

(10)

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UNITED STATES DEPARTMENT OF JUSTICE

FEDERAL BUREAU OF INVESTIGATION

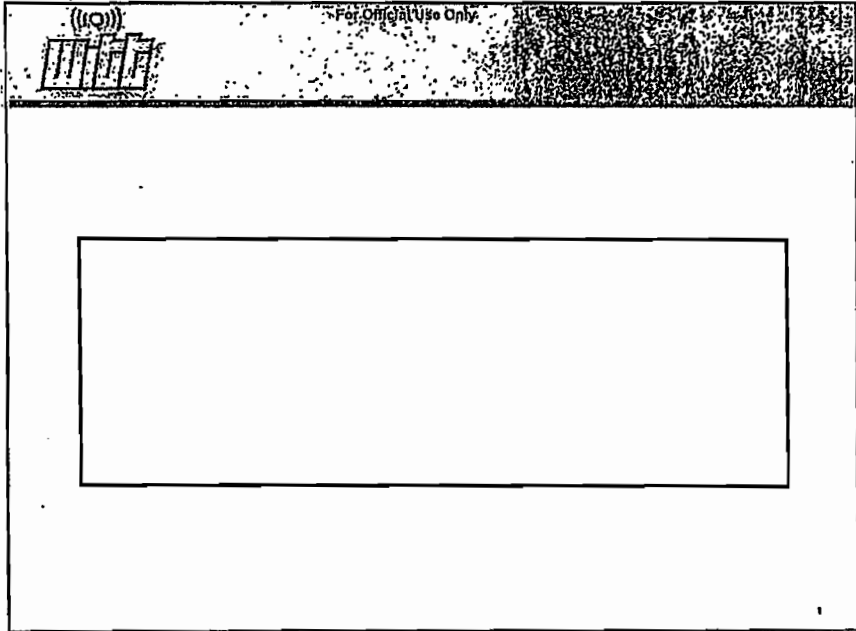
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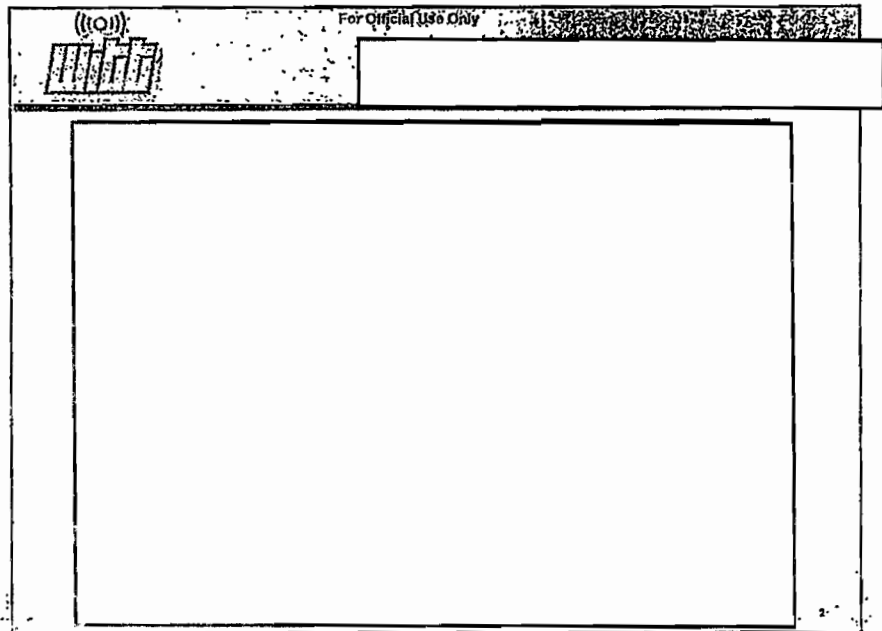
CELL/OTD 004300

Intro

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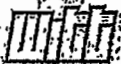
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WITT Website Demonstration

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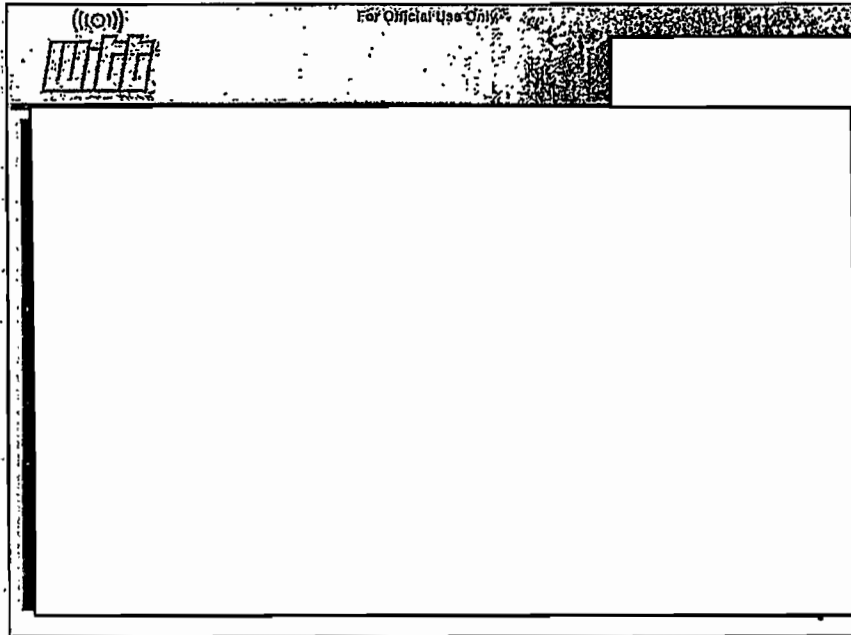


Effective Tools - WITT Web Site

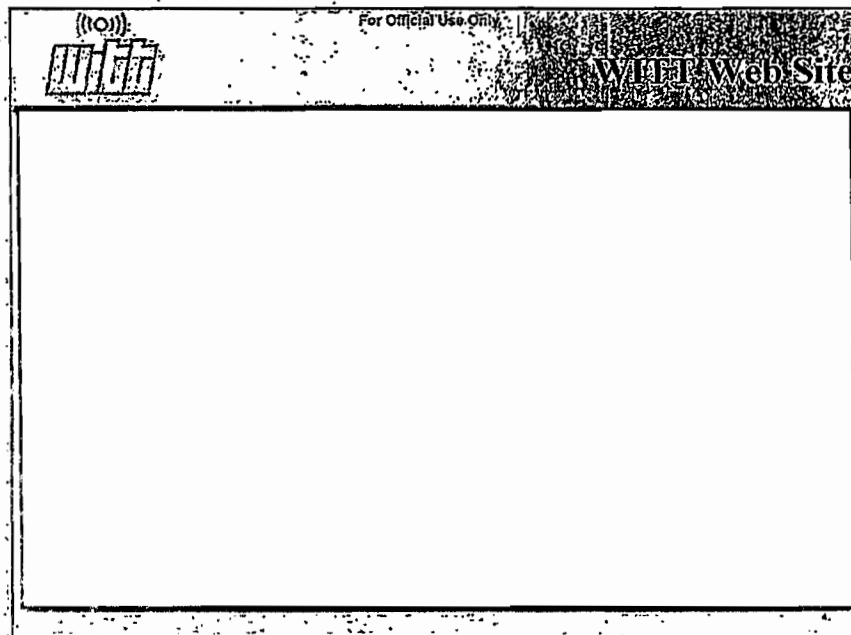
- **PURPOSE:** To provide information, interactive media WITT
- **ACCESS:**
- **URL:**
- **NETWORK CLASSIFICATION:** Secret

