

Revisiting hi-tech issues: spread the word in India

THE editorial about the problems of introducing trenchless methods to developing economies (TTC, December 2005) appeared as I was preparing for a seminar on this subject to be held in New Delhi, India.

The main themes of the initial article included the need for the trenchless community to recognise the different requirements of these varied countries and to offer methods appropriate to any particular country. It pointed out that the funding agencies often operated through international consultants, which frequently proposed solutions they were familiar with in their own nations. In particular, the tendency to support solutions involving privatisation, inevitably focusing attention on the requirements of those who could pay for water, rather than the poor who could not – yet who suffer the most from water related problems.

This problem was discussed in detail in a recent article by a group of Indian academics, and environmental experts. The group analysed the outcome of ADB-financed water projects in some of the major urban areas of Asia and concluded that European models adopted seldom properly addressed the needs of the poor. The answer to this problem is to educate local utility officials to better understand their own particular needs, and the full range of solutions available.

In its role as an international promoter of trenchless methods, the ISTT is considering ways of addressing these issues, and facilitating growth of trenchless technology in these areas. In fact, ISTT is supporting a working group, based in India, to address the specific technology transfer problems.

The Delhi Seminar was organised by Tokyo Engineering Consortium (TEC), the project management consultant acting for the Ministry of Environment National Rivers Conservation Directorate on the Yamuna Action Plan Phase II. YAP II is a major environmental improvement programme, focused on the Yamuna River, which stretches over 1,200 km from Himachal Pradesh through Uttar Pradesh, Haryana and Delhi to the Ganges River.

The project, to restore the river's water quality by providing sewage treatment plants and sewers and removing sources of pollution, is funded by the Japan Bank for International Cooperation (JBIC), which apparently has a larger aid budget in the area than the World Bank/ADB.

The first phase (YAP I), involving the evaluation of the problem, construction of 35 sewage treatment plants and 216 km of new sewer, focused mainly on Haryana and Uttar Pradesh and ran from April 1993 to February 2003,

at a cost of ¥18 billion (US\$162 million). Phase II began in December 2004 and will run until November 2009 for ¥13 billion (US\$117 million) and involves a significant investment in new and replacement sewers and two treatment works in New Delhi. The purpose of the seminar, entitled 'YAP II and Beyond – a Workshop on Dissemination of Trenchless Technology in India', was to inform local bodies of the benefits of new technology. Speakers included central government officials; consultants working on the project, and a number of representatives from international equipment and product suppliers. It was organised and led by Dr Dec Downey, vice chairman of the ISTT, a subconsultant on the project working for TEC.

The workshop was opened by NRCDC Additional Secretary Naresh Dayal with various sessions covering the background to the project, progress to date, and reviews of the history and development of trenchless methods. The client's perspective was provided by VS Thind, project director for the Delhi Jal Board (DJB), who proved to be a well-informed and passionate supporter of the need for Trenchless methods in India's crowded urban areas. Delegates also heard from Niranjana Swarup, executive director of IndSTT, who described the societies' ambitious programme to educate Indian engineers in the Trenchless arts. Other presentations were given by Charlie Kretch, the YAP II project manager, who outlined the scope of works, and BK Balasubramanian, a project engineer for YAP II, who reviewed the track record of trenchless contracts in India.

More sessions were reserved for international experts who each had 20 minutes to cover topics including micro-tunnelling, directional drilling, pipe-bursting and most of the renovation lining techniques.

Most of the 190 or so delegates felt that the event was worthwhile and NRCDC has decided to undertake extra workshops specific to the scope of works in Uttar Pradesh and Haryana.

One main difficulty in improving such events is to find speakers who can give 'generic' presentations on technologies without simply promoting a particular product. Inevitably, companies attending such seminars expect to be able to promote their particular offerings. One disadvantage of this approach is the need to use many presenters to ensure complete and even coverage of a subject, restricting the time available to each presenter.

The question of course is: 'Is there an alternative means of providing unbiased guidance on the use of trenchless technology?' One possibility would be for funding or implementing agencies to organise and financially support more educational events. Ideally, such events should be true workshops with an atmosphere that promoted questions and encourage audience participation. The ISTT and many of its professional associates, including IndSTT, have direct experience of organising such events, and would be happy to work directly with the funding and implementing agencies.

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