Brief of Modular SSTO Launch Vehicle System (Land/Sea launch) with Configurable Satellites Integration Mechanism for Launch on Demand of Small Satellites (Upto 150 kgs/400 Kms/48 Hrs))

Single Stage to Orbit (SSTO) launch vehicles employ non-conventional propulsion and have modular architecture. These launch vehicles have single stage which employs only a specific fuel and hence are restricted by their payload capacity. However, they have an all-weather launch capability and can be readied in record times. Hence, the challenge involves developing a Single stage to Orbit Rocket that employ's only green propulsion and can carry payloads upto 150 kgs to 400 Kms altitude. The launch vehicle should have modular design and should be assembled in 48 hours.