The requirements are:

The transceiver (transmitter and receiver) will have one AC mains power supply input, one USB port for communicating with a computer, and at least the following RF interfaces:

1 SMA port for RF signal output (to be connected to SMA-fed transmitting antenna to be supplied by IIT Delhi). The RF should be generated using a PLL-synthesizer locked with a crystal oscillator.
1 SMA port for return RF signal input (to be connected to SMA-fed receiving antenna to be supplied by IIT Delhi).
1 SMA or BNC port for 10MHz IF signal output.
Further ports such as IF gain control may be provided, but are not mandatory.
Software should be provided so that a user can set the frequency to any value in the 8-12 GHz range (with a resolution of 100 KHz or finer) from a computer, through the USB port.
RF power output should be > 0 dBm.
Receiver sensitivity should be better than -80 dBm.

General Terms and conditions:
1. Vendors are requested to send their quotes (technical specs and prices separately) to the office of Dr A Basu, Rm. III-319, C.A.R.E., I.I.T. Delhi-110016, before 5 pm, Sept 30, 2013.
2. Quote should be valid for at least 60 days.