



Appendix No. 1a – Technical specifications for part one

DNA sequencing using the Illumina sequencing platform

The following in particular shall be assured within the terms of the subject of performance of the Framework Agreement:

- Sequencing of DNA libraries prepared by the submitter using the Genotyping-by-Sequencing method or a derived method. A library is understood to mean a sequencing library compatible with the Illumina sequencing platform, i.e. DNA fragments with the specific sequences necessary for sequencing on the Illumina sequencing platform.
- The target organisms that will be the subject of DNA sequencing are *Phytophthora pseudosyringae*, *Phytophthora citricola* and related species - genome size about 70 Mbp.
- Next Generation Sequencing (NGS) will be run on an Illumina - NovaSeq6000 paired-end 150 bp device.
- The service provider will assure collection of samples and their transport. The sequence-ready libraries will be prepared for sequencing by the submitter and the service provider will collect these for transport for sequencing, bound to magnetic beads and lyophilized (dried magnetic beads), i.e. as a dried pellet. The provider will receive all the necessary information about the lyophilisation method and library preparation.. The service provider will carry out quality control, dilution and concentration adjustment of the sample.
- The service provider will filter the obtained data. The estimated number of obtained sequencing reads after data filtering (i.e. pass filter reads) is 700 million paired-end sequences, 350 million sequencing reads from each side.
- The estimated length of the obtained sequences (i.e. reads) is 2×150 bp (PE - paired-ends).

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.



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- 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.