



Explosive Detection Canine Technologies

The Department of Homeland Security (“DHS”) SAFETY Act program evaluates a wide range of anti-terrorism products, systems, and services for consideration for provision of legal liability protections to the providers of Qualified Anti-Terrorism Technologies. Explosive Detection Canine (“EDC”) service technologies are one such category of applications submitted to the DHS Science and Technology Directorate (“DHS S&T”) for evaluation.

Providers of EDC service technologies may submit applications to the DHS Science and Technology Directorate (“DHS S&T”) for consideration for SAFETY Act liability protections. The following information is intended to assist providers of EDC service technologies in preparing SAFETY Act applications and to provide additional transparency regarding SAFETY Act evaluation considerations for this type of technology.

Information to assist applicants in preparing a SAFETY Act application for an EDC technology:

- [General Information on Submitting a SAFETY Act Application for an EDC Service Technology](#)
- [Standard EDC SAFETY Act Application vs. EDC Block Designation for CCSP-K9](#)
- [Traditional vs. Person-Borne EDC Service Technologies and SAFETY Act Protections](#)
- [Drafting a Technology Description for an EDC Service Technology](#)
- [SAFETY Act Evaluation Considerations for EDC Service Technologies](#)

General Information on Submitting a SAFETY Act Application for an EDC Service Technology

A provider of an EDC service technology may submit a SAFETY Act application to DHS S&T for consideration for SAFETY Act liability protections. First, providers should develop a description of their technology. Second, they should consider whether the EDC service is intended for general deployment or to be used under the TSA CCSP-K9. Third, providers must consider whether they deploy traditional and/or person screening canine (PSC) services, PSC is defined in the ANSI/ASB Standard 092, Standard for Training and Certification of Canine Detection of Explosives, 1st ed. (AAFS Standards Board 2021) as a canine trained to detect and alert to the presence of explosives and explosives related substances (e.g., propellants, oxidizers, precursors) for which it has been trained that may be person borne. Prior to submitting a full SAFETY Act application, all providers of EDC service technologies are encouraged to submit a pre-application to discuss the application process and these considerations.

The following provides information related to preparation of a SAFETY Act application for an EDC service technology.

A. Describing the EDC Technology

When submitting a SAFETY Act application for an EDC service technology the first step is creating a Technology Description. The Technology Description will determine what type of SAFETY Act application to submit, form the basis for evaluation of a technology, and will ultimately define the scope of the technology for SAFETY Act protections. The Technology Description is a standardized narrative that includes information on your company and technology and is written in a specific format. The Technology Description for an EDC service technology will consist only of components related to the detection of explosive materials. The Technology Description will not include ancillary or related services such as security guard functions, armed security functions, explosive ordnance disposal services, threat and vulnerability assessment services, detection of non-explosive materials such as narcotics, etc. (If you provide other services for which you would like to apply for SAFETY Act protections, you may submit a separate SAFETY Act application for these services.)

- Due to the variance with which EDC services may be deployed internationally and within wartime or conflict zones, for SAFETY Act purposes the geographic area of deployment of an EDC service is limited to the United States and its territories. [Click on this link](#) for guidance on drafting the Technology Description for your EDC service technology.
- The provider must consider whether its EDC services are delivered broadly to a wide range of customers, or in support of the TSA CCSP-K9 program. [Click here for more information](#) on when to submit a general SAFETY Act application and when to submit under the Block Designation for the TSA CCSP-K9 program.

B. Functional Categories of EDC Service Technologies

The type of SAFETY Act protections which DHS may provide to an applicant for an EDC service technology is related to the functional category of the EDC service, i.e. traditional or person-borne. [Click here for more information](#) on the functional categories of EDC services and the types of SAFETY Act protections can be awarded for each.

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Standard EDC SAFETY Act Application vs. EDC Block Designation for CCSP-K9

A SAFETY Act application for an EDC service technology may be submitted either as a standard SAFETY Act application or through the Block Designation (BD-14) for the TSA CCSP-K9 program.

- A standard SAFETY Act application for an EDC service technology should be submitted when the EDC services are deployed within the U.S.
- A SAFETY Act Block Designation application may be submitted if the EDC services are deployed only under the TSA CCSP-K9 program. (The application process for the SAFETY Act Block Designation for CCSP-K9 is streamlined and generally processed in under 120 days.)
- If an applicant deploys EDC services both broadly to a variety of customers and under the TSA CCSP-K9 program, it may wish to submit two separate SAFETY Act applications, to receive insurance liability protections for all deployments of the technology.

The following lays out the primary difference between a standard and a Block Designation SAFETY Act application.

A. Standard SAFETY Act Application

The majority of EDC service technologies evaluated under the DHS SAFETY Act provide support to a range of commercial and government customers. If the EDC services are not deployed in support of the TSA CCSP-K9 program, the Applicant should submit a general SAFETY Act application. [Click here for information](#) on submitting a general SAFETY Act application.

