



Stockholm, 15 February 2021

Our Ref: DIR-2021-OUT-0766-AACrDr

Re: Call for expression of interest by Member States in using SARS-CoV-2 sequencing support offered by ECDC

Dear National Coordinators,

I am writing to inform you of a service that ECDC is offering Member States with low SARS-CoV-2 sequencing capacities to have sequencing carried out at no charge by laboratories contracted to ECDC.

The ECDC Rapid Risk Assessment on the spread of new SARS-CoV-2 variants of concern in the EU/EEA (published on 21 January 2021) concluded that the risk associated with the introduction and community spread of variants of concern had increased to high/very high. In response, Member States were asked to increase their efforts to detect introductions of known variants, as well as the emergence of new variants by increase the level of surveillance and sequencing of a representative sample of community COVID-19 cases (1). From the ECDC side, guidelines have been produced for making decisions on establishing sequencing capacities and capabilities, which technologies to use, and deciding on the role of sequencing for SARS-CoV-2 outbreak investigations and surveillance (2). For surveillance purposes, representative strains of viruses from different geographical locations and time points, as well as from patients of varied demographics and across the disease severity spectrum, should be selected for sequencing. SARS-CoV-2 vaccine escape variants, viruses causing reinfections, variants emerging in animal populations or variants with increased transmission, especially if they are not explained by other epidemiological factors, should also be selected for sequencing.

A European Commission recommendation published on 19 January 2021 stated that all EU Member States should reach a capacity of sequencing at least 5% - and preferably 10% - of positive test specimens (3). In mid-January 2021, ECDC conducted a survey on the countries' capabilities and capacities for detection and characterisation for SARS-CoV-2 variants within the EU/EEA (N=29, report under preparation). The survey showed that at the time only three countries met the wider European Commission target and reported a sequencing proportion of more than 10% of positive test specimens, two countries reached the 5% level, and the remaining countries only had the capacity to sequence a fraction of the recommended proportion of PCR positive specimens. It should however be noted that many countries are in the phase of increasing both their sequencing capacities and capabilities. Still, many Member States need support to rapidly develop a capacity to ensure sufficient surveillance of new SARS-CoV-2 variants across the EU.

Throughout the pandemic, ECDC has offered limited sequencing support to Member States. The services offered initially were not designed to meet the needs of a pandemic neither in terms of volume nor in turnaround time. Therefore, ECDC with the support of the European Commission will significantly enhance the sequencing capacity and improve the support that can be offered to Member States, both in the short and longer term.

As a first step, ECDC has established a Whole Genome Sequencing (WGS) support contract with Eurofins Genomics that will allow for higher volumes of specimens to be processed from now to early April 2021. These services include shipping of RNA samples, cDNA synthesis, sequencing and basic bioinformatics

analysis, and will allow the processing of around 2,000 specimens per week with a turnaround time of maximum 7 working days. The establishment of these services has been announced to Member States in the Health Security Committee, and in the ECDC Covid-19 Laboratory and Surveillance network calls. Although this contract represents a considerable increase in the volumes of specimens that can be processed through ECDC, the capacity of this contract is still below what would be needed to reach the communicated sequencing targets. Therefore, at this stage, ECDC will apply the following criteria for prioritising requests from countries to use the WGS services funded by ECDC:

1. Countries having an urgent need to strengthen WGS-based SARS-CoV-2 WGS surveillance due to the epidemiological situation
2. Countries that have little to no national capacity to perform SARS-CoV-2 WGS
3. Countries with some national WGS capability to perform SARS-CoV-2 WGS, but insufficient capacity to sequence the number of samples per week required to be able to quantify the proportion of a variant present at a prevalence of 2.5% of the total circulating viruses (2)
4. Countries with some national WGS capability to perform SARS-CoV-2 WGS, but insufficient capacity to sequence the number of samples per week required to meet the European Commission target of sequencing 5% of all confirmed cases (3)
5. Countries with some national WGS capability to perform SARS-CoV-2 WGS, but insufficient capacity to sequence the number of samples per week required to meet the European Commission target of sequencing 10% of all confirmed cases (3)

During the previous week, National coordinators and Covid-19 Microbiology and Epidemiological operational contact points from the countries currently prioritised under criteria 1-3 above have already been approached by ECDC for using these WGS services, with an initial offer of around 200 specimens per country and week. ECDC and the European Commission are investigating the possibility to provide further support Member States to increase their sequencing capacities.

Member States who would like to benefit from the sequencing services offered by ECDC or who are interested in additional information are strongly encouraged to contact ECDC using the address: 5.1.2a

Member States wanting other forms of support for undertaking their own sequencing are also invited to provide details of what kind of support they are seeking to the same email address: 5.1.2e

This information will assist ECDC and the Commission to consider what further measures could be useful to support Member States in the future.

Kind regards,

5.1.2a

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Director

- 1) Risk related to the spread of new SARS-CoV-2 variants of concern in the EU/EEA – first update
<https://www.ecdc.europa.eu/sites/default/files/documents/COVID-19-risk-related-to-spread-of-new-SARS-CoV-2-variants-EU-EEA-first-update.pdf>
- 2) Sequencing of SARS-CoV-2: first update, 18 January 2021.
<https://www.ecdc.europa.eu/sites/default/files/documents/Sequencing-of-SARS-CoV-2-first-update.pdf>
- 3) COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE EUROPEAN COUNCIL AND THE COUNCIL A united front to beat COVID-19
https://ec.europa.eu/info/sites/info/files/communication-united-front-beat-covid-19_en.pdf