

(U) Running Strategic Analytics Affecting Europe and Africa

Region: Europe, Middle East (Israel), and Africa : [REDACTED] ECC



The overall classification of this briefing is:
TOP SECRET//COMINT//REL USA, FVEYS//20291123

Outline

- (U) Background
- (U) Problem Definition & Challenge
- (U) Our AOR: Europe - Africa
- (U) Examples for Europe - Africa
- (U) Enrichment and Data Flow
- (U) Real-time, batch, XKEYSCORE
- (U) Conclusions

(U) Terrorists Transit via Europe



NCEUR Support
to EUCOM

- (U) Communication
 - Transit Points
- (U) Partners
 - Second Party
 - Third Party
- (U) Relationships
 - EUCOM
 - AFRICOM
 - CENTCOM



(U) US needs partners for data & to help capture, confine....

(U) Challenge: Integrating Tactical & National Collection

- (C//FVEY) Collection with HF/VHF/UHF
 - Digital packets
 - Analog comms
 - Noise issues, lack of experience with these types of signals
- (C//FVEY) Tactical versus National (Strategic) Collection
 - RTRG
 - DISTILLERY



(U) Analytics for Targets in Europe

- (C//FVEY) OPSEC Savvy Targets

- “...most terrorists stop thru Europe”

- (TS//FVEY) Use advanced techniques

- Steganography

- Forensics or Analytics on front end

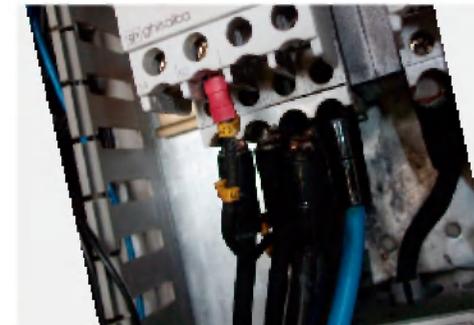
- Encryption

- Takes time and has “black hole” issue

- (TS//SI//FVEY) Reliance on “special” collection

- GCHQ and FAA

- Problems processing w/r to TS



(U) Analytics for Identity Intelligence

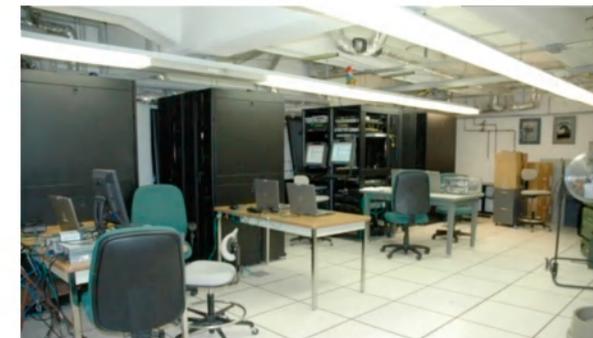
(U) Human Trafficking	(C//FVEY) Operations from Jordan to Syria in both directions; Sahel	Metadata for geolocation; content for confirmation
(U) Weapons Smuggling	(C//FVEY) From Libya to Sahel	Metadata for geolocation; content for confirmation
(U) Drug Smuggling	(C//FVEY) Sahel and financing of terrorism; Balkans into Europe	Metadata for geolocation; content for confirmation
(U) Biometrics & Elections	(C//FVEY) Used in Africa	Need collection assets

(U) Enrichment Sources

- (U) Air Breather, HF & UHF/VHF
- (C//FVEY) Big Pipe & FORNSAT
- (U) Military SIGINT Services
- (U//FOUO) Forensics
- (U) Third Party Sources
- (C//FVEY) Second Party
 - GCHQ is critical for mission