B. TSA CCSP-K9 Block Designation.

SAFETY Act Block Designation (BD-14) provides SAFETY Act liability protections for Sellers of EDC services certified under the Transportation Security Administration (“TSA”) to operate in the Certified Cargo Screening Program – Canine (“CCSP-K9”). If EDC services are provided in support of the TSA CCSP-K9 program, the Applicant should follow the instructions for the SAFETY Act Block Designation (BD-14). The BD-14 Block Designation application is streamlined and will request information specific to EDC services provided for the TSA CCSP-K9 program. [Click here for information](#) on submitting under the BD-14 Block Designation.

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Traditional vs Person-Borne EDC Service Technologies and SAFETY Act Protections

For DHS SAFETY Act purposes, EDC service technologies can be divided into three categories as consistent with ANSI/ASB 092 Standard for Training and Certification of Canine Detection of Explosives:

- Traditional Explosives Detect Canine - detection of odors tracked to a static source
- Traditional EDC services with person screening capability Technology (EDCw/PSC)
- Person Screening only - detection of odors tracked to a moving source.

Applicants may apply for [SAFETY Act Designation](#) or for SAFETY Act [Designation and Certification](#) for this type of technology. In cases when an applicant does not have a long history of deployment of its traditional EDC services, an application for [Developmental Testing and Evaluation \(“DT&E”\) Designation](#) may be submitted.

A. Traditional EDC Service Technologies (EDC only)

For DHS SAFETY Act purposes, traditional EDC service technologies are considered to be those that detect stationary explosive devices through systematic search of vehicles, areas, structures, rooms, etc. Traditional EDC service technologies have a long history of deployment and have demonstrated effectiveness in locating explosive odors on which the EDC teams have been trained and certified.

B. Traditional EDC services with person screening capability Technology (EDCw/PSC)

For DHS SAFETY Act purposes, traditional EDC services with person screening capability Technology are considered to be those that use a canine trained to detect and alert to the presence of explosives and explosives related substances (e.g., propellants, oxidizers, precursors) for which it has been trained that may be located in the environment and/or person borne.

C. Person Screening only EDC Service Technologies (PSC only)

For DHS SAFETY Act purposes, person screening EDC service technologies are used to detect moving explosive sources. Person screening EDC services are intended to detect and alert to the presence of explosives and explosives related substances (e.g., propellants, oxidizers, precursors) for which a canine has been trained that are carried by an individual, or in an individual’s clothing, as the individual moves through a venue or area. Further, the effectiveness of this mode of EDC service is dependent on environmental conditions, positioning of explosive materials on a subject, search protocols, etc.

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Drafting a Technology Description for an EDC Service Technology

As a part of your SAFETY Act submission you should first draft a description of your EDC service technology. For SAFETY Act purposes the Technology Description is formatted in a specific way. Please use the following template to develop a Technology Description for your EDC service. Do not add to, or modify, the format and content of the Technology Description without consultation with the DHS S&T Office of SAFETY Act Implementation (OSAI).

A. Format for a Technology Description for an EDC Service Technology

EDC service providers should use the following template as the basis for drafting the Technology Description for their technology:

((Applicant company name, or names)), a ((State of incorporation or organization)) corporation, provide(s) ((Applicant Company Name)) Explosive Detection Canine Services within the U.S. and its territories, using explosive detection canine (“EDC”) teams consisting of an explosive detection canine and a single explosive detection canine-handler.

[If a traditional EDC service] EDC teams detect explosive odors to locate stationary explosive materials (the “Technology”).

[If a person screening EDC service] EDC teams locate person-borne explosives by tracking the odor from explosive material to a moving source (the “Technology”).

[If a person screening EDC and PSC service] EDC teams are trained to detect explosive odors both on stationary and moving sources.

EDC teams are trained using the *[insert a list of all applicable training standards and all provider-selected training guidelines or standards]* standards. EDC teams are tested using the *[insert a list of all applicable testing that is performed, e.g., locally provided odor recognition tests, the National Odor Recognition Test, etc.]* EDC teams are certified under *[insert the name of the third-party, national-level EDC professional organization]*¹ on the following explosives:²

- *Name of explosive material 1;*
- *Name of explosive material 2;*
- *Name of explosive material 3; and,*
- *Etc., for all explosives on which teams are certified under the national organization.*

All EDC service type teams are initially certified, and at least annually recertified, by *[insert the name of the third-party, national-level EDC professional organization]* through an independent third-party *[insert the name of the third-party, national-level EDC professional organization]* Master Trainer/official.

¹ For SAFETY Act purposes, all EDC teams must be independently certified by a third-party official a national-level EDC professional organization, such as NAPWDA, IPWDA, UPWDA, NPCA, etc.

² Adjust this list based on the explosive materials that are used for EDC team certification under the provider-selected third-party, national-level, EDC professional organization.

The Technology includes operational deployment of EDC teams; canine health and welfare; operational policies and procedures; and, background checks, vetting and screening of personnel hired for deployment of the technology teams.

