| Title                | NDC Capacity Building Workshop and Regional Seismic Travel<br>Time (RSTT) in combination with Data Sharing and Integration<br>Training   |
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| Objectives           | The objectives for the NDC Capacity Building Workshop are:   |
|                      | <ul> <li>to strengthen participants' knowledge of the Comprehensive Nuclear-Test-Ban Treaty (CTBT) and the work of the Preparatory Commission;</li> <li>to further build up the national and regional capacities in implementing the Treaty and participating in the verification regime, as well as to promote the civil and scientific application of verification technologies, in particular to promote the importance of Ground-Truth (GT) event locations in defining regional seismic velocity structures and models;</li> <li>to share data and to develop the Regional Seismic Travel Time Model (RSTT) in Asia through the acquisition of GT seismic locations.</li> </ul> |
|                      | <ul> <li>to understand and learn how RSTT can help regional networks achieve more precise event locations;</li> <li>to learn how RSTT can be interfaced with current locators used in daily earthquake location procedures;</li> <li>to recognize the importance of obtaining better regional locations for future tomographic studies;</li> <li>to stimulate regional cooperation in data exchange through the NDCs and/or regional network operators.</li> </ul>   |
| Location             | Chiang Mai, Thailand   |
| Dates                | 28 October – 01 November 2019  |
| Language             | English  |
| Point Of Contact     | IDC/CBT, CTBT P.O. Box 1200, A-1400 Vienna, Austria Tel: +43 1 26030 6484 Fax: +43 1 26030 5973 Email: conferences and workshops@ctbto.org   |
| Participants Profile | Applicants should be involved in the use of IMS Data and Products, in particular NDC analysts, scientific staff from seismological observatories, and/or tsunami warning centres or researchers from academic institutions with seismological background and experience. The workshop aims at having a broad regional representation from Asia.  Participation in the training requires the participant to have an advance degree in seismology and/or geophysics, a good command of the English language and have worked in areas related to tomography, receiver functions, regional seismic studies and earthquake data processing.   |

|                               | Participation in previous RSTT related activities is an asset. It is highly recommended that the participants bring along a laptop of recent model and satisfactory specifications in hard disk and memory to allow use of Virtual Machine, in order for them to obtain the software of the Commission and enable them to pursue further work after the workshop.   |
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| <b>Application Procedures</b> | Applicants are requested to visit our website <a href="mailto:ctnw.ctbto.org">ctnw.ctbto.org</a> and apply online latest by <b>01 July 2019</b> .   |
|                               | Financial support may be available for a limited number of participants. Such assistance must be requested at the time of registration (by selecting the relevant box during online registration) and no later than <b>01 July 2019</b> .   |
|                               | States Signatories wishing to nominate experts are requested to inform the Provisional Technical Secretariat (See Point of Contact) through their respective Permanent Mission.   |
| Deadline for Application      | 01 July 2019  |
| Financial Information         | Applicable to PTS-funded participants only: In accordance with the Staff regulations and rules and Administrative Directives, the PTS will provide the candidates with daily subsistence allowance (DSA) and financial support to cover the travel costs.  • The DSA will be sufficient to cover related expenses during the workshop and training program.  • The PTS travel agent will reserve, issue and send the tickets to the participants for the most direct and economic route.  • Funded participants are not allowed to purchase their own tickets unless, under exceptional circumstances, be authorized to do so and only if this proves to be more cost efficient for the PTS; and  • Health insurance will be provided for the duration of the workshop and training.  Requirement: Scanned passport copies. |
| Abstracts                     | The selected participants to the event will be requested to submit an abstract. Complete instructions will be provided.   |
| Agenda                        | <ul> <li>The agenda on NDC Capacity Building is:</li> <li>Presentations of the latest developments, regarding IMS and IDC, capacity building and training.</li> <li>National experiences in establishing and operating an NDC and/or experience with CTBT: Speakers from each State in Asia represented at the workshop (15 minutes each).</li> <li>Establishment, Operation and assistance of NDCs.</li> <li>Introduction to the RSTT project and data sharing activities.</li> <li>Civil and scientific applications of IMS data and IDC products with emphasis on special interest to NDCs in Asia.</li> </ul>   |
|                               | The agenda for the training is  • Presentations and discussions on:   |

|                                | <ul> <li>Theoretical aspects behind the RSTT model and other 2.5D or 3D seismic velocity models</li> <li>Computational efficiency of the RSTT method.</li> <li>Tessellation grid and the importance of crustal parameters data input (compilation of published references).</li> <li>Availability of ground truth events (GT) and the need to test the model.</li> <li>How regional phase data exchange can help better understanding the regional crustal structure through tomographic studies.</li> <li>Hands-on exercises on RSTT data sets</li> <li>Measurement of regional arrival times.</li> <li>Location of events using regional data.</li> <li>Combining regional and local data.</li> <li>Testing location accuracy.</li> <li>Evaluation of residuals.</li> <li>Comparison with ground truth and other reference events.</li> <li>Establishing new reference (ground truth) events.</li> </ul> |
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| Co-organizers                  | NDC Thailand   |
| Other Pertinent<br>Information | The Training is available for a limited number of participants.  Visas  Participants should apply for visas, if needed, at the corresponding consular office upon receipt of an Acceptance Note Verbale/Letter from the Provisional Technical Secretariat, in order to ensure timely processing.  Health/Accident Insurance It is strongly recommended that prior to departure all participants should acquire health and accident insurance for the duration of the workshop and training.  |