Multinational Lunar Research Park
On its form and regulation

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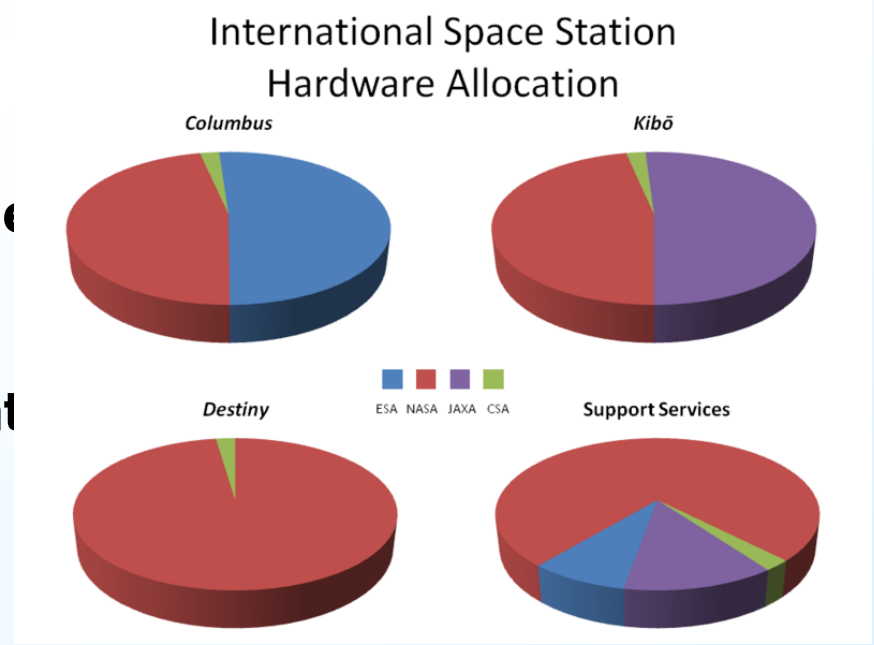
Outline

- **Existing multinational mega-project**
  - **ISS**
  - **ITER（International Thermonuclear Experimental Reactor）**
  - **Large Hadron Collider**
- **An example of multinational regulation**
  - **UN Committee of Transports of Dangerous Goods（TDG）**

ISS

- USA, Russia, EU, Canada and Japan
- Total cost 10^2 billion $ (JAXA 10^1 billion $)
- Managed by **The Multilateral Coordination Board (MCB)**, the highest level management body established under the **intergovernmental agreement**
- USA takes responsibility for managing and conducting whole project
- Large part of hardware utilizat is allocated to USA



http://en.wikipedia.org/wiki/International_Space_Station

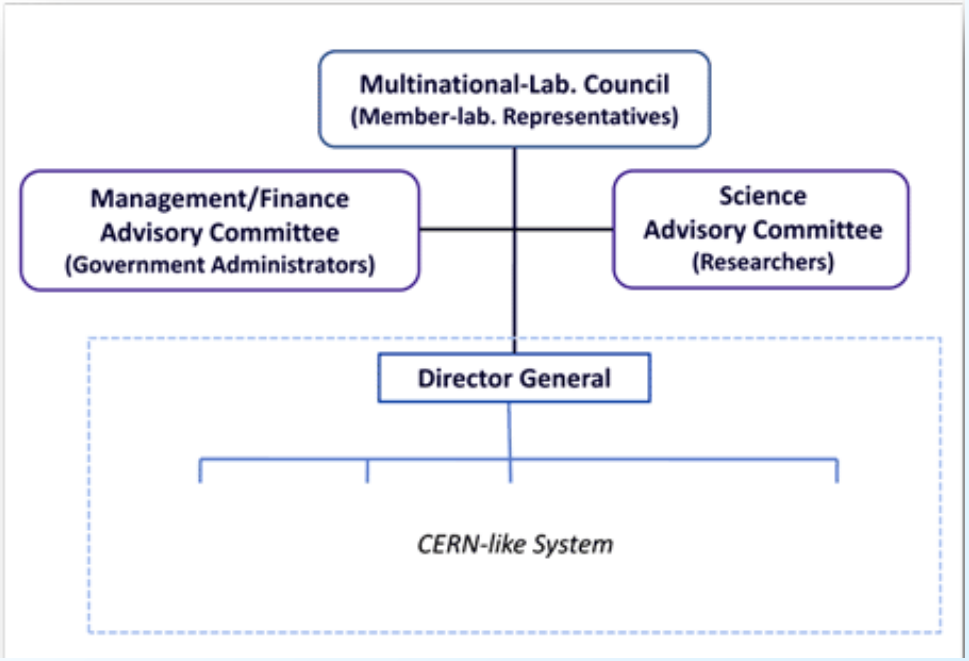
ITER

(International Thermonuclear Experimental Reactor)

