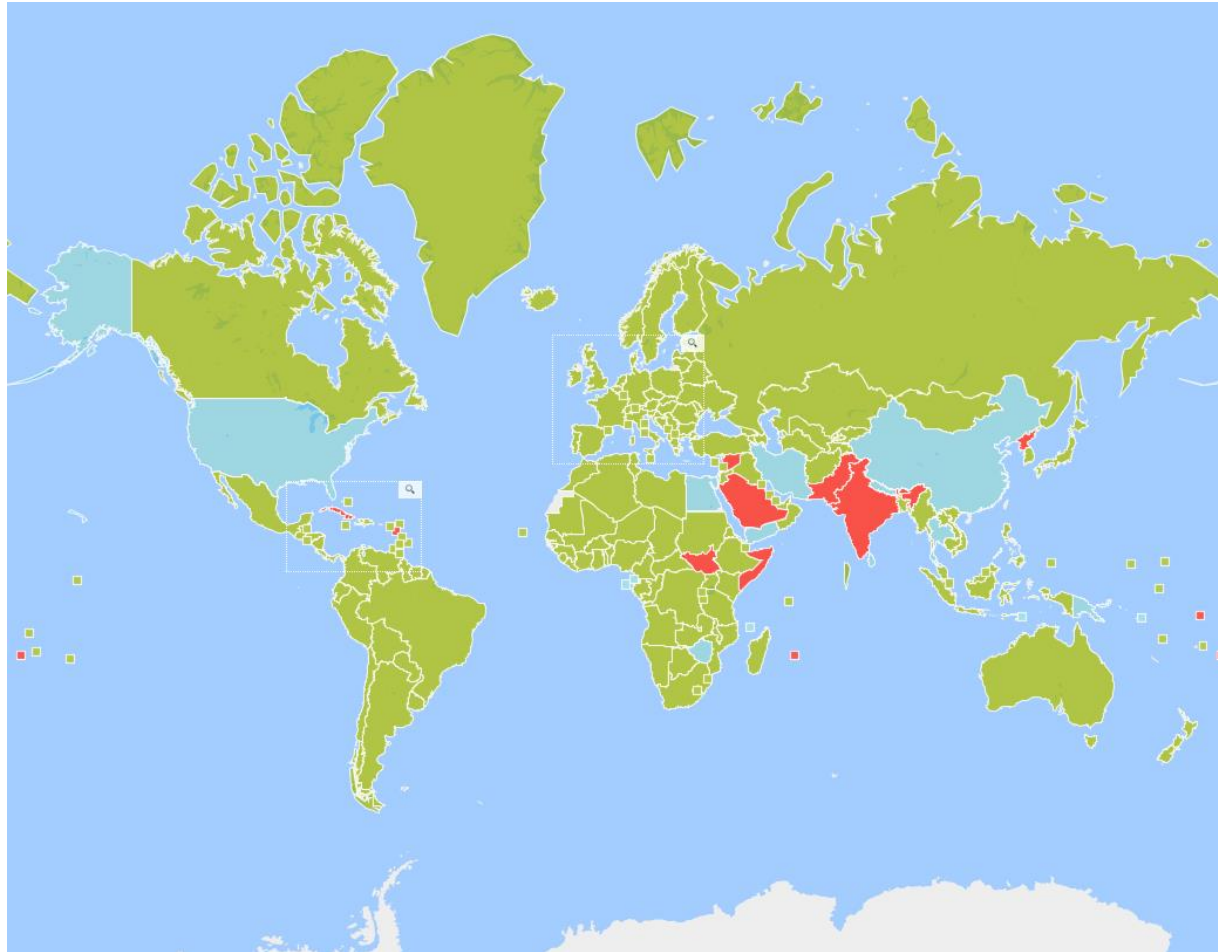

II. RADIOACTIVITY

COMPREHENSIVE TEST BAN TREATY

Since 1958 an agreement is negotiated which is supposed to inhibit every kind of nuclear tests or nuclear explosions for test purpose. At the same time an international monitoring system should be developed that could reveal any breach of agreement. It should further afford mutual control through for example on-site-inspections.

This so called Comprehensive Test Ban Treaty (CTBT) amends the Partial Test Ban Treaty by banning every kind of nuclear test.



Ratified Signed Outstanding
(Source: <https://www.ctbto.org/map/>, 9.10.2016)

So far the CTBT could not entry into force, because all 44 so called Annex-II-states are required to sign and ratify it at first. Annex-II-states are those states that use nuclear power in any kind. Eight ratifications are missing currently¹; the United States and China at the head.

At present the Comprehensive Test Ban Treaty Organization (CTBTO) is engaged to finish a global monitoring network. It is financed by the current treaty parties and will be used as a reliable and valid verification system as soon as the CTBT entries into force.

For the network there are 377 sensitive measure stations and laboratories planned which can detect nuclear explosion in the atmosphere, aboveground, underground and underwater. Current technology in the field of

¹ Status: October, 2016

seismology, hydrology and radiology in the atmosphere would be used. Those facilities are part of the International Monitoring System (IMS) that is currently in testing phase. It sends the results of analyses to a central office from the CTBTO in Vienna. Those results are also shared with the parties to the treaty.

Furthermore if the CTBT entered into force, one-site-inspections would be possible in case of suspicion of nuclear testing. A group of control officers would be sent to the area of suspicion to look for more evidence for a carried out nuclear explosion. Such an inspection has already be carried out in Kazakhstan with success.



(Photo source: www.ctbto.org, November 11, 2010)

METHOD: INTERACTIVE MATERIAL AND A LOOK INTO MORE DETAILS

MATERIALS: Interactive maps and information (www.ctbto.org)

TIME AND LOCATION: Very flexible from 10-30 Minutes, PC-Pool

You can find current information materials about the status of the treaty, the monitoring system and nuclear tests on the website of the CTBTO (www.ctbto.org). Your group can split and take a deeper look for example into the details of every kind of measurement technology. The results of the research can be presented in front of the rest. At the CTBTO website are also movies like in case a nuclear test side would be explored or a simulation about all nuclear tests happen.