

DOMESTIC COMMUNICATIONS ASSISTANCE CENTER

A Vision Statement for the Domestic Communications Assistance Center

Draft

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SUMMARY

The FBI has developed a national Electronic Surveillance Strategy (ELSUR Strategy) in order to preserve vitally important law enforcement and Intelligence Community (IC) electronic surveillance (ELSUR) capabilities. An important component within this Strategy is the establishment of a Domestic Communications Assistance Center (DCAC) headed by the FBI.

Drawing upon FBI and other expertise, the DCAC will coordinate, integrate, and distribute ELSUR solutions among domestic law enforcement agencies (LEAs) and IC agencies (ICAs). This document presents a Vision Statement for the DCAC, describing how the DCAC will increase the ability of LEAs and ICAs to work with greater unity to strengthen ELSUR capabilities and information-sharing to protect the United States against national security and serious criminal threats, including Cyber crimes and attacks. The DCAC will help secure ELSUR and information-sharing capabilities in a substantially more cooperative, efficient, and cost-effective way.

BACKGROUND

Court-authorized ELSUR is a critically important governmental technique utilized in all types of investigations to enforce the Nation's laws, ensure the safety of its citizens, and maintain the Nation's security. ELSUR is used in nearly every significant intelligence, counterintelligence, counterterrorism, criminal, and Cyber crime investigation. Practically speaking, failing to maintain LEA/ICA ELSUR technical capabilities effectively repeals the lawful authority created by the Congress to conduct ELSUR pursuant to Federal and state ELSUR laws and court orders.

ELSUR capabilities and solutions are not investigation-specific; that is, ELSUR capabilities and solutions for one type of investigation more often than not are applicable to and effective for many. But the effectiveness of ELSUR capabilities operates inversely with the complexity and variety of communications technologies and services deployed in the marketplace. As the complexity and variety of communications technologies and services increase, ELSUR capabilities tend to decrease, and ELSUR costs likewise increase.

In the early days, "wiretapping" voice communications carried over analog "local loop" lines was relatively simple, straight-forward, and inexpensive. Thus, each LEA's ELSUR capabilities were robust; and there was little need for inter-agency cooperation and little premium was placed on strategic, integrated, or standardized interagency efforts. Most agencies could fend for themselves.

However, with the advent of digitally-based, switch-centric, advanced telecommunication services and features, the efficacy of agency-based "wiretapping" diminished by the day. In addition, as mobile "wireless" telephony quickly replaced wire line service and became the mainstay for U.S. telecommunications, ELSUR interception access points (IAPs) became more complex and problematic. Further, as computer-based "electronic communications" continue to grow and surpass voice communications in volume, especially with the emergence and use of broadband technology, they far exceed voice communications in ELSUR complexity.

Accordingly, in 1994, the Congress enacted the Communications Assistance for Law Enforcement Act (CALEA), which prescribed ELSUR responsibilities and authorized financial resources for "telecommunications carriers," to ensure that U.S. agencies could maintain their ELSUR capabilities. In addition, in CALEA, Congress emphasized the use of industry standards bodies in order to engender cooperation, consistency, and efficiency, and to promote uniformity and cost-effectiveness in ELSUR solutions. But, unlike with the funding specified in CALEA for telecommunications carriers, no funds were appropriated for LEAs/ICAs to address their increased ELSUR costs.

However, CALEA's mandated industry cooperation was, and remains, limited to "telecommunications carriers" and to "service that is a replacement for a substantial portion of local telephone exchange service." CALEA's

- Technological and operational advantages
- Cost savings
- Advantages in securing cooperation from the communications industry

Aside from these benefits, the communications industry itself will welcome a more cooperative governmental effort to standardize and centralize (or regionalize) ELSUR delivery nodes, mechanisms, and the ELSUR technical, operational, and administrative points of contact (POCs) to the extent possible. The communications industry much prefers government agencies to act in unity, identify a single set of ELSUR requirements, and speak with one voice.

Finally, it should be emphasized that conducting ELSUR is not an end in itself. It is the information “product” of ELSUR collections that contributes significantly to the successful conduct and resolution of intelligence, counterintelligence, counterterrorism, criminal, and Cyber crime investigations. Moreover, in the post-9/11 world, “collection product” information-sharing is vital. But these truths underscore the obvious and important proposition that agencies cannot use or share information that they have not acquired or have not been able to collect: agencies cannot connect the dots without first collecting those dots.

The FBI has given great consideration to this matter; and, consistent with its longstanding leadership in domestic ELSUR efforts, it has devised a comprehensive national ELSUR Strategy (discussed below). As one prong of the Strategy, it has proposed an initiative to secure vitally-needed ELSUR and information-sharing capabilities in a much more cooperative, efficient, cost-effective and integrated fashion through the institution of an FBI-led DCAC.

