





MEMORANDUM

To: Erk Jensen

Cc: Paul Cruikshank

From: Paolo Chiggiato

Subject: TE-VSC mandate for insulation vacuum of crab cavities in the SPS tunnel

The TE-VSC mandate for insulation vacuum of the crab-cavity test bench in LSS6 of SPS is summarized here below:

- 1. TE-VSC check and approve the design of the cryostat to **verify the compatibility** with vacuum requirements.
- 2. TE-VSC is responsible for:
 - a. The **procurement** of the needed pumps, gauges, isolation valves, safety valves and their spares based on **standard SPS and/or TE-VSC equipment**.
 - b. The installation and the leak detection on the cryostat of the above components.
 - c. The **control and monitoring** systems of such vacuum components based on standard **SPS solutions**.
 - d. The request of **cables** for the powering and control of such components.
- 3. TE-VSC provides the equipment owners with **status signals** upon request.
- 4. Such components are included in the TE-VSC daily monitoring. Stand-by duty service is provided only when the set-up interferes with the SPS beam. In all other cases, a best effort service is offered.
- 5. TE-VSC provides expert advice to BE-RF in case of operational non-conformities.
- 6. TE-VSC ensure maintenance of such components and their control systems. Upon request, this may include TE-VSC in-tunnel support to evacuate the cryostat from atmospheric pressure or to vent it to atmospheric pressure.
- 7. TE-VSC **is not** in charge of:
 - a. The design and integration of the cryostat.
 - b. Other non-standard components, e.g. burst rupture disks and other safety devices.
 - c. The fabrication, assembly and tests of the cryostat.