### Printed from THE TIMES OF INDIA

## BEL-NAL pact for e-target system for defence & paramilitary training

TNN | Aug 14, 2018, 03.16 PM IST



BENGALURU: Defence PSU Bharat Electronics Ltd (BEL), on Tuesday said it has signed a Technical Collaboration Agreement (TCA) with National Aerospace Laborotaries (NAL), under the Council of Scientific and Industrial Research (CSIR), for the design and engineering, production and commercialisation of Electronic Target System (ETS), a modern training aid meant for enhancing marksmanship of Defence and Paramilitary forces during live firing exercises on the field.

The agreement heralds a new beginning in the ties between BEL and CSIR labs for developing products targeting niche market segments.

"Designed by CSIR-NAL, ETS is a technically superior and cost-effective solution for police, paramilitary and defence personnel looking at acquiring sharp shooting skills in small firearms as well as honing their proficiency in tactical field firing. With this technology, BEL is targeting a market of about 1,500 lanes," BEL said in a statement.

Presently, after firing a shot, a shooter is unable to instantly gauge if he has hit or missed the target and by what margin, and, needs to move near the target to examine the results. ETS helps in instantly providing the hit location through a display, positioned beside him.

CSIR-NAL has developed two technologies for Electronic Target System — Detection and Hit Visualisation using Acoustic Nwave Identification (DHVANI) and Acoustic Based Hit Identification and Analysis System (ABHIAS) — using which the shooter can instantly see, after each shot, the result on an electronic display placed nearby. This enables the shooter to constantly selfmonitor his progress and take remedial steps to improve his accuracy.



### ANIL URS

To design and develop electronic target system for training purposes

BENGALURU, AUGUST 14

Defence PSU Bharat Electronics Ltd (BEL) has signed a Technical Collaboration Agreement (TCA) with CSIR-NAL for the design and engineering, production and commercialisation of an Electronic Target System (ETS), a modern training aid meant to enhance the marksmanship of defence and paramilitary forces during live firing exercises on the field.

The agreement heralds a new beginning in ties between BEL and CSIR labs for developing products targeting niche market segments. The agreement was signed by Anandi Ramalingam, Director-Marketing, BEL, and Jitendra J Jhadav, Director CSIR-NAL, in the presence of Gowtama M V, Chairman and Managing Director, BEL, and other senior officers of BEL and CSIR-NAL, at the BEL corporate office here on August 14.

Designed by CSIR-NAL, ETS is a technically superior and cost-effective solution for police, paramilitary and defence personnel looking at acquiring sharp shooting skills in small fire arms, as well as honing their proficiency in tactical field firing. With this technology, BEL is targeting a market of about 1,500 lanes.

Currently, after firing a shot, a shooter is unable to instantly gauge if he has hit or missed the target and by what margin and needs to move near the target to examine the results. ETS helps instantly identify the hit location on a display positioned beside him.

CSIR-NAL has developed two technologies for the Electronic Target System – Detection and Hit Visualisation using Acoustics N-wave Identification (DHVANI) and Acoustics-Based Hit Identification and Analysis System (ABHIAS) — using which the shooter can instantly see, after each shot, the result on an electronic display placed nearby. This enables the shooter to constantly self-monitor his progress and take remedial steps to improve his accuracy.

### Published on August 14, 2018

- What did Bhushan Steel bring home for Tata Steel?
- 2 Will HPCL be on par with 'parent' ONGC?
- 3 TVS Motor launches new scooter, 3-wheeler in Philippines
- 4 RIL temporarily shuts down one unit at Jamnagar facility

### NEWS

T+ T-

Affordability makes 3-star hotels a hit among travellers: report



Affordability and decent customer service make three-star hotels most ...

### LATEST IN COMPANIES



Affordability makes 3-star hotels a hit among travellers: report

Affordability and decent customer service make three-star hotels most ...



At 40, no going hell for leather, says Hidesign's Kapur Printed from

# **BangaloreMirror**

### Bengaluru: Training aid to sharpen shooting skills; BEL, NAL sign agreement

By Hemanth CS, Bangalore Mirror Bureau | Aug 14, 2018, 07.33 PM IST



Bharat Electronics Ltd (BEL) has signed an agreement with NAL for the design and engineering, production and commercialisation of Electronic Target System (ETS), a modern training aid meant for enhancing marksmanship of Defence and Paramilitary forces during live firing exercises on the field.

ETS designed by NAL is a technically superior and cost-effective solution for Police, Paramilitary and Defence personnel looking at acquiring sharp shooting skills in small fire arms as well as honing their proficiency in tactical field firing. With this technology, BEL is targeting a market of about 1500 lanes.

Presently, after firing a shot, a shooter is unable to instantly gauge if he has hit or missed the target and by what margin and needs to move near the target to examine the results. ETS helps in instantly providing the hit location through a display, positioned beside him.