FIVE-PRONGED NATIONAL ELSUR STRATEGY

To deal with the emerging ELSUR challenges, the FBI, in consultation with a number of domestic governmental agencies and LEA associations, has developed a five-pronged national ELSUR Strategy. DCAC efforts are interwoven in varying degrees with each of the five prongs. As discussed further below, this Strategy includes:

- (1) Updating Federal ELSUR assistance mandates (e.g., updating CALEA)
- (2) Revising and enhancing certain Federal statutory and administrative ELSUR-related authorities
- (3) Enhancing LEA and ICA ELSUR coordination
- (4) Enhancing ELSUR cooperation between industry and LEAs/ICAs
- (5) Increasing LEA and ICA ELSUR technical and financial resources

(1) Updating Federal ELSUR assistance mandates (e.g., updating CALEA). The Strategy seeks to update Federal ELSUR assistance mandates, such as by codifying and further clarifying orders that have been issued by the Federal Communications Commission (FCC) as it carries out its responsibilities in implementing the CALEA. In particular, the proposed amendments revise CALEA by, among other things, clarifying:

- That CALEA coverage applies to providers of “replacement telephone service” and “network access service” (i.e., providers of VoIP and broadband access services)
- The level of assistance required of network access service and VoIP providers with respect to their isolating and delivering communications content and identifying information to LEAs/ICAs
- The lawful authority of LEAs/ICAs to fully receive and appropriately process a subject’s communications traffic, including IP/packet-based communications
- The importance of an expeditious implementation of CALEA through a timely industry standards process

In assuming leadership in advancing the Strategy, the FBI stands as a recognized leader of domestic governmental agencies in securing ELSUR capabilities through the institution of reasonable statutory obligations for service provider ELSUR assistance. The FBI spear-headed the original CALEA legislation; and, after its enactment, the Attorney General vested CALEA technical, implementation, and coordination responsibilities in the FBI. The

DCAC will play an important role in monitoring the intersection of statutorily-mandated ELSUR requirements and requirements best addressed via governmental self-help and coordination and through industry cooperation.

(2) Revising and enhancing certain Federal statutory and administrative ELSUR-related authorities.

Updating non-CALEA ELSUR-related authorities will include the enactment of Federal statutes and revision of DOJ regulation, respectively, such as:

- Protecting sensitive law enforcement and proprietary service provider ELSUR techniques and information (including protocol processing, decryption, and signal analysis techniques and information)
- Authorizing, in statute, FBI assistance and coordination of ELSUR expertise (if Congress supports the concept of the FBI coordinating/sharing ELSUR expertise and equipment via the DCAC and ELSUR regional technical centers), and establishing, in statute, a fund for appropriations dedicated to same
- Removing any administrative constraints on the FBI's (and/or the FBI-led DCAC's) ability to loan ELSUR equipment and provide technical assistance, training, etc. to state and local LEAs

Policy, legal, and legislative components within the DCAC will work together to integrate non-CALEA ELSUR-related authorities to ensure that enhanced technical and fiscal efforts and industry cooperation are not impeded or undercut by outdated or insufficient authorities that have not been adjusted to meet emerging ELSUR challenges.

(3) Enhancing LEA and ICA ELSUR coordination. For ELSUR efficiency and cost-effectiveness sake, the Strategy envisions organized, integrated leadership and support within the LEA/ICA community via a centralized FBI-led DCAC. Given the DCAC's principal role in coordinating, integrating, and distributing ELSUR solutions, the DCAC is most thoroughly engaged in the *coordination prong* of the Strategy. As discussed at greater length below, in this role, the DCAC, for example, will coordinate and provide ELSUR

- Research and development (R&D)
- Analysis, processing, and presentation tools and applications
- Network(s) for the delivery of ELSUR intercept traffic, information-sharing, and technical support
- Intercept testing and evaluation regimes
- Strategic and tactical technical and operational assistance
- Technical best practices
- Training programs for technical personnel and end-users from multiple agencies
- Outreach and liaison with entities within the communications industry

To supplement the DCAC, and to further enhance agency ELSUR coordination, the FBI envisions the creation of one or more ELSUR Regional Support Centers (RSCs)(discussed at greater length below) that will serve as a conduit(s) for the efficient and cost-effective distribution of DCAC-based strategic and tactical ELSUR technical support.

