expert approach to the evaluation of the quality of assay kits for potential bulk purchase. It was at a meeting in April 2020 of this committee at which a spreadsheet was presented listing potential suppliers. Some of these were listed separately on a 'VIP' tab; these were the companies which had approached ministers directly and I was asked to consider them for fast tracking, as in **Exhibit DP/12** INQ000581895 through the Cabinet Office Commercial Team. I refused because this undermined my wish for an objective, expert-led assessment. This experience gave me an insight into the contractual mayhem in play. Indeed, there were many criticisms from the Consultant Virology community of national purchases of testing systems which were not evaluated or were being imposed on their laboratories at the expense of well-established systems.

- 29. The broader context at this time was that Matt Hancock , on 2nd April, 2000, was speaking of a goal of 100,000 tests a day, as in Exhibit DP/13 (INQ000474859) and as discussed in paragraph 9 of this statement. This target was in the absence of any specific objective. Over the next few weeks, in the attempt to demonstrate this goal was being achieved, Mr Hancock himself and many others confused tests being available, with tests undertaken. In addition, there was confusion between tests to detect the virus and tests to detect antibodies (the latter of which was underpinned by large scale purchasing of kits, but ultimately provided no useful information). During the government press conferences it appeared to be a personal challenge to Mr Hancock himself to deliver on what was a deeply flawed goal, which caused further immense frustration for professionals in the field. Indeed, bringing in the army to deliver this goal deflected attention from the very important component of test and trace - namely to identify those infected, and to support the isolation of them and their contacts, and to limit spread of infection.
- 30. There were already discussions amongst the clinical and scientific community of many other innovative ways to utilise testing, and to respond to the spreading pandemic. For instance, once it was known that SARS-CoV-2 could be detected in stool samples from infected individuals the potential arose of testing sewage to detect the virus. This could be done, for instance, in sewage outflows from institutions such as schools, as a way of monitoring infection rates, and as an initial screening of communities and institutions to guide focused surge testing, However, the constraints imposed by the government focus on 100,000 tests a day made the assessment and implementation of new approaches difficult.

Trace, Isolate, Support

31. Now let me come onto other aspects of Test and Trace. In the same way that existing systems remained underutilised for testing, the same can be said for contact tracing. It is true that Local Authority capacity for public health had been reduced because of the HPA move to PHE in 2012. Nevertheless, it

seemed obvious that local public health structures were ideally placed to receive further investment to grow contact tracing and isolation support for the population they serviced, since this would not only build on existing expertise, but also be best placed to understand local drivers of the pandemic and how best to mitigate these risks and support the relevant communities. By contrast, SERCO were contracted to undertake the COVID contract tracing function (through the outsourced Test and Trace programme) with under-skilled staff tasked with dealing with the heterogeneous risk within diverse populations over the telephone. This was not joined up with identification of particular risk individuals and communities, and advice on isolation was generic and one dimensional. There appeared to be little understanding of the specific pressures people were experiencing. For example, how to support isolation in multi-generational households; for those living with high-risk individuals; for those without private outdoor spaces; or for those on zero-hours contracts who needed to earn. All of these challenges remained unevaluated and solutions were not sought. This is perhaps the clearest example by which inequalities in society were amplified by the poor COVID response. By contrast, delegating such tasks to local health protection teams would ensure a more sensitive, responsive and indeed effective outcome - namely limiting further spread of infection and disease.

- 32. What is the goal of a Test and Trace system? A report from DELVE on Test, Trace, Isolate and Support as in **Exhibit DP/14 (INQ000194035)** identified the key features required. They estimated that such a programme implemented in **addition to other measures such as social distancing**, could avert 5-15% of new infections as long as testing was rapid, led to isolation of contacts of cases within 48 hours of initial test of index case, and was characterized by high compliance and coverage of the population. The report also highlighted lessons from Taiwan, South Korea, New Zealand and elsewhere, where the time from testing to result being received was between several hours and 72 hours.
- 33. Considering the lack of integrated data available from UK Test and Trace, I led a programme of work within the UCL based i-sense consortium, as in **Exhibit DP/15 (INQ000551843)**, to address this. By bringing together quite disparate pieces of data, for instance from ONS, PHE and other research studies, we were able to estimate the "cascade" of effectiveness of the Test and Trace. We asked what proportion of contacts of cases were able to successfully isolate? With a caveat of uncertainty, we were able to estimate how effective the test and trace programme was during late 2020. We concluded that only an estimated 3% of contacts of cases did actually adhere to isolation themselves. In other words, the Test and Trace programme as established during 2020 was likely highly ineffective in preventing ongoing spread of infections.