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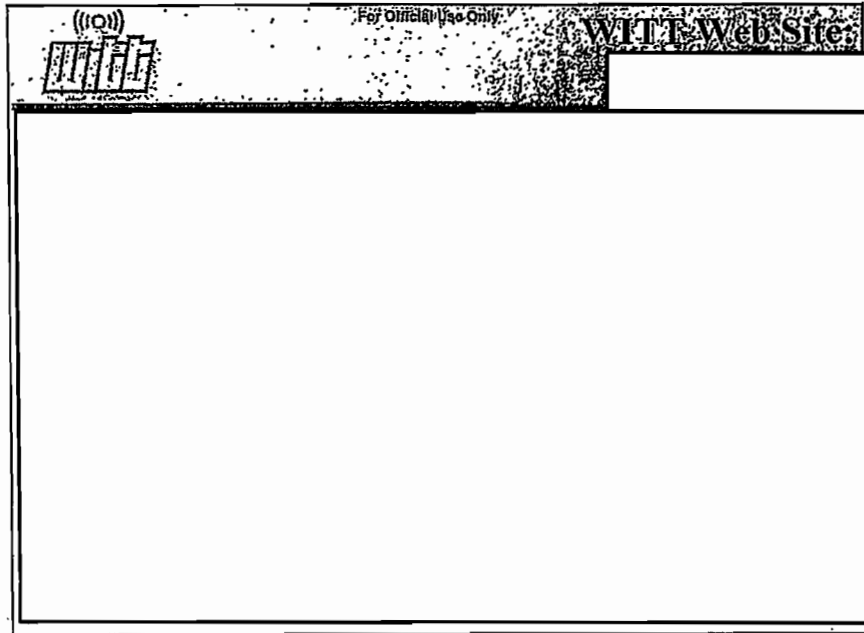


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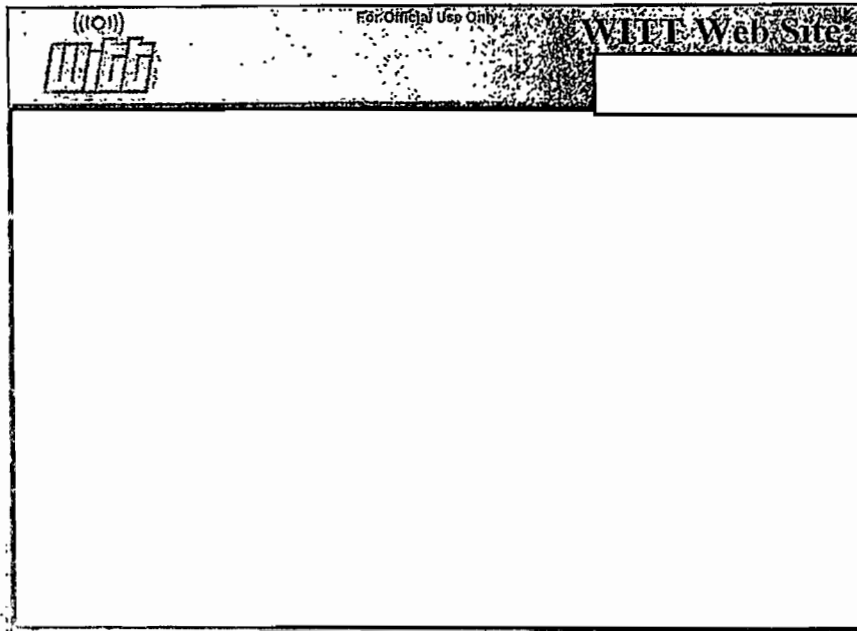


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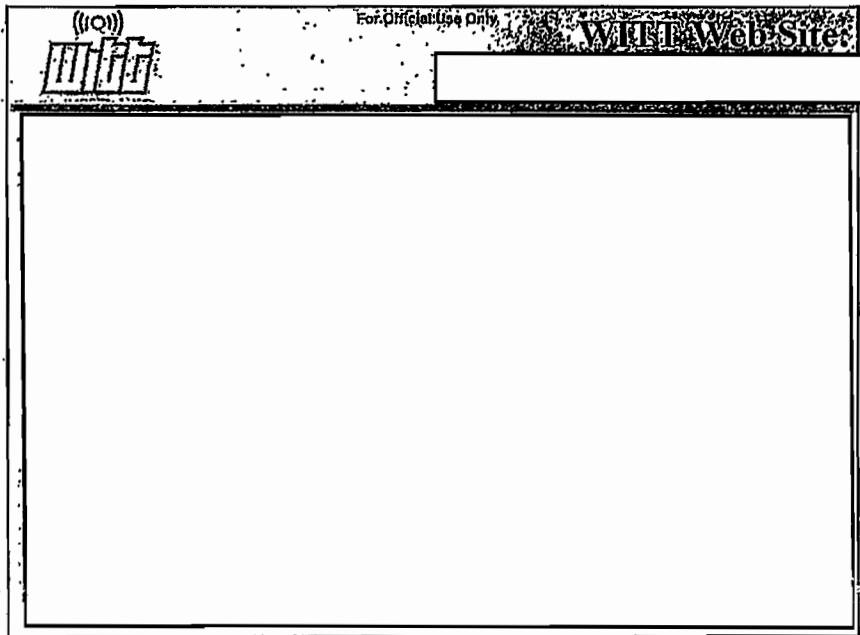
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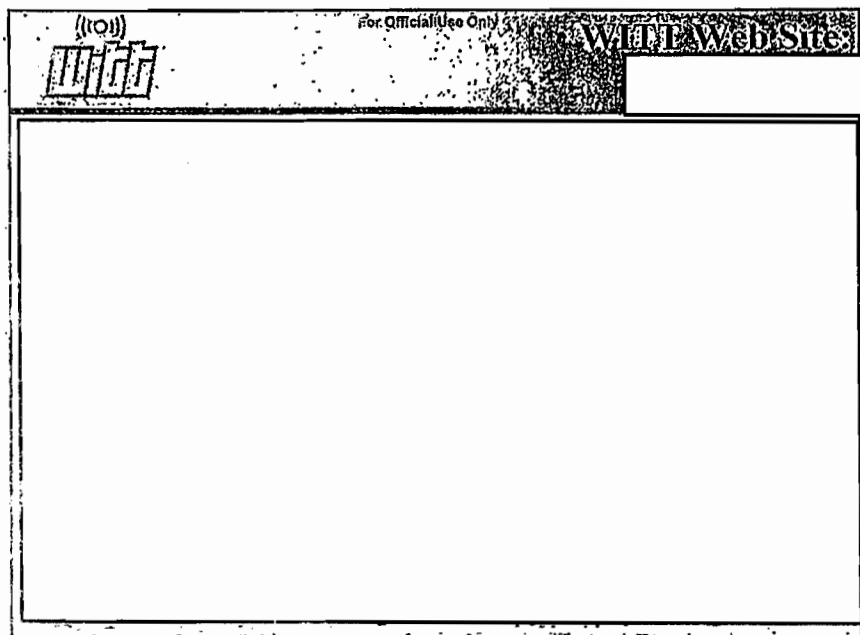
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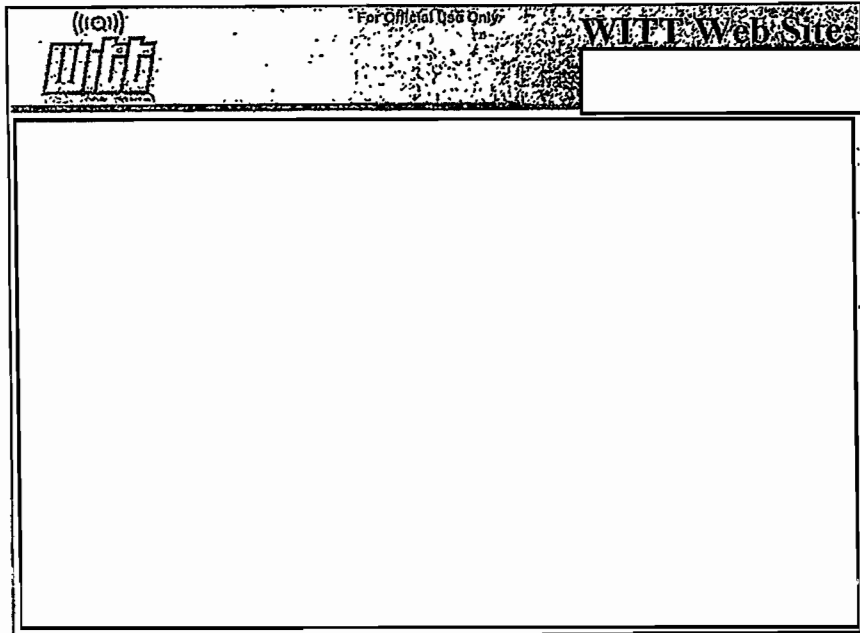