Vesting DCAC coordination leadership in the FBI makes sense. FBI organizational leadership and coordination efforts to enact and implement the CALEA legislation are well-recognized. Similarly, FBI technical leadership and coordination are well recognized: for example, when technological impediments to ELSUR have arisen, the FBI has demonstrated substantial technological innovation and coordination by developing and sharing ELSUR solutions (e.g., DCS 3000 software as an *interim* CALEA solution), in the absence of any commercial solutions.

(4) Enhancing ELSUR cooperation between Industry and LEAs/ICAs. In the face of diverse and rapidly-evolving communications technologies, it is imperative that greater and broader industry liaison be pursued, especially with IP-based communications service providers and manufacturers and emerging trusted third-party ELSUR solution providers. By obtaining greater information and insight into emerging technologies, services, applications, etc., LEAs/ICAs can field more timely, cost-effective technical solutions and identify less expensive commercial ELSUR solutions.

- In pursuing this facet of the Strategy, the DCAC will build upon the FBI's current, substantial, and highly effective liaison efforts with communications service and application providers, vendors, and others, such as through the FBI's Information Technology Study Group (ITSG).
- To date, the FBI has exhibited sound judgment in defining reasonable ELSUR solutions and requirements and in balancing and modulating technical and cost burdens between industry and domestic agencies.

Absent such centralized FBI-DCAC industry liaison efforts, fragmented and/or parochial approaches that otherwise might be pursued by individual Federal, state, and local agencies could unwittingly impair industry relations and their technical assistance to the detriment of the strategic goals of ICAs and LEAs.

(5) Increasing LEA and ICA ELSUR technical and financial resources To maximize cost-efficiencies, the DCAC will implement the Strategy's vision for a centralized and coordinated utilization of ELSUR funds needed to:

- Facilitate distribution of ELSUR expertise among domestic governmental agencies that conduct ELSUR, especially through the DCAC's sharing of the fruits of FBI ELSUR R&D to benefit all such agencies
- Establish a DCAC to help coordinate and propagate ELSUR capabilities among domestic governmental agencies that conduct ELSUR
- Establish and closely coordinate DCAC efforts with one or more RSCs that will serve as conduits for providing ELSUR know how, technical assistance, equipment sharing, intercept processing assistance
- Devise cost-effective intercept delivery assistance for all governmental agencies that conduct ELSUR
- Continue and increase greater and broader ELSUR industry outreach and liaison

VISION FOR THE DCAC

Given the technological and fiscal ELSUR challenges facing LEAs and ICAs as a community, the prospect of each and every LEA/ICA taking on such ELSUR challenges individually is neither realistic nor prudent. Indeed, in a world full of diverse and complex communications technologies that threaten ELSUR capabilities, an effective antidote is to seek, to the extent possible, common, unified, and standardized interagency ELSUR solutions, rather than each agency pursuing individualized, stove-piped, and non-cost-effective technical solutions.

While it is envisioned that DCAC efforts will be interwoven in varying degrees with each of the five prongs of the ELSUR Strategy, the DCAC is most thoroughly engaged in the *coordination prong* of the Strategy, where it is the focal point and the fulcrum for implementing interagency coordination. As it stands to reason, the coordinating functions assigned to the DCAC are best suited for a centralized entity that already has demonstrated ELSUR leadership and expertise. An FBI-led DCAC represents the most logical, efficient, and cost-effective means to coordinate, integrate, and distribute technical solutions to successfully maintain and secure ELSUR capabilities.

An FBI-led DCAC is uniquely positioned to continue the fostering of ongoing cooperative and strategic thinking among LEAs and ICAs since, unlike with any other agency, there has long been a prominent FBI "footprint" in the ELSUR efforts of both LEAs and ICAs. Although typically ad hoc and tactical in nature, the FBI has long assisted other Federal, state, and local LEAs effect criminal and Cyber-based ELSUR intercepts. And, as a key IC member, the FBI provides vital daily support to ICAs by effecting national security intelligence, counter-intelligence, and counterterrorism intercepts. Elsewhere, LEAs and ICAs are already working cooperatively such as through Joint Terrorism Task Forces (JTTFs), Cyber Crime Task Forces (CCTFs), and the FBI-instituted Regional Computer Forensic Laboratories (RCFLs). DCAC efforts will mirror such efforts in an ELSUR context.

Importantly, substantial technological, operational, and cost-saving efficiencies can be obtained through a unified DCAC approach to closely interrelated ELSUR endeavors, such as ELSUR R&D, processing tools, intercept delivery networks, training, and industry liaison. In addition, such a uniform approach, as noted, will be much

welcomed by communications service providers who prefer to standardize and centralize ELSUR delivery nodes, ELSUR delivery mechanisms, and ELSUR technical, operational, and administrative POCs to the extent possible.