QRC Package



3rd Party Partner Sharing

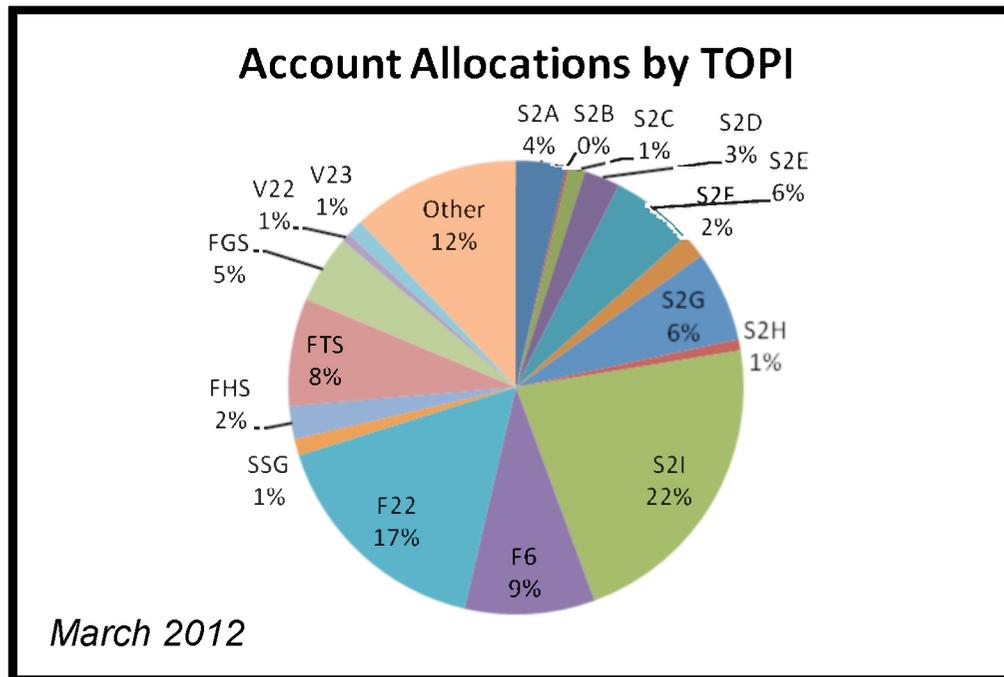


44

Computer Forensics

(C//FVEY) Key Idea: Low Priority of AFRICA may cause loss of metadata and content; makes "Discovery" more uncertain