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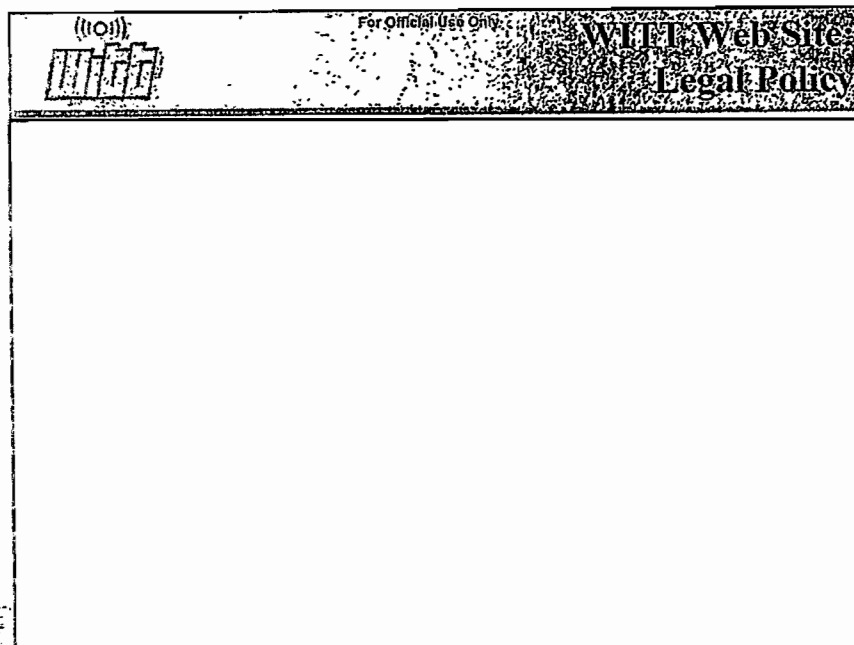


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With

CONOPS

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With **Surveillance Players**

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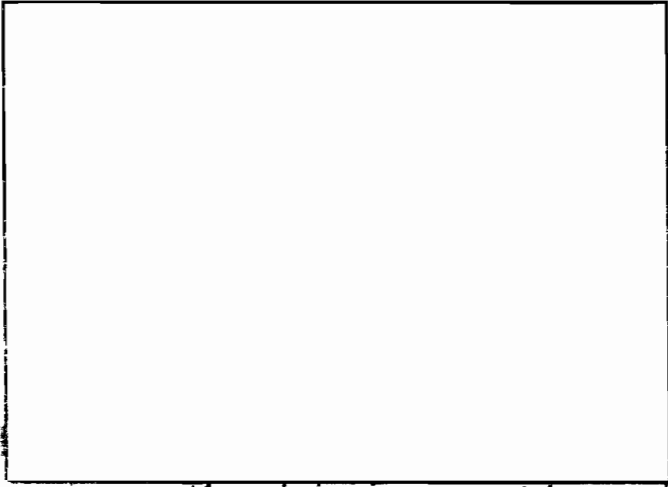
5 Scenarios



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Scenario 1



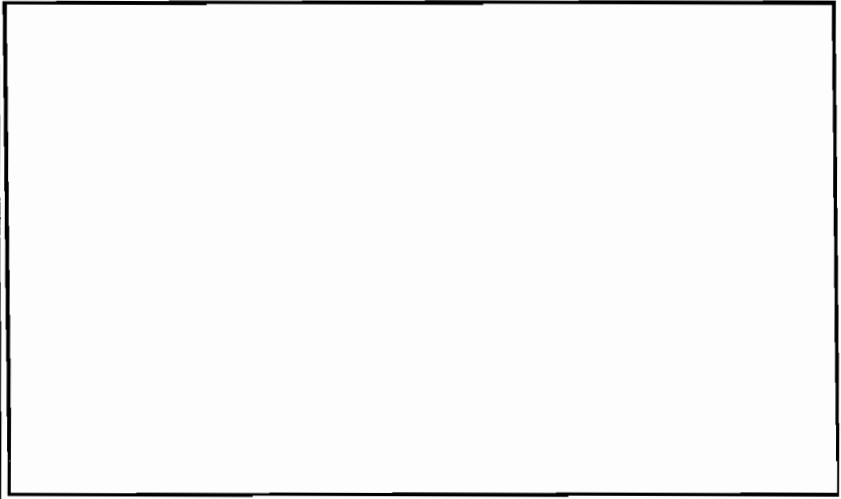
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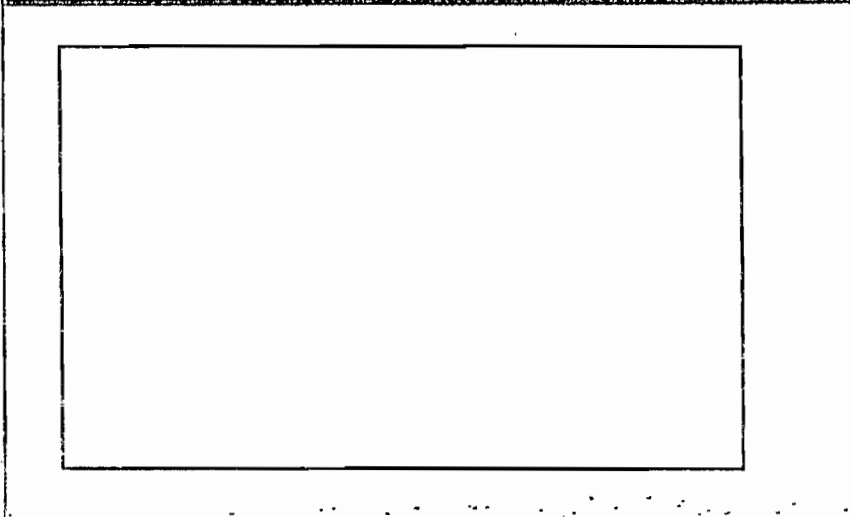
Scenario 1



