

ITALIAN ASSOCIATION FOR TRENCHLESS TECHNOLOGY





I.A.T.T. (Italian Association for Trenchless Technology) was founded in 1994 to promote the progress of scientific and technical know-how in the field of trenchless technologies (nodig).



 I.A.T.T is an affiliated member to the I.S.T.T. (International Society for Trenchless Technology), with headquarters in London along with other 29 National Associations for Trenchless Technologies in 33 countries.





29 Associations in **33** countries

ISTT



IATT Activities/Aims

WTA COLON



International Activities



IATT and the Mediterranean Countries



- ISTT (International Society for Trenchless Technology) has appointed IATT for divulgation of No-Dig technologies on the North-African and Middle East countries
- The activity is deployed on the basis of a framework agreement between IATT and ICE (Italian Trade Office) and the Ministry for International Commerce.





International activities



- Master Agreement signed with the Italian Ministry of Economics regarding the internazionalization June 2010
- Agreement with MISE and ICE (Italian Foreign Trade) for the openinig of an office in Amman and Tripoli
- Agreement with MISE (Kurdistan, Iraq)

International dissemination



- •Meeting with Kurdish Delegation in Milan –March 2011
- •Participation to the Delegation in Afghanistan with Paolo Romani, Prime Minister of Economic Development – April 2011
- •International No-Dig NASTT Washington March 2011
- •International No- Dig Berlin May 2011
- •National No-Dig Paris- June 2011

International seminaries



Done in 2009

SEMINARY ICE LEBANON
SEMINARY ICE JORDAN
SEMINARY ICE KURDISTAN
SEMINARY ICE ALGERIA
SEMINARY MOROCCO, TUNISIA, ALGERIA, LYBIA
INTERNATIONAL NO-DIG 2009 TORONTO

Done in 2010

•SEMINARY ICE JORDAN •SEMINARY ICE KURDISTAN •INTERNATIONAL NO-DIG 2010 SINGAPORE

Projects financed

•EZ LINE projects in the framework of 7 PQ financed by European Commission of Bruxelles



•Undergroud Catastre projects financed by Regione Lombardia



• Several projects concerned the application of trenchless technologies in MED Countries



The "No-Dig" Technologies



No-Dig Applications



- Cable Laying (Energy, TLC)
- Pipe Laying (Gas, Energy, TLC, Water)
- Penstock Laying (Sewage systems)
- Renovation of underground penstocks
- Utility Mapping
- Geological surveys
- Civil Engineering
- Environmental Engineering



Dig vs No-Dig



Digging a trench means:

- Road damaging
- Land disruption
- Safety Problems
- Environmental Problems
- Traffic



Damage caused to trade, residential and free-time activities



Trenchless Technologies

- 80% reduction in social-environmental costs
- 67% reduction of on site accidents
- Reduction of damage to the pre- existing utilities



Comparison of construction materials









Social - Environmental Impacts





Percentage cost saving with respect to traditional digging

Percentage cost saving in fuel consumption related to worst traffic condition

ripo di intervento			
Perforazione orizzontale guidata	Microtrench	Minitrincea	
- 74	- 90	- 74	

Tipo di intervento				
Perforazione orizzontale guidata	Microtrench	Minitrincea		
- 75	- 90	- 74		

Percentage of cost saving between different laying techniques related to traditional digging.

Social - Environmental Impacts



Tipologia di costo	Tipo di intervento			
	Perforazione orizzontale guidata	Microtrench	Minitrincea	
installazione	- 29	- 78	- 64	
Costo legato all'incremento del traffico viario	- 74	- 91	- 74	
Impatto ambientale	- 75	- 90	- 74	
Risparmio percentuale	- 69	- 90	- 73	



Social - Environmental Costs



Percentage cost saving in relation to the application of No-Dig Technology

- 80% reduction of social-environmental costs
- 67% reduction in on site accidents
- reduction of damage to the pre-existing utilities.

Note: Studies conducted by Telecom Italia Lab with the use of an environmental impact model produced by "Federation of Swedish Industries"

Training and Divulgation



IATT promotes the diffusion of the No-Dig Culture mainly through *Training* and *Divulgation* activities:

- Dedicated seminars on company premises;
- Organization of open, workshops and seminars;
- Publication of specialized brochures and technical informative material (No-Dig Techniques, Case histories,);

•Frameworks with other associations.





Activities with Italian Government



Conference Table for OS35 with:



Master Agreement with:



Agreements (internazionalization) with:



MINISTERO DELLO SVILUPPO ECONOMICO DIPARTIMENTO PER L'IMPRESA E L'INTERNAZIONALIZZAZIONE D.G. Política Commerciale Internazionale e D.G. Polítiche di Internazionalizzazione e la promozione degli scambi

Agreement with :

ITALIA //



MINISTERO DELLO SVILUPPO ECONOMICO DIPARTIMENTO PER L'IMPRESA E L'INTERNAZIONALIZZAZIONE D.G. Política Commerciale Internazionale e D.G. Polítiche di Internazionalizzazione e la promozione degli scambi





- MOU signed with Jordan Environment Society 14 November 2010
- Agreement signed with ANCI (Italian Association of Municipalities) 24 November 2010
- Agreement signed with Formedil (release of patents for special machinary/equipment for trenchless technologies) 27 January 2011

Agreement signed with Federutility (reuse of existing belowground network) - 28 January 2011

Agreement signed with Roma Capitale (Rome Municipality) – June 2011

Normatives and Legal Provisions



2 ITU (International Telecommunication Union) Recomendations:

About the use of georadar investigation in Directional Drilling and on the installation of TLC apparatus and systems

- Workshops In EU Ambit:
- Published normative on the use of georadar (306-8);
- Forthcoming publication of a normative on the application of directional drilling (2008)
- Legal Aspects and Regulations:

Infrastructures and Transportation Ministry Decree dated 10.08.04. - Introduction of No-Dig Technoilogy on Railcrossings and parallelisms -



OS 35 - Regulation and Certification

Concern about a specific type of certification to be requested on tenders. It's has been designed around the low enviroment impact phylosophy of No-Dig technologies. It's applies on the implementation and maintenance of any underground construction by means of the application of non-invasive technologies.

The Price – Booklist

- With the evolution of the Market and technologies, a new Price-Booklist was released in November 2012 and published on DEI – Tipografia del Genio Civile







In order to use **No-Dig Techniques** more and more frequently it is essential to be provided with:

- 1. Technology know-how;
- 2. The warranty of the availability of qualified companies ;
- 3. The ability to evaluate the economic impacts;



The **No Dig Techniques** mean:

- Major social-environmental cost reduction;
- Cost adjustment in favour of eco-friendly activities ;
- Notable cost reduction in comparison to traditional techniques, in specific circumstances.

A growing demand and knowledge for these techniques will allow for "more work" and therefore a reduction of costs listed.



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