Risk Management in Emerging Technologies

1: Risk is inherent in all technologies

- Intent in use of technology
- Robustness and resilience in design
- Risk of adoption versus non-adoption
- Risk perception matters
- Risk response strategies generate new risks
- Risk is unavoidable and often not completely solvable

2: Elements of risk management strategies

- Identifying and defining risks
 - Objective
 - Subjective
- Prioritizing risks
 - Likelihood versus impact
- Manageable and unmanageable risks
- Known risks versus unknown risks
- Risk avoidance or risk mitigation
- Cost of risk management
- Method of risk management market generation/regulation

3: Challenges to risk management in cyberspace

- Markets have not prioritized risk
- Existing technology did not prioritize risk
- Consumers often do not consider risk
- Governments can strategically benefit from risk
- Risks online are usually connected to risks offline
- Human factors

Conclusion

- No simple solution to risk management in the digital space
- A number of risks will not be solved
- A number of risks will take very long to solve
- Risk management will require self-restraint, open communication, and transparency from actors with a limited track record of successful cooperation.
- Consequently, we must identify and solve the biggest problems first.