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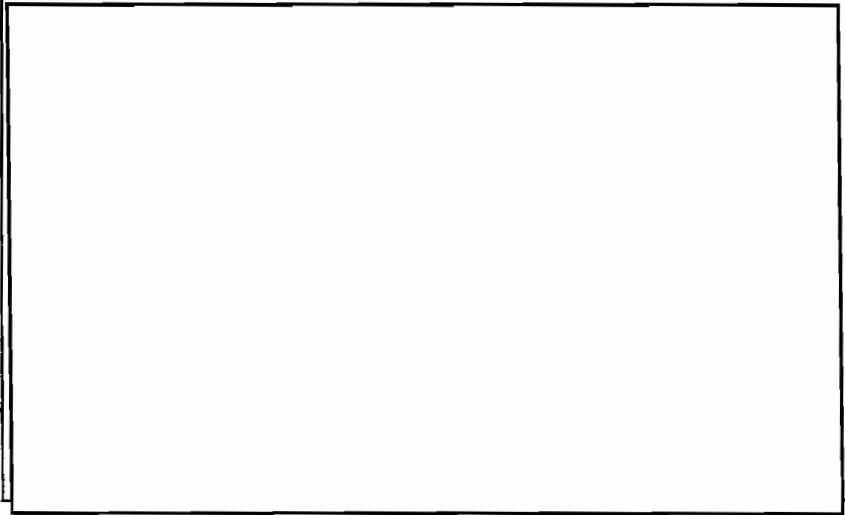
Scenario 2



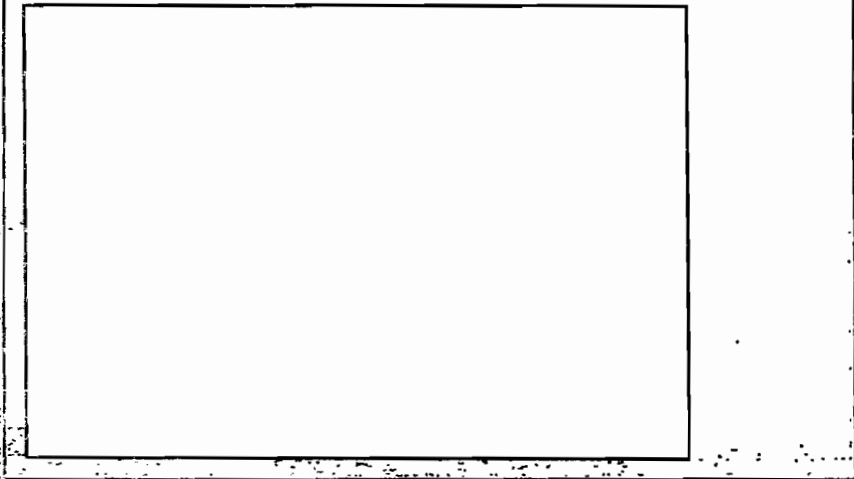
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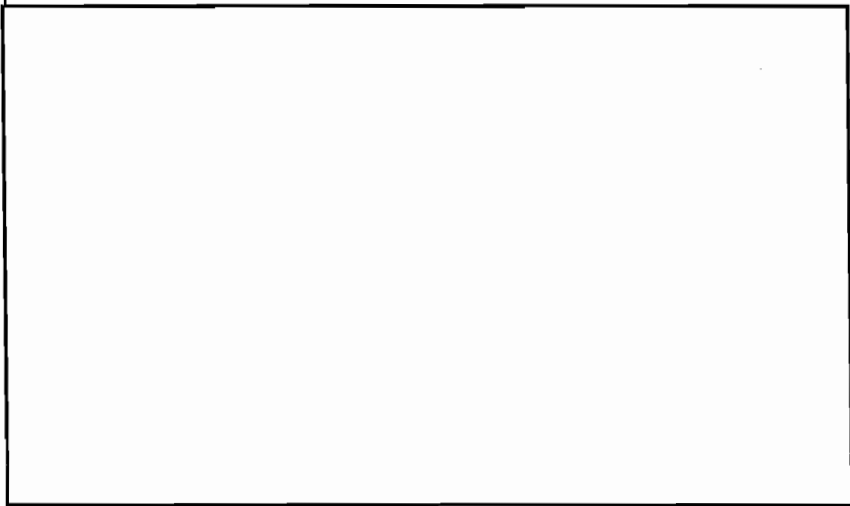
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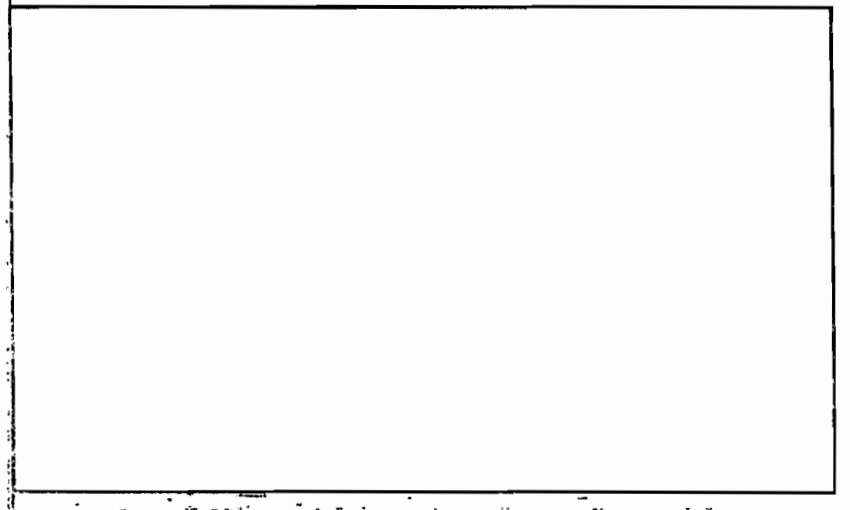
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Scenario 3



