THE NETLANDER MISSION: PAYLOAD STATUS REPORT

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The NetLander mission will deploy in 2007 a network of 4 stations on Mars for one Martian year of operation. The determination of the deep internal structure of the planet, especially the state and size of the core, the structure of the mantle and shape of discontinuities will be the goal of a 3 axis VBB seismometer, a 3 axis magnetometer, and a geodetic experiment. The surface, crustal and subsurface structure below all landing sites will be also determined by the Panoramic Camera, the magnetometer, a 3 axis SP seismometer a ground penetrating radar and a surface thermal mapping. The atmospheric dynamic will be studied by an set of sensors (wind, pressure, temperature, electric field, optical depth, microphones), as well by the geodetic direct measurement of the mass exchange between Polar caps and the atmosphere. Finally, ionospheric sciences will be performed by the magnetometer and by the radio-science experiment. We present the mission following the phase B studies presently in progress, as well as the payload status after its selection in early 2000 and the launch delay from 2005 to 2007. The NL mission is a joint effort of France, Finland, Germany, Belgium with contribution from Switzerland, Denmark, Austria, UK, USA and other countries.