

Big Brother or Eye in the Sky?

Legal Aspects of Space-Based Geo-Information for Disaster Management

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1. Introduction

- Satellites for disaster management
 - ➢ Global coverage
 - Packages with earth observation, communication & navigation
 - → Charter on Space and Major Disasters
 - → Global Monitoring for Environment and Security (GMES) / Global Earth Observation System of Systems (GEOSS)
- ■Legal aspects... ⊗ ⊕ ⊕



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2. The Role of Space Law

- 1967 Outer Space Treaty
 - > Freedom of space activities
- UN GA Resolution 41/65
 - > "Protection natural environment" (Princ. X)
 - "Protection from natural disasters" (Princ. XI)
 - → Data & info to be transmitted promptly
 - ➤ Lead role UN int'l co-operation (Princ. VIII)
 - ➤ N.B.: not formally binding
 - ◆ India, China, Indonesia, Brazil



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3. GMES

■2001 ESA & EC (on behalf of EU)

- > Independent European capability
- Decision-support system
- > Optimising use current EO systems
- Phased approach
 - Inventory of data types available & identification of gaps
 - Development of new instruments & satellites...
- Relation with GEOSS



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4. The Charter

- ■ESA & CNES Charter by XI/2000
 - > CSA, NOAA, ISRO & CONAE (& JAXA)
 - > 1999 UNISPACE III
 - 'Contributing' satellites
 - ◆ EO, communication, navigation...
 - > 'Authorised users' can activate Charter
 - 'Associated bodies'
 - 'Co-operating bodies' (EU & UN Bureau for the Co-ordination of Humanitarian Affairs)
 - ➤ Data available asap & for free...



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5. International responsibility

- State responsibility for legality
 - > Also for private space activities
- Charter
 - > 'Obligations' still of general nature...
 - > Are there 'rights' for victims (victim states)?
 - > How to deal e.g. with existing copyrights?
- ■GMES (& GEOSS)
 - > Informal institutional co-operation



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6. International liability

- State liability for damage
 - > Again also for private space activities
- Charter
 - ➤ Liability waived → 'best efforts' obligation...?
 - ➤ But liability down-stream...?
 - → 'Good Samaritan' principle
- ■GMES (& GEOSS)
 - > Liability regime will have to be developed



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7. Int'l organisations & 8. Private entities

- State responsibility & liability
 - > IGO's: member states cannot hide...
 - ESA: Declaration on liability, but still...
 - ◆ EU: member states
 - Private entities
 - Data access, privacy & data protection
 - Licensing & certification
 - Public goods vs. fair competition
 - ◆ National laws (in 9.5 countries…)
 - ♦ PPP's



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9. Concluding remarks

- Rudimentary int'l legal framework
- Incoherent laws at nat'l level
- Charter & GMES:
 - ➤ Institutional & practical effort
- Legal issues requiring attention
 - ➤ Liability & 'Good Samaritan' principle
 - > Balance owners data & victims
 - Abuse by free-riders



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