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Scenario 4

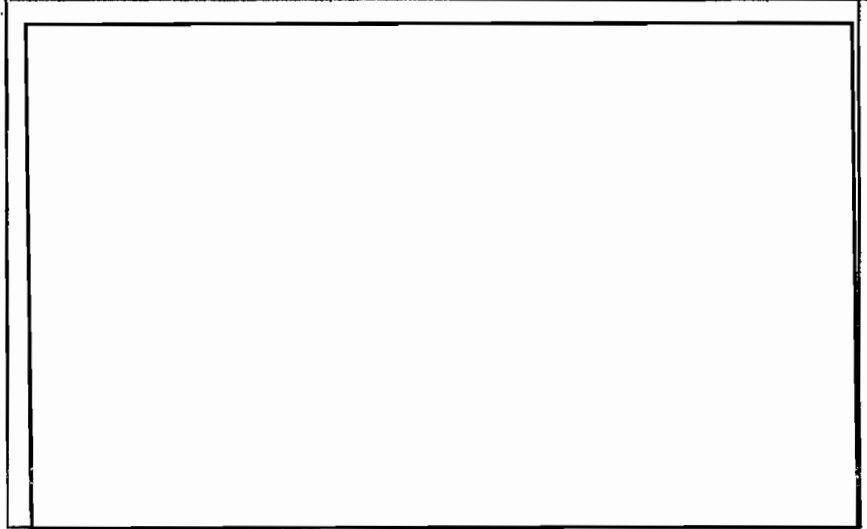


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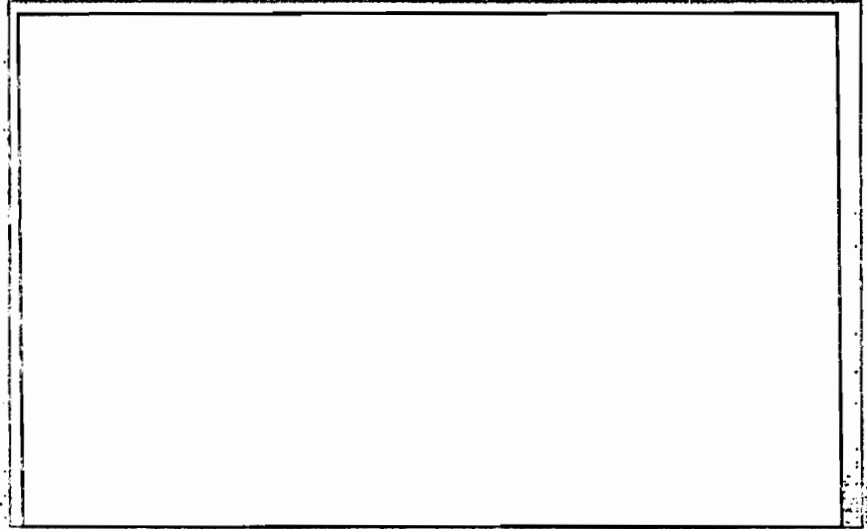
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Scenario 4



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Scenario 5 - GALEA Surveillance



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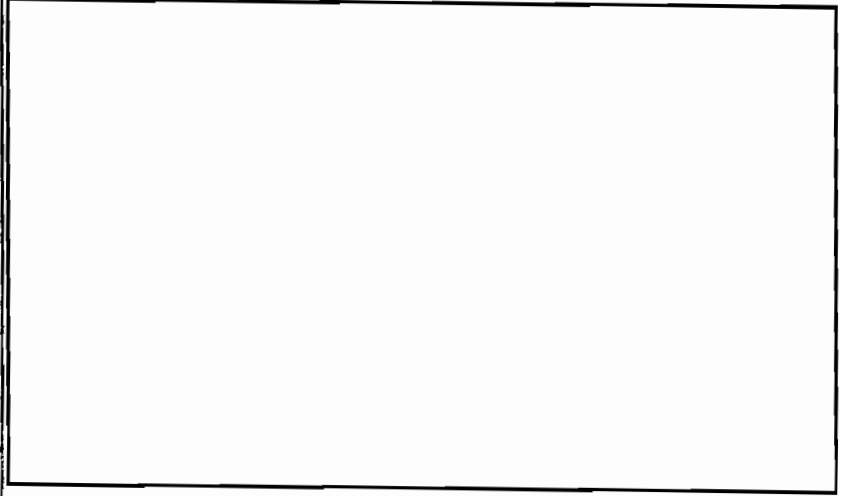
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Scenario 5 - CABLE Surveillance



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Legal

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Legal Guidelines

- Legal considerations await the OGC's review, analysis, and approval
- Additional Legal and Policy issues being identified
- Updates and reference material will be posted on the WITT web site
- Any specific legal question, guidance, or advice should be referred to your CDC and/or to the OGC

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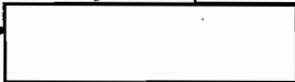
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Preliminary Issues

- Pen Registers
- Title III
- Search Warrants
- Disclosure and Evidentiary Considerations
- Safety Issues



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Introduction to the Mobile Phone Systems

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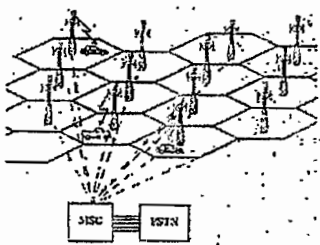
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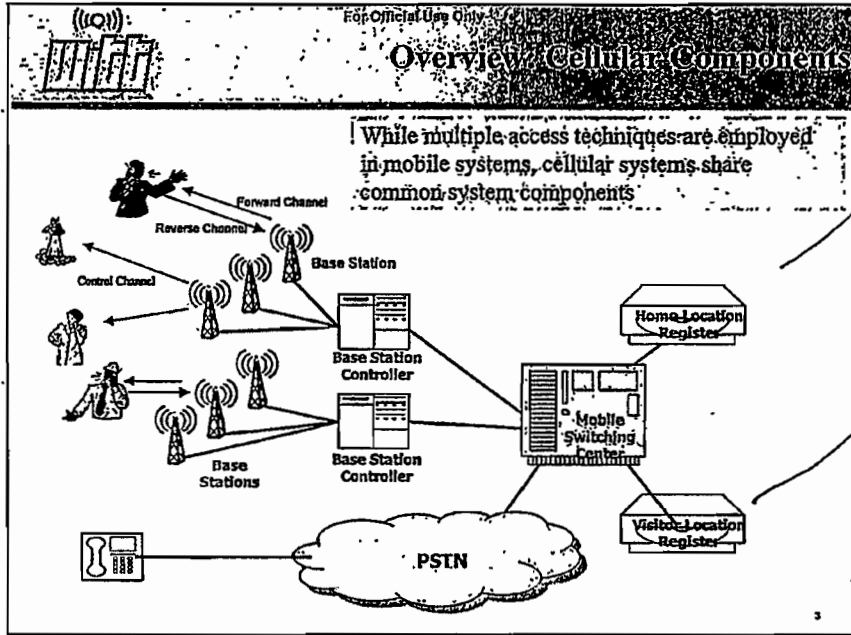
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Overview: Cellular System Concept

