### Objective
To acquire knowledge and advanced techniques of global seismological observation for playing important roles in the monitoring system of nuclear tests.

### Outcome
1. To acquire knowledge of the CTBT regime and the role of seismology in the International Monitoring System (IMS).
2. To understand global seismological observation technologies for monitoring nuclear tests and earthquakes.
3. To acquire data analytical techniques to discriminate nuclear tests from natural earthquakes.
4. To make an Action Plan (Project Proposal) which they should do in their country after a homecoming.

### Target Organization
This course is designed for administrative officers who are expected to play important roles in a global monitoring network on nuclear tests.

### Target Group
- University graduates or equivalent professional experience more than 3 years in seismology,
- Basic mathematics, knowledge of computer,
- Under 45 yrs old,
- Competent command of spoken and written English which is equal to TOEFL iBT 61 or its equivalent.

### Contents
- Outline of CTBT and IMS - Introduction of CTBT Regime concerning seismology, etc.
- Seismological Observation, National Data Center - Seismometer, Seismic Network, Design of Seismic Network, National Data Center
- Data Processing, Data Analysis, Nuclear test identifying method - Retrieval of Digital Seismic Data and Disposal of Format, Introduction to UNIX, Analysis of Teleseismic waves, Seismic Array Data Analysis, Discrimination by mb-Ms, Seismicity and Tectonics, etc.

### Outline
1. Preliminary Phase
   - To make an Inception Report on the current situation of the global seismological observation in their country.

2. Core Phase in Japan
   - To understand the overall view of the global seismological observation through lectures, practical exercises and site visits.
   - (1) Outline of CTBT and IMS - Introduction of CTBT Regime concerning seismology, etc.
   - (2) Seismological Observation, National Data Center - Seismometer, Seismic Network, Design of Seismic Network, National Data Center
   - (3) Data Processing, Data Analysis, Nuclear test identifying method - Retrieval of Digital Seismic Data and Disposal of Format, Introduction to UNIX, Analysis of Teleseismic waves, Seismic Array Data Analysis, Discrimination by mb-Ms, Seismicity and Tectonics, etc.