

Roles of Asian Micro-satellite Consortium

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Micro-satellite with a weight of 50-100 kg has various merits compared to middle and large sized satellite, that is, 1) low cost fabrication compared to middle or large sized satellite, namely, few M EUR including BUS and mission payloads. The launch cost will be about 2 M EUR as piggyback, 2) quick fabrication: about one or two years for flight model would be sufficient, enabling application of the latest technologies, 3) on-demand operation, taking detail information at a point of interest, and 4) the low cost and quick fabrication make us possible to launch not a small number of satellites, which is called as constellation flight.

We would discuss the possible roles of international organization, Asian micro-satellite consortium (AMC), which promotes and accelerates the micro-satellite development and the discussion of data utilization. AMC will consist of domestic working group in each country. The each working group is composed of 3 parts: BUS development team, payload development team and data user team, involving various field scientists or engineers, such as forestry, agriculture, fishery, forest fire, bio-diversity, flood, meteorology, climate change, ionospheric / magnetospheric science, etc. Also in AMC we will discuss the possibility of future projects, such as on-demand operation or super constellation involving more than tens of microsatellites and unmanned air vehicles (UAVs) under international collaboration.

AMC will be started officially in the very near future probably involving about 10 countries in SE-Asia as the founding member.

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