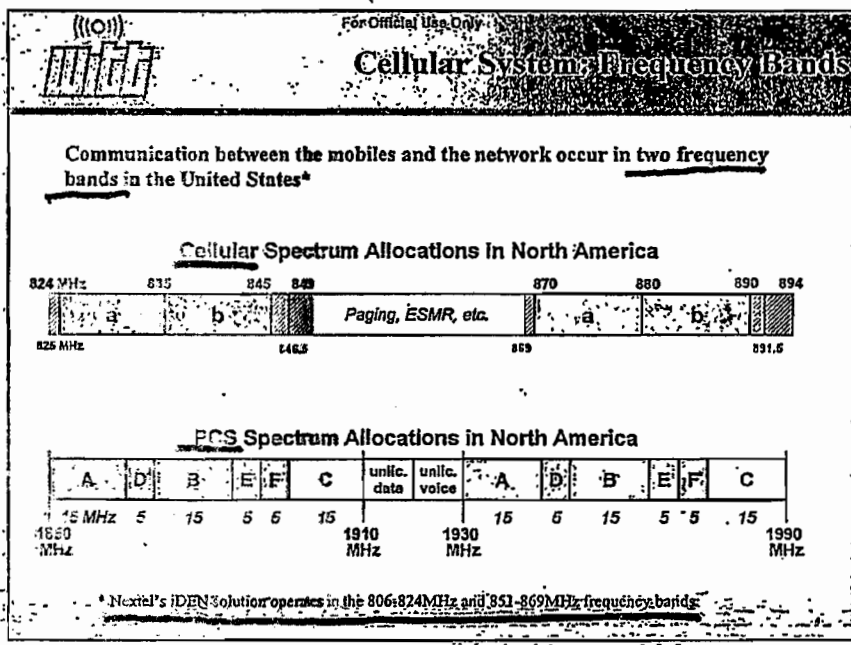
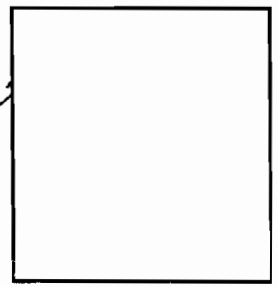
- Cellular System allows the reuse of spectrum within a region by employing centrally connected base stations
- Each base station wirelessly connects to multiple mobiles within a designated geographic area (cell)
- Base stations connect to a Mobile Switching Center (MSC) and then to the Public Switched Telephone Network (PSTN)
- The system allows
 - Reuse of spectrum in regions, increasing the capacity of the system over a trunked radio system
 - Mobility of users in the system without loss of connectivity



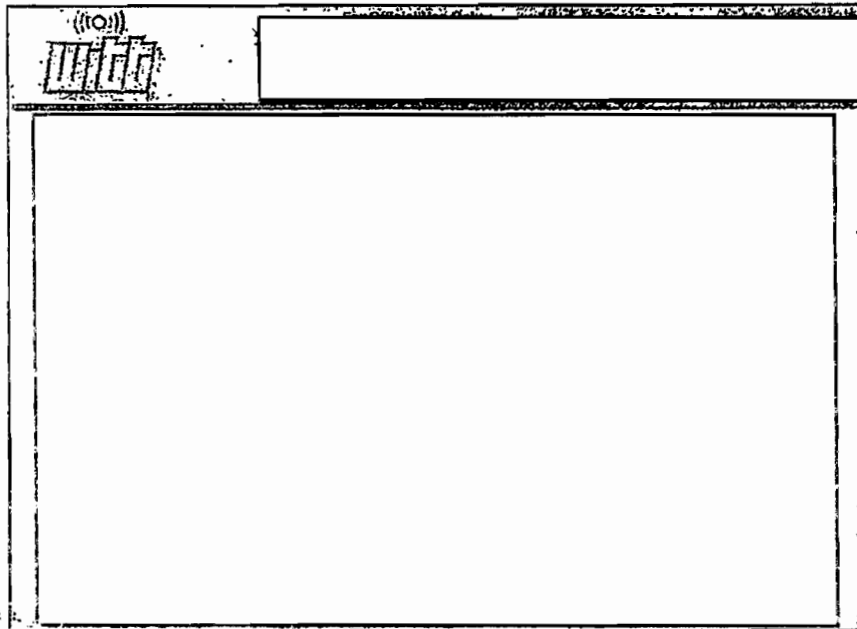
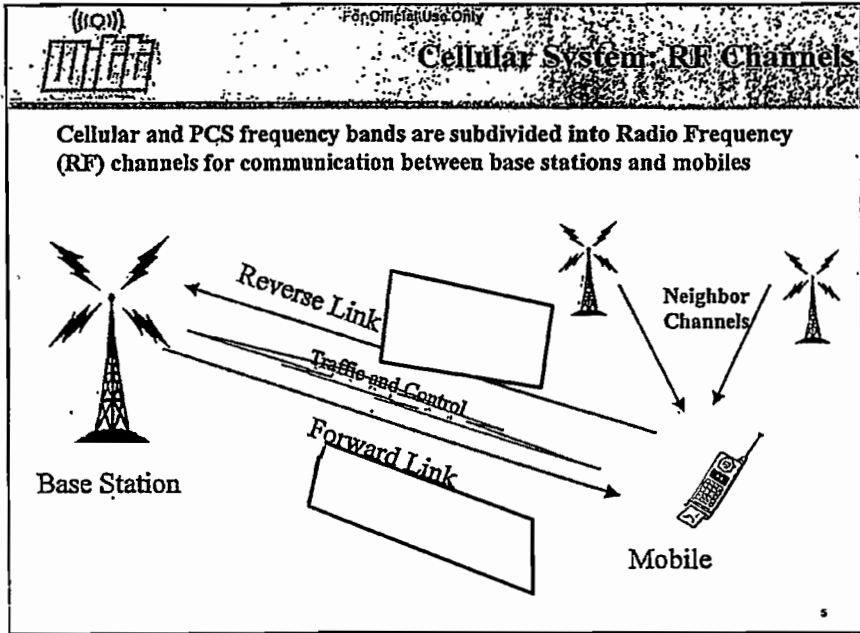
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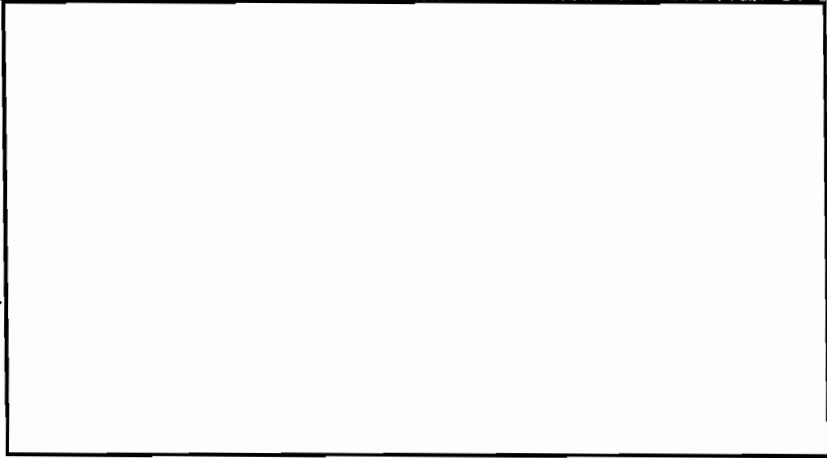
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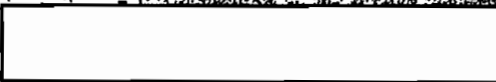
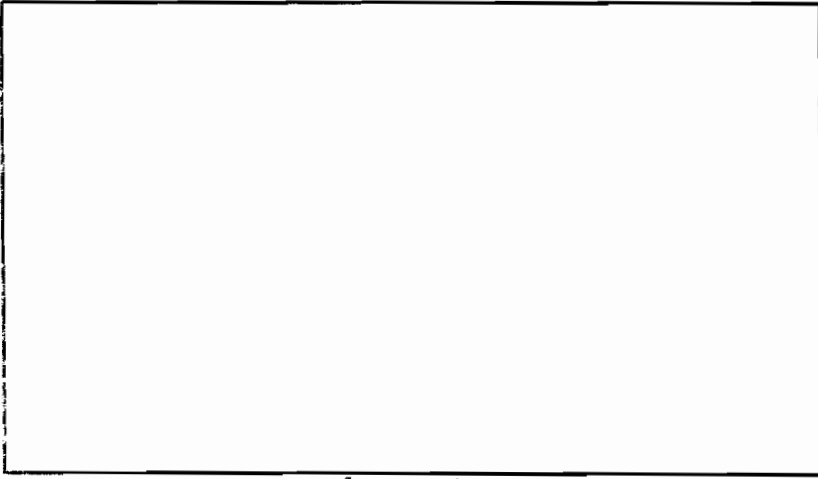
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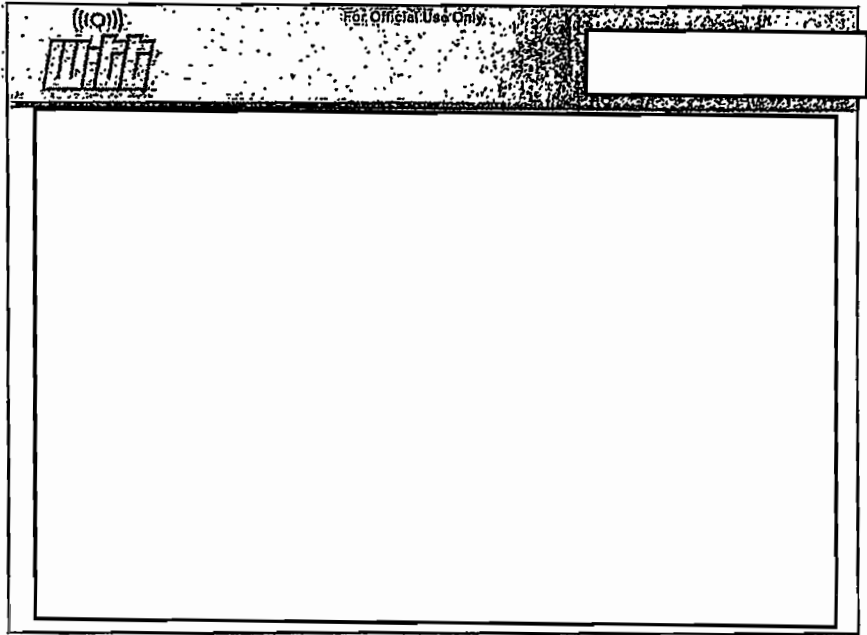
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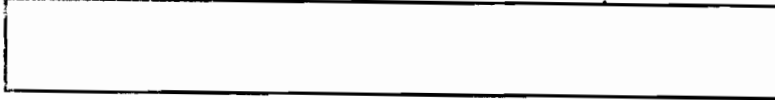
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Access Technologies

