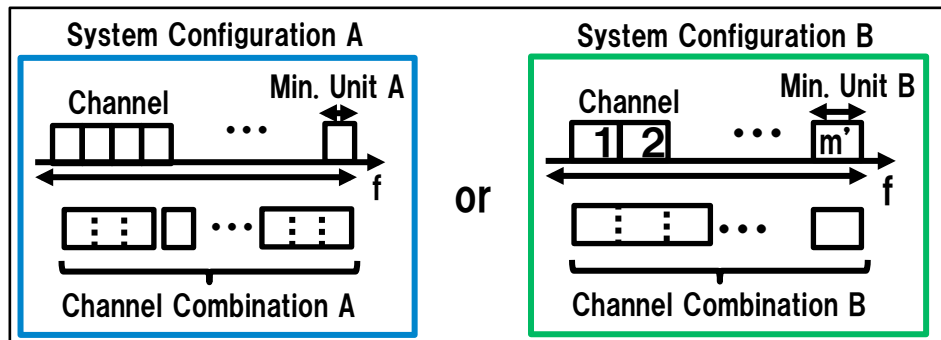


Research and Development of a High Throughput Satellite System with Flexible Capacity and Coverage based on Demands

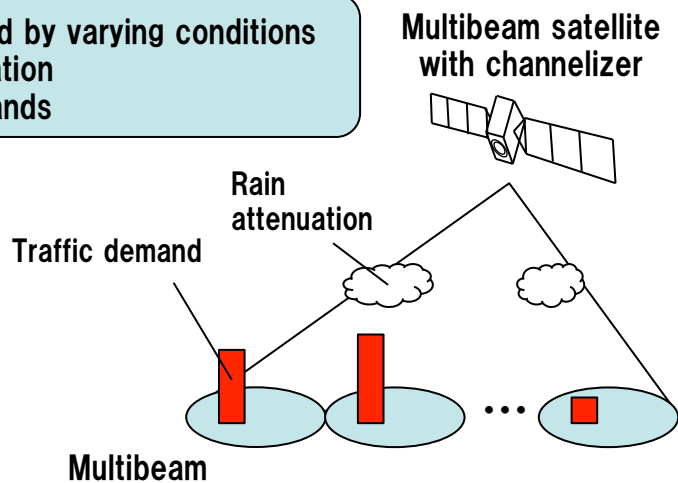
In order to maintain a high performance for next generation satellite communication systems, it is necessary to flexibly allocate resources as the environment and requirements vary. Thus, the development of digital channelizer and digital beam forming as a form of flexible resource allocation has been recently promoted. In this research and development, we present a model for performance evaluation of satellite communication systems when faced with environmental variation such as user requests and rain attenuation and so on.



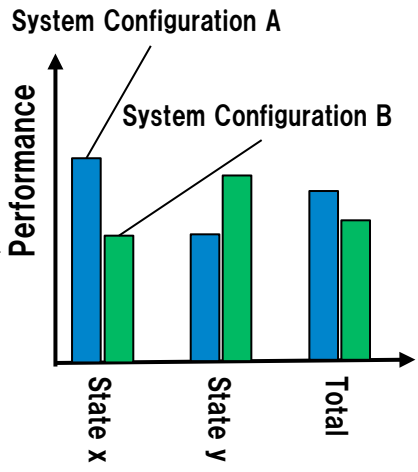
There is no existing analysis model for these system configurations

State is defined by varying conditions

- Rain attenuation
- Traffic demands



Evaluation as state changes



Overview of satellite communication system frequency flexibility analysis model