PROPOSED STRUCTURE AND ACTIVITIES FOR THE DCAC

DCAC “Coordinating Office”

The DCAC is designed to greatly reduce redundant LEA/ICA ELSUR efforts-- not add to them. In order for the DCAC to achieve its goal of effectively coordinating, integrating, and distributing ELSUR solutions to domestic LEAs/ICAs, it must be appropriately structured. Accordingly, it is envisioned that the DCAC will employ a central office that will operate as a hub in coordinated DCAC activities. This central DCAC “coordinating office” (DCO) will interface with other established FBI and/or other agency components possessing cutting-edge ELSUR expertise. Thus, the primary role of the DCO will be to coordinate, integrate, and distribute ELSUR solutions. Put differently, the DCO will not engage in “reinventing the wheel.” Rather, it will leverage existing FBI or, as appropriate, other agency ELSUR expertise/efforts that are in place or under way.



It is envisioned that DCAC functional activities, as led and coordinated through the DCO, will include:

- Conducting and distributing ELSUR R&D
- Developing and distributing ELSUR interface, analysis, processing, and presentation tools
- Operating and maintaining an efficient infrastructure for the delivery of intercepted communications
- Testing and evaluating industry-proposed ELSUR solutions
- Providing strategic and tactical technical and operational ELSUR assistance
- Disseminating ELSUR technical best practices
- Conducting ELSUR training programs for technical personnel and end-users from multiple agencies
- Conducting outreach and liaison with entities in the communications industry and standards bodies
- Conducting outreach and liaison with entities within the LEA/ICA community
- Conducting legal and policy analysis with respect to ELSUR issues
- Carrying out DCAC technical and administrative program management
- Carry out centralized budget planning, analysis, and evaluation support for the DCAC

As noted, to avoid redundancy and the notion of “re-inventing the wheel,” substantial technical, liaison, and cost efficiencies will be achieved by drawing upon resident leadership, expertise, and technical efforts established.

within the FBI. All of the above-listed DCAC functions are ones where the FBI already has long-standing, well-established, and effective programs in place, albeit on a lesser scale. But, regardless of how well-positioned and experienced a domestic agency like the FBI may be, no such agency can satisfy the growing ELSUR requirements of an entire domestic governmental community based on its current agency-specific technical and fiscal resources.

To facilitate greater interactive agency input and enhance agency satisfaction, it is envisioned that the DCAC will receive ELSUR program advice from a National Steering Committee comprised of experienced Federal, state, and local LEA and ICA representatives.

To be clear, although the DCAC's mission will be to facilitate coordinated and integrated ELSUR support among LEAs/ICAs that conduct ELSUR, the DCAC will not have any direct operational role or responsibility in the actual criminal or intelligence investigations being conducted by any participating agencies using DCAC ELSUR technical support.

DCAC "Regional Support Centers"

To properly leverage the benefits derived from a DCAC, and to facilitate the rapid distribution of DCAC ELSUR capabilities and solutions, the FBI believes that it will be extremely useful to utilize one or more Regional Support Centers (RSCs). RSCs will operate as the conduit through which strategic ELSUR services, tactical technical support, and other ELSUR aid and resources will be distributed to end-user LEAs/ICAs.

RSCs will provide the following types of assistance to other LEAs/ICAs:

- Protocol processing support
- Quality of service assistance
- Technical interface support between communications service providers and end-user agencies
- Ad hoc ELSUR equipment loans
- Training
- Service provider liaison support
- ELSUR "help desk" support

The RSCs will continuously receive ELSUR-related technical solutions, software, expertise, information, and training through the DCAC-DCO. Although it is appropriate that the FBI will have an interest in establishing core criteria and quality norms for any RSC rendering technical support, optimally the RSCs will be operated, managed, and manned by agency personnel based in the locality of the RSC. Further, to the extent that an RSC may be most utilized by state and local LEAs, the manning of an RSC by state and local LEA personnel will afford greater respect for state and local autonomy by placing "first-responder" ELSUR technical assistance in the hands of such agency technical personnel that are based in the same region as the end-user LEAs they support.

Such RSCs will engender very tangible and substantial technological, operational, and cost-saving dividends, especially for technology- and cash-poor domestic LEAs. In addition, use of such RSCs will likely be well received by service providers who can then concentrate their ELSUR technical assistance efforts, interfaces, and delivery regimes with greater uniformity and with far fewer agency ELSUR technical interface nodes.

As with the DCAC, it is envisioned that the RSCs will receive "customer input" through an appropriate regionally-based Executive Committee comprised of representatives from the agencies that utilize the DCAC-RSC's services.

