> Many parts of Country A are suffering from a drought, which is leading to starvation in several parts of Country A. As a result, several thousand citizens from Country A have migrated to Country B and Country C, which also borders Country A. Some experts predict that tens of thousands of others will attempt to cross the borders in the next several months if the situation in Country A does not improve. Countries B and C are seeking help in better understanding how many refugees they are likely to receive and where.

> **Key Components**

  – Different jurisdiction – different legal and policy frameworks
  – Critical but slowly developing crisis
  – Emphasis on need for data sharing
Civil unrest in Country A has resulted in damage to a chemical storage facility, with some toxic chemicals being released into the atmosphere. Although Country A claims that the chemical storage facility was being used solely to produce chemicals for commercial and agricultural use, some military experts outside of Country A believe that chemical weapons are stored there as well.

Key Components

- Different types of sensors
- Military vs humanitarian purpose
The United Nations and various Non-Governmental Organizations (NGOs) are trying to understand the extent of the drought and food shortage in order to determine how much aid is needed and where it should be sent. They also want to share this information with the governments of Countries B and C so they can better prepare for the refugees. The entire international community is interested in learning the composition of the chemicals that have been leaked and how far and in what direction the chemicals are likely to spread.

Key Components

- Global Issue
- Intersection of various issues/technologies
Use Case

Countries A, B and C and other stakeholders from around the globe will require vast amounts of geospatial information to help answer these questions. However, Country A’s has limited capabilities to collect, process and use geospatial information. In addition, the International Charter on Space and Major Disasters has not been activated due to the slow-moving nature of a drought. As a result, the needed information will need to come from government agencies, industry and transnational organizations from around the globe. A number of different types of geospatial information will be required to address these issues, collected from many types of sensors, and deployed on several different platforms – i.e. satellite, air (both manned and unmanned) and ground-based). In addition, smart phones could also collect and share valuable geospatial information.
The stakeholders wish to create geospatial products and services by aggregating the different types of geospatial information. In some cases, this information will be publicly available, but in most cases it must be obtained (i.e. licensed) from either industry or government sources.

Representatives from eight countries were asked to respond to the following questions. So far have received responses from seven – Australia, China, Finland, Malaysia, Mexico, Sweden, United States.
Q: OpenStreetMap (OSM) has offered to come in and work with local communities to map areas impacted by the drought. Are there any laws or policies in your country that would restrict them from creating these maps or sharing them with others outside of the country?

Analysis of responses:
- Permission/authorization required for certain types of mapping (surveying).
- Some concerns over quality and classified information.
- License terms may make it difficult to share government data with OSM.
Q: A commercial satellite imagery provider has offered to donate high resolution satellite imagery to your agency but is asking for a license that is very restrictive on transfer to other government agencies, re-use and/or derivative products. You have been asked what rights you need in the satellite imagery in order to develop effective products and services to address the drought?

Analysis of responses:
- Use rights as broad as possible
- Invoke emergency management agreements
- Downloadable,
- Derivative products
- Unlimited copies
> Q: Several NGO’s have asked permission to operate drones over the country to collect data on the chemical release and share this with a number of countries around the globe so that they can prepare in case the chemicals enter their atmosphere. What legal issues do you see?

> Analysis of responses:

  – Role of Civil Aviation authorities
  – Restrictions on size (weight), speed, altitude, hours of operation
  – Permit/licensing
  – Privacy and national security are two of the biggest concerns
Q: Your military department wishes to use geolocation data from mobile phones to identify and monitor the movement of refugees. It has asked the mobile phone carrier to turn over all of its records. You have been asked if there are any legal issues that need to be considered.

Analysis of responses:
- Most countries have restrictions of the use of geolocation information collected by smart devices.
  - Privacy
- Need approval of third party
  - Judge or regulatory