(U) Enrichment: SIGDEV & GCHQ QFDs

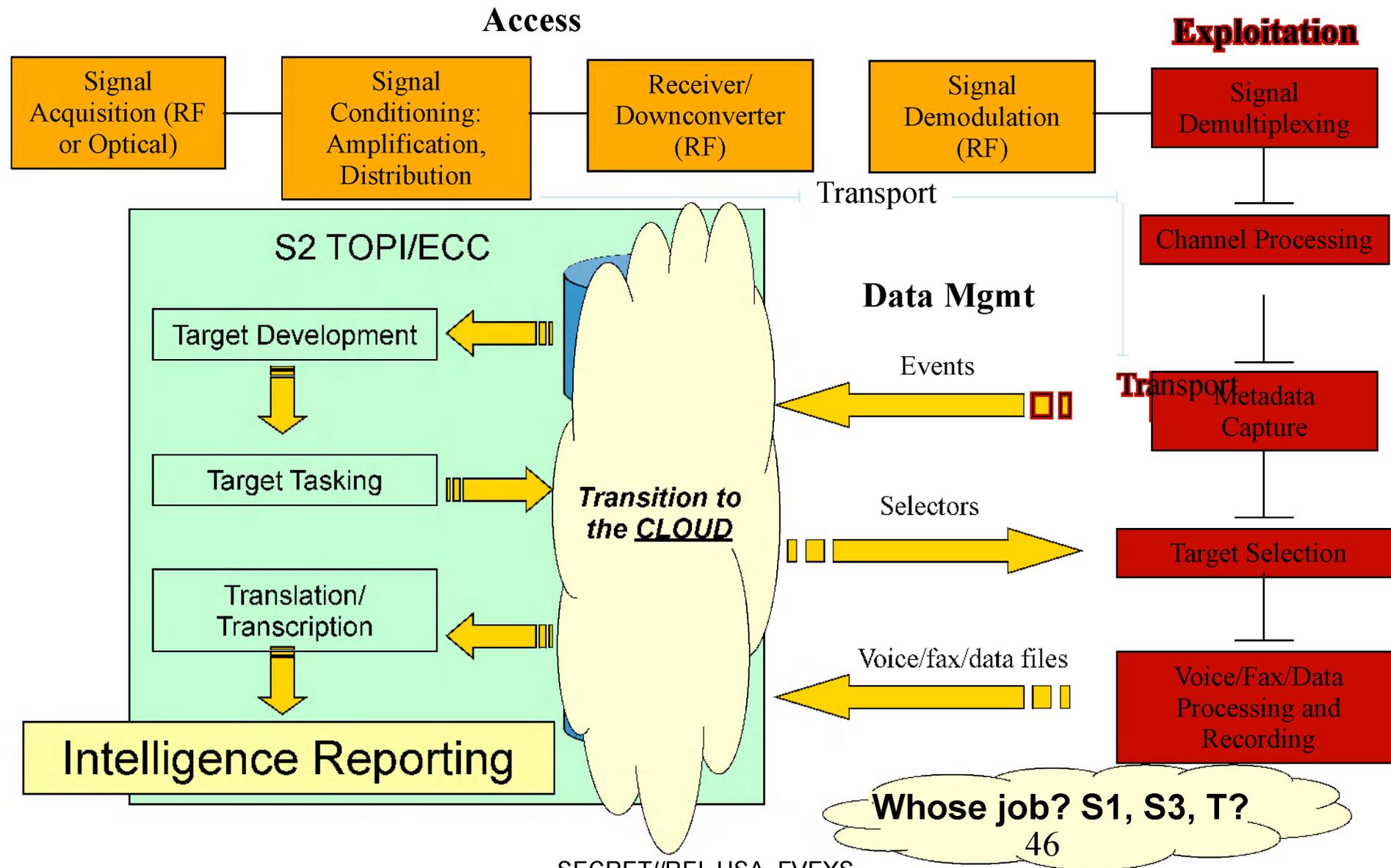


- (S//FVEY) 54% of current ECC DNI tasking based on QFD data
- (S//FVEY) QFDs provide better access to metadata for European & North African targets than any other access at ECC due to poor passive collection
- (C//FVEY) Flexibility provided by the use of TDIs and the first stage query allows for better target discovery and development

Slide taken from ECC archives.

(C//FVEY) Much of ECC data comes from GCHQ QFDs

(U) Data Flow Integration is Constant Headache



(U) “Real Time” Analytics



- (U) Nascent Analytics with unclear definition of “real time”
 - How fast is alerting?
- (C//FVEY) DISTILLERY
 - Pulled from GHOSTMACHINE stack
- (U) NIAGARAFILES
 - File based
 - Starting to gain experience
- (C//FVEY) RTRG
 - Tools not integrated into ECC
 - Data Sets are sparse
 - Tactically oriented
 - Unregulated alerts can quickly spam user
- (C//FVEY) ECC Current Effort:
 - Focused on NTOC and Distributed Denial of Service attack alerting
 - Uses DISTILLERY

(U) How fast is real time?

(U) Batch: MapReduce Analytics



- (U) Batch oriented versus streaming
 - Run every 15 min to once a day or so
 - Not streaming
- (U) Good Data Storage
 - Good access outward to MDR-1, MDR-2
 - Days to years of storage
 - Promotion (?)
- (U) Complex Analytics like “Pattern of Life”
 - Reasonable amount of processing cycles at the front end collection system (not yet tested)
- (U) Session can be quite long and still captured (not yet tested)
- (U) UUID’s (identifying sessions) are workable
- (U) No experience yet sharing with second and third party partners
- (U) Unknown level of entry training required
 - Menwith Hill has WHIZBANG

(C//FVEY) Batch gives you access to data 24 number hours ago

(U) Xkeyscore Fingerprints



- (C//FVEY) Streaming
 - Data available one hour later?
 - Most do pulls up to yesterday
- (U) Good Data Storage
 - RAW content: 3 days to a couple of weeks
 - Metadata: 90+ days
- (U) Complex Analytics like “Pattern of Life”
 - Reasonable amount of processing cycles at the front end collection system
- (U) Session can be quite long and still captured
- (U) UUID’s are workable
- (U) Good for sharing with second and third party
- (U) Relatively low level of entry training required

(U) XKS fingerprints great for streaming

(U) Key Take Aways

- (U//FOUO) Discovery in Africa is based on “we do not know what we do not see”
 - Unknown Unknown from url: https://wiki.nsa.ic.gov/wiki/NTOC-E_discovery_tradecraft
- (U) Europe has Opsec savvy CT targets
- (U) Analytics involve partners
 - 3rd Party in future
- (U) Limited Resources: Processing Power & BW

NSA/CSS Europe & Africa



QUESTIONS?