There are currently five cellular technologies in use in the U.S. market

- AMPS	(10% Market Share)
- TDMA (IS-136)	(20%* Market Share)
- GSM	(17% Market Share)
- CDMA	(46% Market Share)
- iDEN	(7% Market Share)

* Carriers are converting TDMA systems to GSM



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AMPS (Advanced Mobile Phone Service)

- Background
 - Initial U.S. cellular system
 - Reached feasible system capacity limits in mid 90s
- Limitations
 - Provides basic voice service
 - No additional services: Digital Messaging, Location based services, etc



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TDMA (Time Division Multiple Access)

- Background
 - Technology was the first commercially available digital cellular technology in U.S.
 - Provides increased system capacity and advanced digital services
- Technology

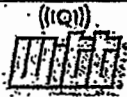


- U.S. TDMA systems being replaced with GSM systems



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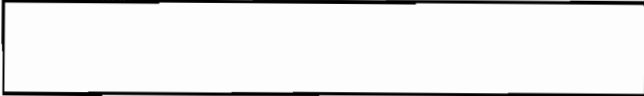
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GSM (Global System for Mobile Communications)

- Background
 - Technology first introduced in Europe and migrated to the U.S.
 - Provides increased system capacity, advanced digital services and ability to offer seamless international mobile operation
- Technology
 - Multiplex users by assigning unique operating time slots in shared frequency channels



- GSM is the most widely adopted cellular technology in the world

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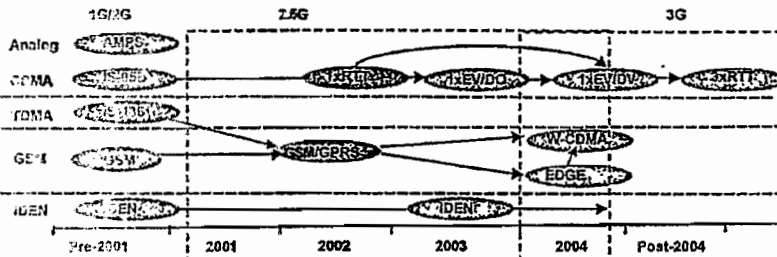
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General Trends

- CDMA and GSM phones will dominate near term U.S. market
 - 33 percent of the market (with conversion of IS-136 systems to GSM)
- 3G Systems will be CDMA based
- Carriers will continue to develop enhanced features



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Loggerhead
Triggerfish

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LoggerHead
Triggerfish Overview