B. Technology Description for a Traditional EDC Service

The following is an example of a Technology Description for a traditional EDC service:

Acme Corporation, LLC, a Delaware corporation, and Fauntleroy Company, LLC, a California corporation, provide Acme Explosive Detection Canine Services within the U.S. and its territories, using explosive detection canine (“EDC”) teams consisting of an explosive detection canine and a single explosive detection canine-handler. EDC teams detect explosive odors to locate stationary explosive materials (the “Technology”).

EDC teams are trained using ANSI/ASB Standard 092, North American Police Working Dog Association (“NAPWDA”) and National Police Canine Association (“NPCA”) standards. EDC teams are tested and maintained using the ANSI/ASB Standard 092, and possibly a *National Odor Recognition Test (“NORT”)*, or *other third-party odor recognition test*. EDC Teams are certified under NAPWDA³ on the following explosives:⁴

- *Name of explosive material 1;*
- *Name of explosive material 2;*
- *Name of explosive material 3; and,*
- *Etc., for all explosives on which teams are certified under the national organization.*

All EDC teams are initially certified, and at least annually recertified, by NAPWDA through an independent third-party NAPWDA Master Trainer/official.

The Technology includes operational deployment of EDC teams; canine health and welfare; operational policies and procedures; and, background checks, vetting and screening of personnel hired for deployment of the technology teams.

³ For SAFETY Act purposes, all EDC teams must be independently certified by a third-party official a national-level EDC professional organization, such as NAPWDA, IPWDA, UPWDA, NPCA, etc., that certifies traditional EDC teams.

⁴ Adjust this list based on the explosive materials that are used for EDC team certification under the provider-selected third-party, national-level, EDC professional organization.

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⁵ For SAFETY Act purposes, all EDC teams must be independently certified by a third-party official a national-level EDC professional organization, such as NAPWDA, IPWDA, UPWDA, NPCA, etc., that certifies traditional EDC teams.

⁶ Adjust this list based on the explosive materials that are used for EDC team certification under the provider-selected third-party, national-level, EDC professional organization.

⁷ List up to 10 customer locations for which the person-borne EDC service is to be deployed for data collection under a DT&E Designation.

SAFETY Act Evaluation Considerations for EDC Service Technologies

The following information is intended to assist providers of EDC service technologies with their preparation of SAFETY Act applications. When preparing a SAFETY Act application for an EDC service technology, please consider that:

- EDC service technologies are deployed using canine and handler teams that are trained and tested as a team to detect explosive odors in order to locate explosive materials.
- For EDC service technologies, SAFETY Act protections can be divided into two categories:
 - [General SAFETY Act technologies](#), and,
 - [Transportation Security Administration \(“TSA”\) Certified Screening Program – Canine \(“CCSP-K9”\)](#).

Dependent on the category of the technology, the specific directions for submission of a SAFETY Act application on the SAFETY Act web site, should be followed.

- For SAFETY Act purposes EDC service technologies can be divided into three functional groups consistent with ANSI/ASB Standard 092:
 - [Traditional](#) - Traditional EDC teams detect stationary explosive odor through systematic search of an area, room, or vehicle.
 - Traditional EDC with person screening capability – EDC’s have the ability to detect explosive odor on stationary and moving sources
 - [Person screening](#) – Person screening teams EDC services are only used to locate explosive odors carried by individuals, e.g. in backpacks or clothing, by tracking the odor from an explosive material to a moving source.

The type of SAFETY Act protections which DHS may provide to an EDC service technology is related to the functional group of the technology.

- Documentation supporting an application for an EDC service technology must include:
 - Information on the selection, hiring and vetting of EDC team handlers. As an anti-terrorism technology this should include a thorough background investigation with a periodic review cycle.
 - Information on the training and routine testing of EDC teams, to include: a discussion of the initial training curriculum, samples of daily/weekly proficiency training documentation, the number of weekly training hours, details on who provides the training, and policies for use of training aids i.e. live explosives or pseudo-explosive material.
 - Copies of reports from testing of the technology, including through use of red teaming Exercises and other penetration tests.
 - Information on the housing and care of canines, including how canine health is maintained and medical exams are scheduled and performed.
 - Feedback and review/evaluation information from customers. This should include customer point-of-contact (“POC”) information such as the customer name, deployment location, POC name, and POC email and telephone number.
 - Copies of incident reports on actual finds during searches, case studies showing effectiveness of teams deployed to customer locations, and any other anecdotal information showing the effectiveness of teams as deployed to customer locations.
 - Copies of applicable company licenses for the storage/handling/transportation of explosive material used in support of the Technology.
 - Copies of (at least) annual third-party certifications for all EDC teams for the current and previous 2 years (or for the working life of the EDC team if shorter), as performed by a

- third party, national level, professional explosive detection canine organization.
- Copies of policies and procedures for all aspects of the program, e.g. training, hiring, safety and operational deployment and safety (to include policies regarding actions taken during and after an alert), and quality assurance oversight over deployment of the technology.

Please see additional information specific to DHS SAFETY Act liability protections for EDC service technologies at [this link](#).

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