

Russian Scientific Interest in VEP

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Russian Scientific Interest in
VEP

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merging of Venera-D and VEP
into a joint Roskosmos/ESA
mission

Status of Venera-D

- An existing line in Federal Space Program for a *Venus mission*
- No other planetary mission is planned after Phobos Sample Return.
- Soyuz-class launch is anticipated (Soyuz-2 → 1900 kg near Venus)
- Launch after 2015
- Definition study 2007-2009 (funding approved)
- Full-scale funding expected from 2010
- International cooperation up to a level of a joint mission is very much appreciated in Russia

Constraints

(may be subjective point of view)

- Soyuz-2 class launch
- 2015-2020 launch period rather than >20

Scientific interest in VEP

- Balloon studies of the dynamics: the interest inherited from Vega
- In-situ studies of chemistry on the cloud level and below
 - Instruments are being developed now for Phobos sample return mission
 - GCMS with TDLAS
 - nephelometer/lidar
 - ATR spectrometer
- Remote studies from the orbiter
 - Instruments inherited from VEX
 - FTS
 - High-resolution occultation spectrometer
 - also, radar has been proposed
- High-risk segment with a longer lifetime

Next steps

- Next (?) VEP meeting in Moscow
- Venera-D is a virtual mission but it *is decided*. What kind of support Venera-D might provide to VEP?