness

Price levels have been elevated during the Covid-19 pandemic which has assisted UK manufacturers to compete with overseas suppliers, particularly as short timeframes have necessitated PPE from overseas to be transported by air (for example aprons from China were costing about 7p per apron with air freight making up 5p of that cost). We recommend that DHSC include a full cost to serve analysis from the procurement team in their work to build a resilience model to determine to which extent UK manufacturers should continue to be encouraged to enter the market.

There are a number of financial options that could be deployed to support companies manufacturing PPE in the UK, such as tax incentives, business rates reduction, energy subsidies, and loans if UK manufacturing becomes part of the overall resilience model. Our advice is that were such a policy to be pursued grants are the most effective tool as they are an injection of cash direct to the company and don't have the associated costs and administrative burden (for companies and public authorities) of the other approaches.

The Regional Growth Fund and the Exceptional Regional Growth Fund are two mechanisms through which such grants could be administered if DHSC concludes that financial support is necessary to support UK manufacturing of PPE in the medium-long term.[9]

Commented [NR]: Need to link this to the point above about the procurement criteria. Once tey have done the full cost to serve analysis it may well show imports are cheaper. The question is then do they want to have break the procurement up into cells and include one with criteria which point to UK manufacture eg must be able to supply by road within 2 hours.
Commented [NR]: This section will inevitably repeat what's in the response to the strategy, however in this case I think that's ok. The key points are that the strat needs to set the context for uk manufacturing, and make policy change to ensure it happens. We can repeat the point here about grants from above [NR] let's speak.
Commented [NR]: ok
Commented [NR]: Do you want to add any more things from the DHSC strat?