The IST Surveillance Solution

- ☑ Intercepts all call attempts which reach the network
  - ➢ Exceptions
    - CDC: Public Dial & Abandon
      CPE Generated Feature Status
      Line Side Feature Modifications
    - CCC: D-Channel Data Field carried in PSTN
- ☑ Supports standard delivery options
- ☑ Hardware
  - ➢ All NE's Bellcore network compliance certifiable
  - ➢ Equipment meets CO NEBS (Network Equipment Building Standards) certifiable
- ☑ Software
  - ➢ Standard UNIX environment for CDC Communications server
  - ➢ Windows for Administration GUI
  - ➢ Telecommunications Management Network (TMN) compliant

The ST Solution (Cont'd)

- ☑ Switch platform independent
- ☑ Switch software generic release independent
- ☑ Will to be able to accommodate both wireline and wireless SS7-based networks equivalently
- ☑ Easily scaleable within a network
- ☑ Cost efficient
- ☑ Does not inhibit introduction of new services or reduce competition
- ☑ Adequately protects consumer privacy
- ☑ Meets all critical Law Enforcement requirements NOW!

Product Compliancy

- ☑ Joint TIA Interim Std / T1 Trial Use Standard
  - > J-STD-025 Requirements
    - ☞ Some 155 requirements identified
- ☑ The "Punch List" Items (Covered in SP-3580A+)
  - > Punch List identifies 11 major items
    - ☞ Bellcore document expands into 47 components
- ☑ Three phase approach defined for IST's CALEA product
  - ☞ Initial phase meets a substantial portion of the defined requirements
  - ☞ Second phase extends product to wireless services
  - ☞ Third phase extends product to packet and IP communications
- ☑ Compliance Matrix has been provided to the Commission

Product Rollout Schedule

- [illegible]
- [illegible]
  - [illegible]
  - [illegible]
  - [illegible]
  - [illegible]
- ☑ Establish lab evaluation environment
- ☑ Demonstrate CALEA compliance (reimbursability)
- ☑ First Office Verification
- ☑ Phased network rollout

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- ☑ IST Phase I milestone delivery (25 Oct 1998)
  - Phase 2 target II Q '99
  - Phase 3 target IV Q '99

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CALEA Solutions
The Art of the Possible

ST - Not The Only Game In Town

- February 23, 1998, CTIA Wireless 98, Atlanta GA

  (From ADC NewNet web site)

  - "ADC NewNet announces the development of a lawfully authorised electronic surveillance (LAES) application that meets the requirements of the Communications Assistance to Law Enforcement Act (CALEA). The ADC NewNet application will be a key tool for service providers to comply with the requirements of CALEA."
  - "The ADC NewNet delivery function application will be generally available to meet the October, 1998 deadline with evaluation systems available in the summer, 1998."
  - Lucent Technologies
  - Agreement recently announced to use ADC NewNet in the provision of a CALEA solution for Lucent's wireless product line

Product Vendors - Art of the Possible

- ☑ IST Competitive intelligence indicates that:
  - a major US telecommunications equipment manufacturer is claiming a CALEA compliant product.
  - at least one European operator has deployed an electronic wiretap system based on some key concepts used in the IST solution.
  - Several telcos have explored network based solutions directly and/or have considered AIN-based approaches.
- ☑ Many switch vendors are able to support a sub-set of the CALEA requirements
  - A number of requirements cannot be met and there is uncertainty wrt definitions of compliance

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Solutions for the Global Market

Implementation of CALEA Solutions

Is Compliance By Oct 25, 1998 Reasonably Achievable?

The Regulatory Criteria

Test of Cost Effectiveness

- The IST solution could be implemented across the US (wireline RBOCs) for about $ x / line
- ISTs estimate of total costs to the wireline industry does not exceed $ 500 million

Protection of Privacy

- ☑ The IST solution allows operating companies to guarantee the security and privacy of communications not authorized to be intercepted.
- ☑ Note that IST's solution does address the concerns with "Party on Hold" (from the Punch List) by providing the option to the client operating company.
- ☑ Administration function can be operated from a secure environment

Impacts on Service Development and Competition

- [illegible] solution is feature transparent and thus, will in no way inhibit the introduction of new [illegible] technology
  - Further, the IST solution is easily modifiable to accommodate [illegible]
- The IST solution is one of several competitive products available to the industry.
- Bell Emergis - IST intends to either directly or through partners, to make the CALEA solution available to small carriers and independents on a "service bureau" basis
- Comparable cost-per-line compliance

