



Appendix No. 1b – Technical specifications for part two

RNA sequencing using the Illumina sequencing platform

The subject of the framework agreement shall include the following specific services in particular:

- Preparation of Illumina TruSeq® Libraries using total RNA (stranded RNA) samples by the supplier. The supplier is required to use the RiboZero or similar treatment for rRNA depletion.
- Next Generation Sequencing (NGS) will be run on an Illumina NovaSeq 6000 device under the paired-end 150 bp setting.
- The subject of RNA sequencing will be viruses or virus-like particles isolated from *Phytophthora* spp., the estimated size of the samples is approx. 1-20kb.
- The subject of the tender is paired-end (PE) sequencing according to the contracting authority's requirements. The estimated number of obtained sequencing reads following data filtration, i.e. pass reads, is at least 700 million paired-end reads, i.e. 400 million DNA fragments sequenced from both ends.
- The estimated read length is 2 × 150 bp for paired-end reads.
- The service provider will assure collection of samples and their transportation. RNA samples will be prepared by the contracting authority and the supplier will collect them for transport packed in dry ice. The provider will carry out quality control and sample concentration adjustment prior to library preparation.
- Bioinformatic analysis: the provider is obliged to execute a complete bioinformatical analysis of the sequencing data, including *de novo* assembly, quantification of the contigs and BLAST in a virus database.
- The provider must allow the submitter two days (4 hours/day) of personal consultation (either face-to-face or video consulting online) with the company bioinformatician, who is skilled in NGS data processing.

General requirements of the contracting authority:

- The contracting authority (i.e. the submitter) requires the sequencing results within 6 weeks from the time the samples undergo quality control by the service provider. The samples must undergo quality control within two months from the time they are collected from the submitter at the latest.
- The contracting authority requires that the samples be stored by the service provider for a minimum of 4 weeks from the time of delivery of the results to the contracting authority.
- The sequencing results will be provided electronically to the contracting authority. The contracting authority requires that the service provider provide access to the results database, to the contracting authority's competent person, on the Illumina user server or another computer server.
- The contracting authority requires that the service provider will store the results data for at least 52 weeks.





The tender price must include all necessary costs for due performance of the subject of the contract – including transportation costs and any other related costs.