- To build the largest and most advanced experimental tokamak nuclear fusion reactor, at Cadarache, France
- EU, USA, Russia, Japan, China, India, Korea
- Total cost € 15 billion (about 50 % will be paid by EU as a hosting member)
- The ITER organization was formally established in 2007 after the intergovernmental agreement among seven members under the support of International Atomic Energy Agency (IAEA)
- ITER Organization is supervised by its top body, the ITER Council that has the authority to appoint senior staff, amend regulations, decide on budgeting issues, and allow additional states or organizations to participate in ITER.

Large Hadron Collider

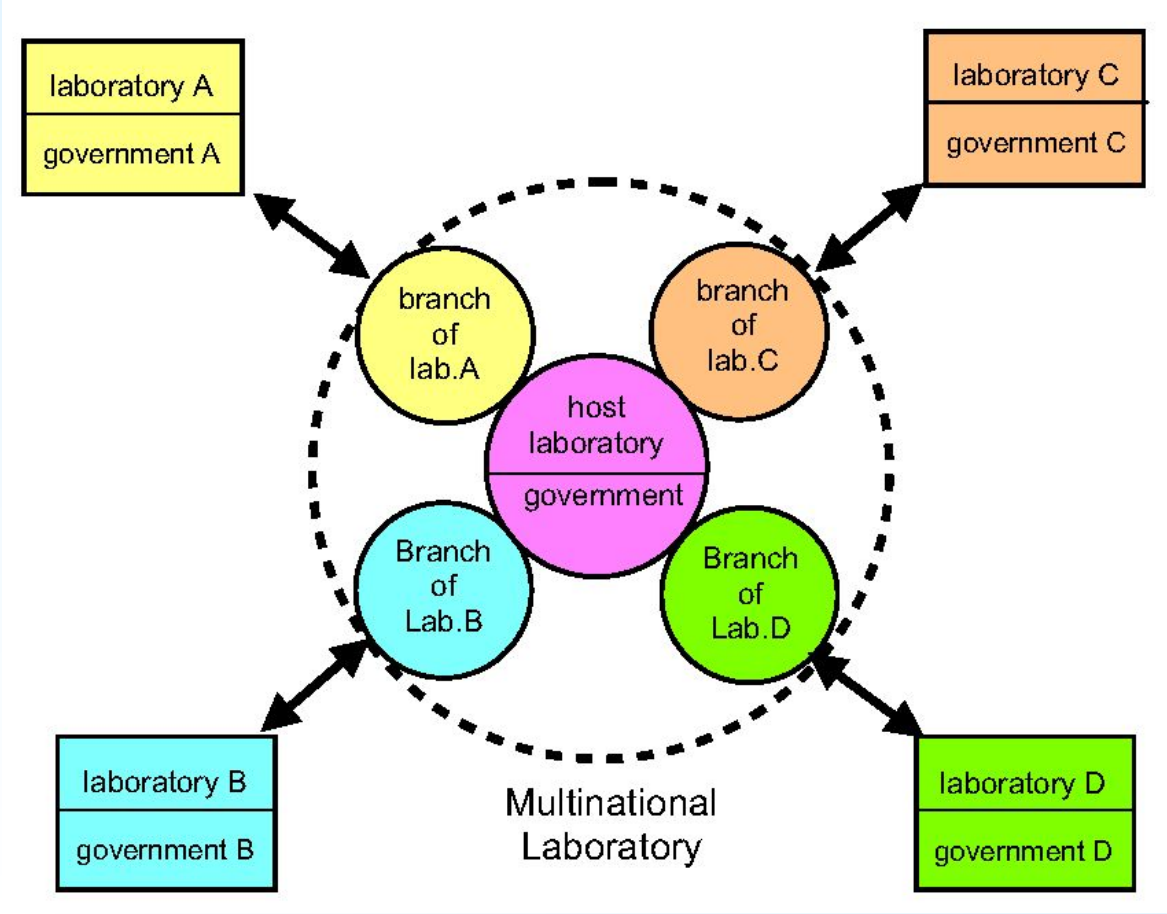
- A large-scale, worldwide scientific cooperation project to build the Large Hadron Collider (LHC) using CERN (European Organization for Nuclear Research)'s existing accelerator complexes located in Switzerland and Frence
- 20 CERN member countries, USA, Japan, Russia, Canada etc
- Total cost about 5 billion $ (USA 0.5, Japan 0.15)
- The project is managed by a Council comprising representat from national laboratories of member countries.



