

Bharat Electronics, CSIR-NAL ink technical collaboration agreement

<https://www.thehindubusinessline.com/companies/bharat-electronics-csir-nal-ink-technical-collaboration-agreement/article24686948.ece>

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 (DHSVANI) 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

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

<https://timesofindia.indiatimes.com/india/bel-nal-pact-for-e-target-system-for-defence-paramilitary-training/articleshow/65400367.cms>



BENGALURU: Defence PSU Bharat Electronics Ltd (BEL), on Tuesday said it has signed a Technical Collaboration Agreement (TCA) with National Aerospace Laboratories (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 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.



BEL and CSIR-NAL sign a TCA for developing shooting aid for the armed forces

<http://forceindia.net/bel-csir-nal-sign-tca-developing-shooting-aid-armed-forces/>

A Technical Collaboration Agreement (TCA) has been signed between Navratna Defence PSU Bharat Electronics Ltd (BEL) and 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.

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

ETS, designed by CSIR-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.

Currently, after a shot is fired, the 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. The ETS helps in instantly providing the hit location through a display, positioned beside him.

Two technologies have been developed by CSIR-NAL for the 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.



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

<http://www.psuconnect.in/news/bel-signed-a-tca-with-csir-nal/16499>

Bangalore: **Bharat Electronics Ltd**, 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.



BEL & NAL Inks Pact for Electronic Target System For Defence Training

<https://www.electronicb2b.com/industry-buzz/bel-nal-inks-pact-for-electronic-target-system-for-defence-training/>

Defence PSU Bharat Electronics Ltd (BEL), declared that it has signed a Technical Collaboration Agreement (TCA) with National Aerospace Laboratories (NAL). This agreement has been signed under the Council of Scientific and Industrial Research (CSIR) for the design and engineering, production and commercialisation of Electronic Target System (ETS).

In a statement BEL stated that 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.

What is an ETS?

ETS is 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.

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 therefore needs to move near the target to examine the results. The new technology ETS will help shooters instantly providing the hit location through a display, positioned beside him.