NAL has developed two technologies for Electronic Target System — Detection and Hit Visualisation using Acoustic N-wave Identification (DHVANI) and Acoustic Based Hit Identification and Analysis System (ABHIAS) — using which the shooter can instantly see, after each shot, the result on an electronic display placed nearby. This enables the shooter to constantly self-monitor his progress and take remedial steps to improve his accuracy.



BREAKING NEWS : Malaysian court to rule on women accused of killing \_

States								[ Photo		
India	World	Sports	Business & Economy	Science & Technology	Features	Entertainment	States	Autoworld	Startup World	

Posted at: Aug 14 2018 1:12PM

### BEL signs MoU with CSIR-NAL for Electronic Target System



Bengaluru, Aug 14 (UNI) Defence PSU Bharat Electronics Ltd (BEL) has signed a Technical Collaboration Agreement (TCA) with CSIR-NAL for the design and engineering, production and commercialisation of Electronic Target System (ETS), a modern training aid meant for enhancing marksmanship of Defence and Paramilitary forces during live firing exercises on the field.

BEL on Tuesday said the agreement, which heralded a new beginning in the ties between BEL and CSIR labs for developing products targeting niche market segments, was signed by Mrs Anandi Ramalingam, Director (Marketing), BEL, and Mr Jitendra J Jhadav, Director (CSIR-NAL), in the presence of BEL Chairman and Managing Director M V Gowtama M V here today.

Designed by CSIR-NAL, ETS is a technically superior and cost-effective solution for Police, Paramilitary and Defence personnel looking at acquiring sharp shooting skills in small fire arms as well as honing their proficiency in tactical field firing. With this technology, BEL is targeting a market of about 1500 lanes. Presently, after firing a shot, a shooter is unable to instantly gauge if he has hit or missed the target and by what margin and needs to move near the target to examine the results. ETS helps in instantly providing the hit location through a display, positioned beside him.

CSIR-NAL has developed two technologies for Electronic Target System — Detection and Hit Visualisation using Acoustic N-wave Identification (DHVANI) and Acoustic Based Hit Identification and Analysis System (ABHIAS) — using which the shooter can instantly see, after each shot, the result on an electronic display placed nearby. This enables the shooter to constantly self-monitor his progress and take remedial steps to improve his accuracy.



THIRUVANANTHAPURAM, AUG 15 (UNI) Minister Kadakampalli Surendran and Shashi Tharoor MP(R) visits flooded areas in Thiruvananthapuram on Wednesdav.UNI

#### **Other Links**

UNIVARTA (News Agency) Indian News Agency

UNI-Urdu Service(News Agency)

Indian News Agency

Newswrap

Newswrap1



BEL ONGC GAIL IREDA HAL IndianOil SJVN HPCL Coal India NCL Powergrid NTPC PFC KIOCL CONCOR DVC NALCO BSNL MECON MECL RINL-Vizag Steel AAI MCL NRDC NBCC REIL HEC REC BHEL SAIL

## BEL Signed a TCA with CSIR-NAL for Training aid to sharpen shooting skills of Defence, Paramilitary & Police forces



**Bangalore:** Bharat Electronics Ltd, (http://bel-india.in/)has signed a Technical Collaboration Agreement (TCA) with CSIR-NAL for the design and engineering, production and commercialisation of Electronic Target System (ETS), a modern training aid meant for enhancing marksmanship of Defence and Paramilitary forces during live firing exercises on the field.

The Agreement, which heralds a new beginning in the ties between BEL and CSIR labs for developing products targeting niche market segments, was signed by **Mrs Anandi Ramalingam**, Director (Marketing), BEL, and **Mr Jitendra J Jhadav**, Director (CSIR-NAL), in the presence of **Mr Gowtama M V**, Chairman & Managing Director, BEL, and other senior officers of BEL and CSIR-NAL, at BEL-Corporate Office in Bengaluru on August 14, 2018.

Designed by CSIR-NAL, ETS is a technically superior and cost-effective solution for Police, Paramilitary and Defence personnel looking at acquiring sharpshooting skills in small firearms as well as honing their proficiency in tactical field firing. With this technology, BEL is targeting a market of about 1500 lanes.

Presently, after firing a shot, a shooter is unable to instantly gauge if he has hit or missed the target and by what margin and needs to move near the target to examine the results. ETS helps in instantly providing the hit location through a display, positioned beside him.

CSIR-NAL has developed two technologies for Electronic Target System — Detection and Hit Visualisation using Acoustic N-wave Identification (DHVANI) and Acoustic Based Hit Identification and Analysis System

(ABHIAS) — using which the shooter can instantly see, after each shot, the result on an electronic display placed nearby. This enables the shooter to constantly self-monitor his progress and take remedial steps to improve his accuracy.