ELSUR Delivery Mechanism

To assist in the critical ELSUR intercept "delivery" and "processing" steps and to help reduce individual agency ELSUR costs, the DCAC will establish and maintain a cost-effective transport mechanism to deliver ELSUR traffic from the intercept access points (IAPs) of communications providers (telephone companies, ISPs, broadband access

and VoIP providers, etc.) to an RSC. From the RSC, the processed ELSUR traffic can then be delivered to the end-user agencies that will be responsible for administering, monitoring, minimizing, recording, and storing the ELSUR product. In addition, this mechanism will serve as a conduit to deliver technically any needed processing or other support. Decisions regarding such methods may be affected by legal, jurisdictional, security, and evidentiary factors, and thus will require the attention of policy-makers and attorneys from participating agencies.

End-user Agencies

The end-user agencies will continue to remain responsible for the actual execution of ELSUR court orders and will perform the communications intercept, monitoring, minimization, and recording efforts and will provide the ELSUR investigative and monitoring personnel. Each agency will decide whether it desires the assistance and services of the DCAC-RSC.

Memoranda of Understanding

It is envisioned that Memoranda of Understanding (MOUs) will be executed that will clearly define the roles and responsibilities and interagency interfaces among and between the DCAC, the RSC(s), and the participating end-user agencies as a means of clearly establishing and memorializing understandings and procedures and in order to properly manage the expectations of all participants.

INCREASED ELSUR FUNDING

As noted, under the fifth prong of the ELSUR Strategy (increasing funding for cooperative LEA/ICA ELSUR efforts), in order to preserve LEA/ICA ELSUR capabilities, substantially more technical and financial resources unavoidably will be required both now and in the future. Increasing ELSUR funding for the FBI for the benefit of all domestic LEAs and ICAs, and then leveraging FBI expertise through the DCAC, ensures cost-effectiveness.

Although this Vision Statement has primarily emphasized the third prong of the Strategy (enhancing ELSUR coordination), the most substantial costs are *not* for ELSUR “coordination,” but rather are for *what* is being coordinated. The great expenses relate to:

- ELSUR R&D
- Developing and distributing ELSUR interface, analysis, processing, and presentation tools
- Operating and maintaining an efficient infrastructure for the delivery of intercepted communications
- Testing and evaluating industry-proposed ELSUR solutions
- Providing strategic and tactical technical and operational ELSUR assistance
- Disseminating ELSUR technical best practices
- Conducting ELSUR training programs for technical personnel and end-users from multiple agencies
- Conducting greater and broader outreach and liaison with entities within the communications industry

The foregoing ELSUR endeavors and efforts have been expensive for the FBI, and they obviously and necessarily will be much more expensive when employed to serve the entire domestic LEA and ICA community. However, the important and good news is that these expenses will be very much less, and much more efficiently and cost-effectively managed, than would be the case if each LEA/ICA were to pursue its own individualized, stove-piped, and non-cost-effective solutions. ***Leveraging existing FBI expertise is the key.*** To illustrate, if the FBI is now spending “2X” to address its own ELSUR requirements; and if an FBI-led DCAC, in leveraging its expertise, could support the entire domestic LEA/ICA community in the ELSUR areas outlined for “5X;” it would be much more cost-effective and prudent than for all such agencies to pursue individualized solutions by expending “10X.”

To fund the DCAC, new appropriations from Congress are required. As noted at the outset, while the FBI and a few ICAs and LEAs, in varying degrees, are fast approaching the limit of their abilities to cope with such ELSUR complexity and its related costs, many agencies simply have not been able to keep up and/or have been priced out of conducting ELSUR. And, notwithstanding how well-positioned and experienced a domestic agency like the FBI may be, no such agency can satisfy the growing ELSUR requirements of the *entire* domestic governmental community based on its current agency-specific technical and fiscal resources. Further, it would be both completely unrealistic and self-defeating to attempt to fund this endeavor by withdrawing or reducing already depleted ELSUR or other funding from any Federal, state, or local agency to fund this vital program.

New funds are required (a) for the FBI to continue to carry out and significantly expand upon its vitally important ELSUR R&D and other ELSUR-related efforts identified above, and (b) for the FBI-led DCAC to coordinate, integrate, and distribute the ELSUR solutions that are developed for the benefit of all agencies. Inasmuch as the maintenance of ELSUR capabilities is an ongoing requirement, it appears that establishing a special-purpose multi-year account for this funding would be appropriate. It would be understood that such funds will be reserved for supporting this national ELSUR Strategy program and its participating Federal, state, and local agencies.