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Distinctive [illegible]
[illegible]

Review of Industry Comments
CC Docket No. 97-213

Section "III" - Comments by IST Support The Need For an Extension

- "...IST's opinion that an extension is not required cannot be seriously considered. First, the IST product is not ready. ..." {SBC pg. 7}
  - The IST product could be ready by October 25, 1998 if the industry would co-operate on verification and testing.
- "...IST is in no position to come in at the eleventh hour and expect to force the entire industry into purchasing its product by presenting itself as a savior." {SBC pg. 8}
  - As demonstrated earlier in this ex parte submission, a number of competitive alternatives are either available or are developing in the marketplace.
- "...None the less, without challenging any claims that IST makes for its product, the fact is that the industry has not embraced IST as a solution for CALEA compliance." {SBC pg. 8}
  - The industry seems to be pulling out all stops to avoid having to embrace ANY CALEA compliant solution.

BellSouth

[illegible] Reply Comments dated May 15, 1998

☑ Section "II" - The Commission Should Disregard Bell Emergis

- "...The Commission should recognize the basis for Bell Emergis' advocacy: it hopes to make a lot of money..." {BellSouth pg 6}
  - Bell Emergis has never claimed that its motives were purely altruistic.
- "...BellSouth is unaware of any statement by the FBI, or any other law enforcement agency, that the Bell Emergis product was evaluated and determined to be a means to achieve compliance..." {BellSouth pg 7}
  - from "Washington Telecom Week" Vol 7, No. 5, Jan 30, 1998: "The FBI told Congress this week that the Canadian company Bell Emergis has developed a network-based method of meeting virtually all of law enforcement's wiretapping needs, that this process can be ready prior to the compliance date and that current authorizations will be sufficient for wireline upgrades."
- "...The cost estimates that BellSouth has been provided for deployment of a network-based solution ... exceed the $500 million authorized to be appropriated by Congress." {BellSouth pg 7}
  - No such country-wide, firm price quote information has been provided to BellSouth or any other RBOC. This is no more than conjecture and speculation.

Ameritech

Section "III" - Technology Is Not Reasonably Available

- "...The only possible alternative to meeting the CALEA compliance date would be the availability of a network-based solution."
- "..., beginning in October 1997, Ameritech worked directly with Bell Emergis to evaluate its product. ... Ameritech concluded that Bell Emergis' solution had significant technical problems..."
- In this regard, the Commission should note that:
  - The product being evaluated was laboratory, prototype grade, not finished production quality.
  - This earlier version relied heavily upon concepts which had known operational complexities.
  - Subsequent to this evaluation, rigorous redesign effort was undertaken, which in fact, now provides the underpinning for Bell Emergis - IST's current engineering design.
  - Follow-up evaluation testing has not been undertaken by any potential client, including Ameritech. Conclusions drawn from earlier designs are therefore, irrelevant and misleading.
  - Bell Emergis - IST is seriously concerned with Ameritech's public disclosure of this information given the fact that disclosure was prohibited under the terms and conditions of the evaluation.

Meeting October 25, 1998

- Client lab testing cannot be undertaken because the industry's efforts appear to be devoted to gaining a blanket deferral.

Conclusions & Observations

Legitimate Industry Concerns

- [illegible] discussions which have taken place between Bell Emergis - IST and the telcos which [illegible] the CALEA Act, several themes [illegible]
  - [illegible] the process for reimbursement of [illegible] CALEA
  - Opposition to implementing CALEA is likely to continue until this issue is favorably addressed to the satisfaction of all involved.
  - [illegible] constitutes compliance to the various CALEA standards
  - Switch vendors will continue to have difficulty in meeting all the prescribed requirements
  - Anomalies exist within the standards as currently written.
- Stable and definitive capacity requirements are needed along with clear prioritization to guide installation activities.

ST's Conclusions

[illegible] 2000 should not be [illegible]

[illegible] from the [illegible] the public from [illegible]

[illegible] reasonably [illegible] availability in the marketplace.

- It would provide the industry with a precedent and opportunity to continue to defer their efforts to comply.

☑ The Commission should set a compliance date based on what the industry could reasonably achieve if it made significant efforts to test, validate and implement … NOW.