http://www.kek.jp/intra-j/director/column/100604.html

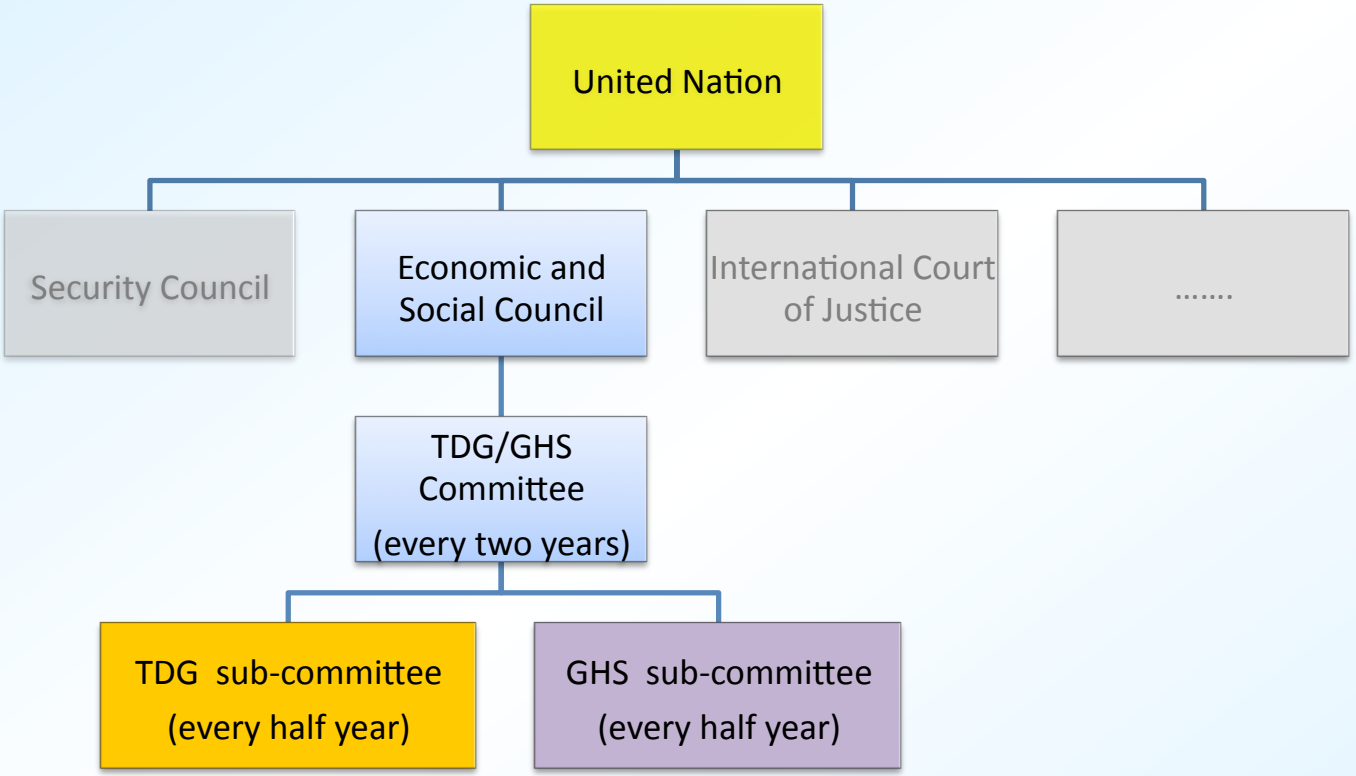
Possible form of multinational lab.

(based on the recommendation by International Committee for Future Accelerators)



http://www.kek.jp/intra-j/director/column/100604.html
http://www.fnal.gov/directorate/icfa/icfa_guidelines.html

An example of multinational regulation



TDG：Transport of Dangerous Goods

GHS：The Globally Harmonized System of Classification and Labelling of Chemicals

TDG/GHS sub-committees

	TDG	GHS
Objective	To recommend regulations for transport of dangerous goods	To recommend globally harmonized system of classification and labelling of chemicals
Participants	22 countries	27 countries
Output	●Model regulations on TDG (Orange Book) ●UN Manual of Tests and Criteria	●GHS official text (Purple Book)

Explosive working group

Plenary session

Summary

- **Existing multinational project are consisting of one hosting member and other participating members.**

- **It would be important which country will host. If no host country is fixed, the lunar base would be the first case of multinational large project.**

- **A system to establish multinational regulation would be necessary particularly in the safety issue such as UN TDG/GHS.**