New Satellite Technologies come to market faster than Regulators can respond



Increased **Demand**

New uses (internet, mobility, personal devices) Increased Supply

New orbits

Reduced Launch costs

Assembly-line satellite production

Regulators have options to respond to the disruption



- Some "pull" (or encourage pro-active good behaviour by the operator)
- Some "push" (or prevent/punish bad behaviour by the operator)
- The "best practices" are <u>prescriptive</u> and focus on desired outcomes (good quality of service, low prices, lots of options) rather than <u>proscriptive</u> and focused on defining specific things that are allowed/not allowed
- Customs
- Policy
- Standards
- Guidelines

- Norms
- Agreements
- Policy Directives
- Private contracts

- Treaties
- Regulations
- Laws



Satellite Operators face multiple Regulatory issues (both as telecom operators, and as space objects)

- <u>Spectrum allocations</u>
 - Global Harmonization vital
 - National licensing difficult

- <u>Situational awareness (traffic)</u>
 - Overlapping orbits
 - Collision avoidance
 - Traffic management vs control

- Sustainability of outer space (pollution)
 - Debris
 - astronomy

- Liability/Insurance/Indemnity
 - Indemnify your state
 - Hold insurance for launch & in-orbit operations