

Mobile satellite constellations

the engineering principles behind the implementations are studied by the
Centre for Communication Systems Research
at the University of Surrey

ICO

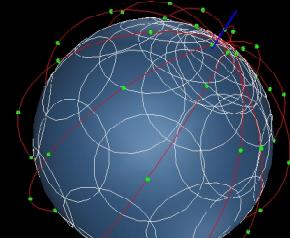
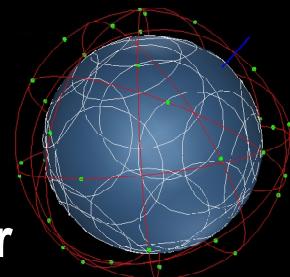
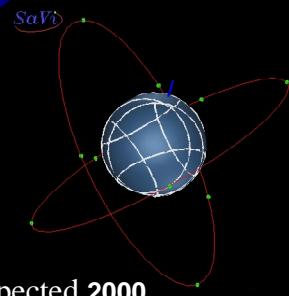
service expected **2000**

Globalstar

service expected **1999**

Iridium

service expected **1998**



Geostationary orbital ring (GEO)

Spaceway, Cyberstar, Astrolink, Inmarsat, Intelsat, Aster, KaStar, etc.

Global Positioning System (GPS)

Glonass

Teledesic (Celestri) Globalstar, Skybridge

Concordia Ellipso Borealis

Iridium, Orbcomm

Low Earth Orbit (LEO)

Orbcomm

Medium Earth Orbit (MEO)

Orbital altitudes for satellite constellations

peak radiation bands of the Van Allen belts (high-energy protons)

orbits are not shown at actual inclination; this is a guide to altitude only

- voice codecs
- networking
- signal processing
- modulation
- propagation