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Intro to



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Introduction to

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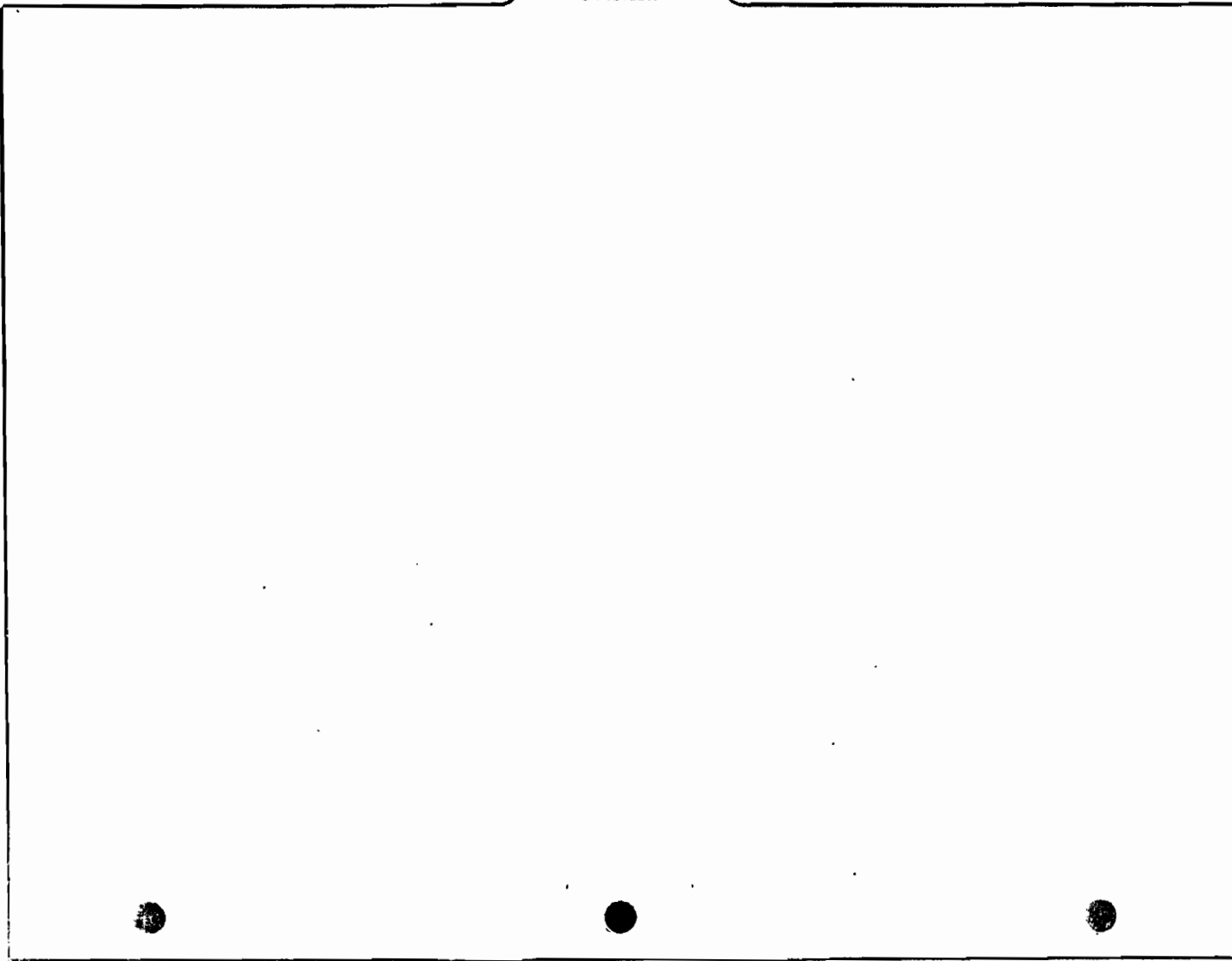
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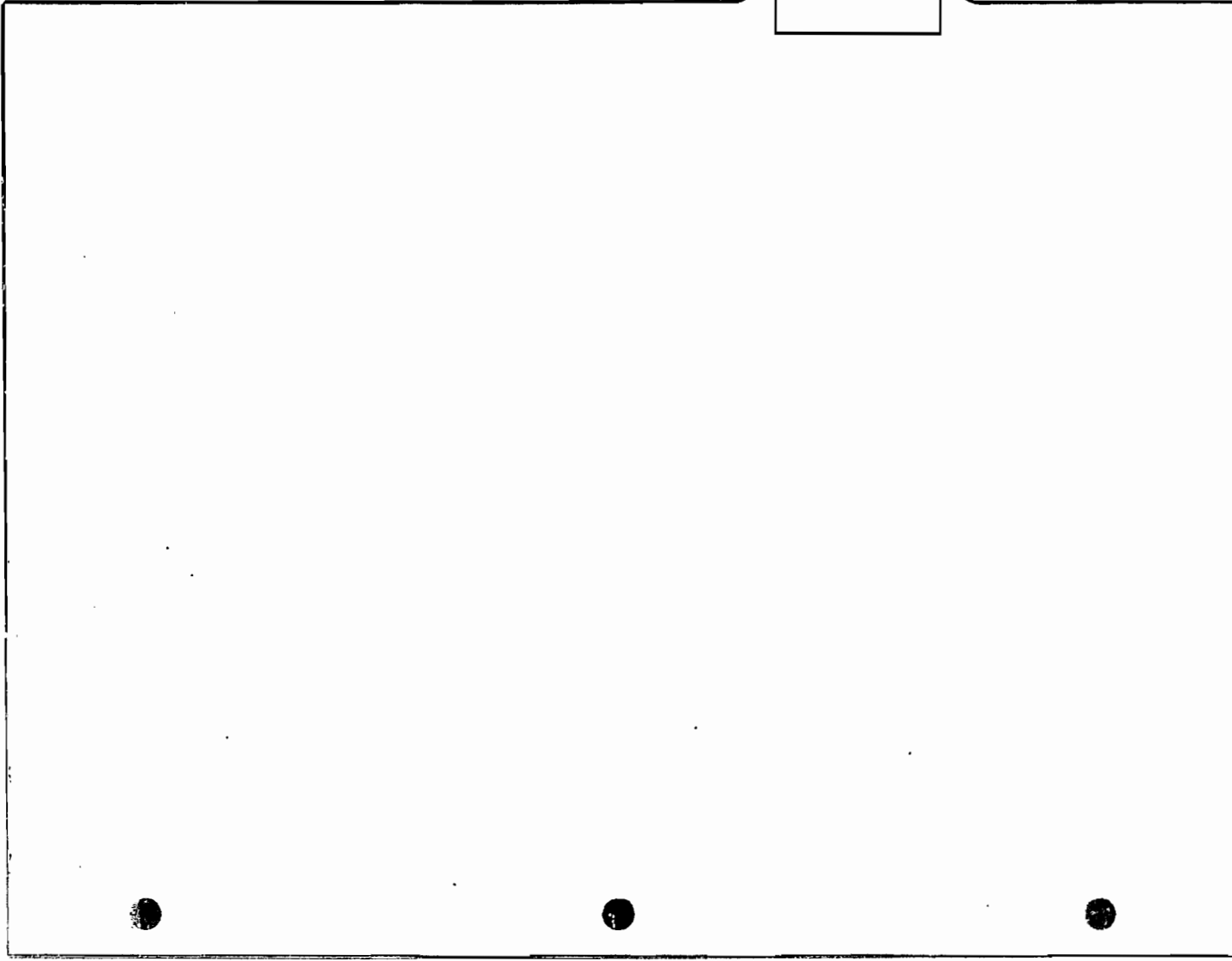
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Overview

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Goal – Learn operation of equipment in simulated case environment

- Agenda
 - EQUIPMENT SETUP [Redacted]
 - SCENARIO #1 [Redacted]
 - SCENARIO #2 [Redacted]
 - SCENARIO #3 [Redacted]

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(S) For Official Use Only Scenario #1

- Set up
- Location

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(S) For Official Use Only Scenario #2

- Set up
- Location

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CELL/OTD 004358

2

(S) For Official Use Only Scenario #3

- Set up
- Location

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Intro to



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Introduction to

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StingRay Function

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StingRay Lab Exercises

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StingRay Lab Exercises

- Goal -
- Agenda

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StingRay Field Exercises

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Stingray Field Exercises [Redacted]

Goal - [Redacted]

- Agenda

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