

# (U) Running Strategic Analytics Affecting Europe and Africa

Region: Europe, Middle East  
(Israel), and Africa :  
██████████, 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....

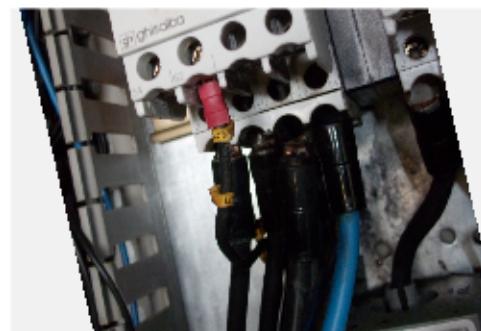
# (U) Challenge: Integrating Tactical & National Collection

- (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

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

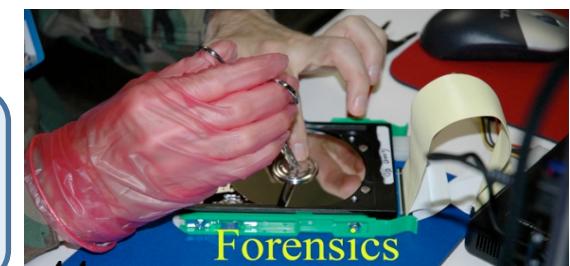
(C//FVEY) Key Idea: Low Priority of AFRICA may cause loss of metadata and content; makes “Discovery” more uncertain



QRC Package

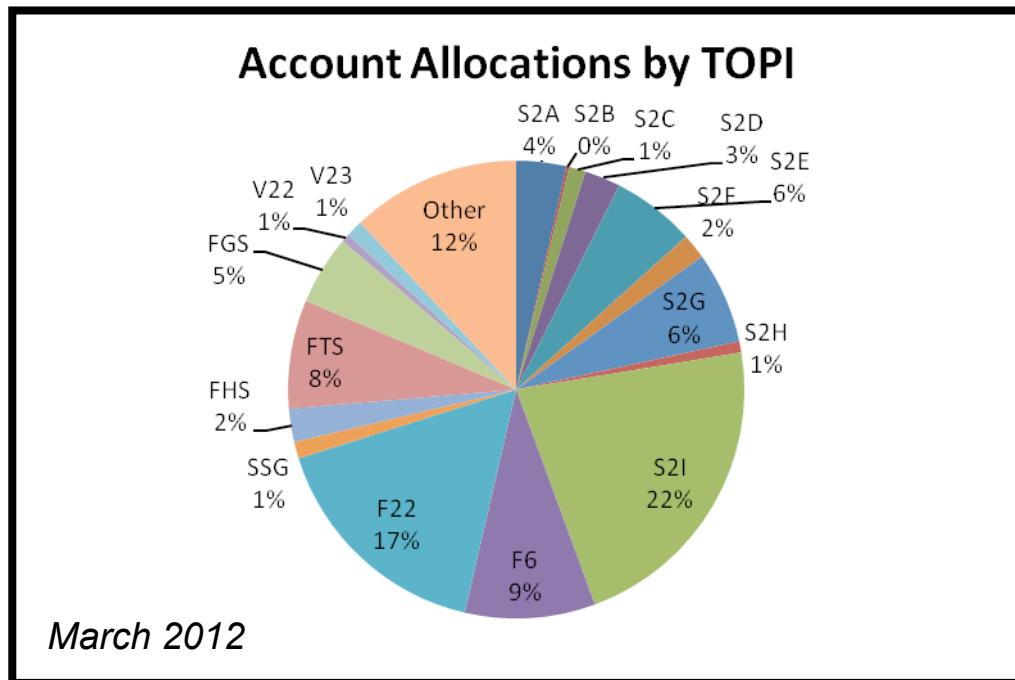


3rd Party Partner Sharing



Forensics

# (U) Enrichment: SIGDEV & GCHQ QFDs

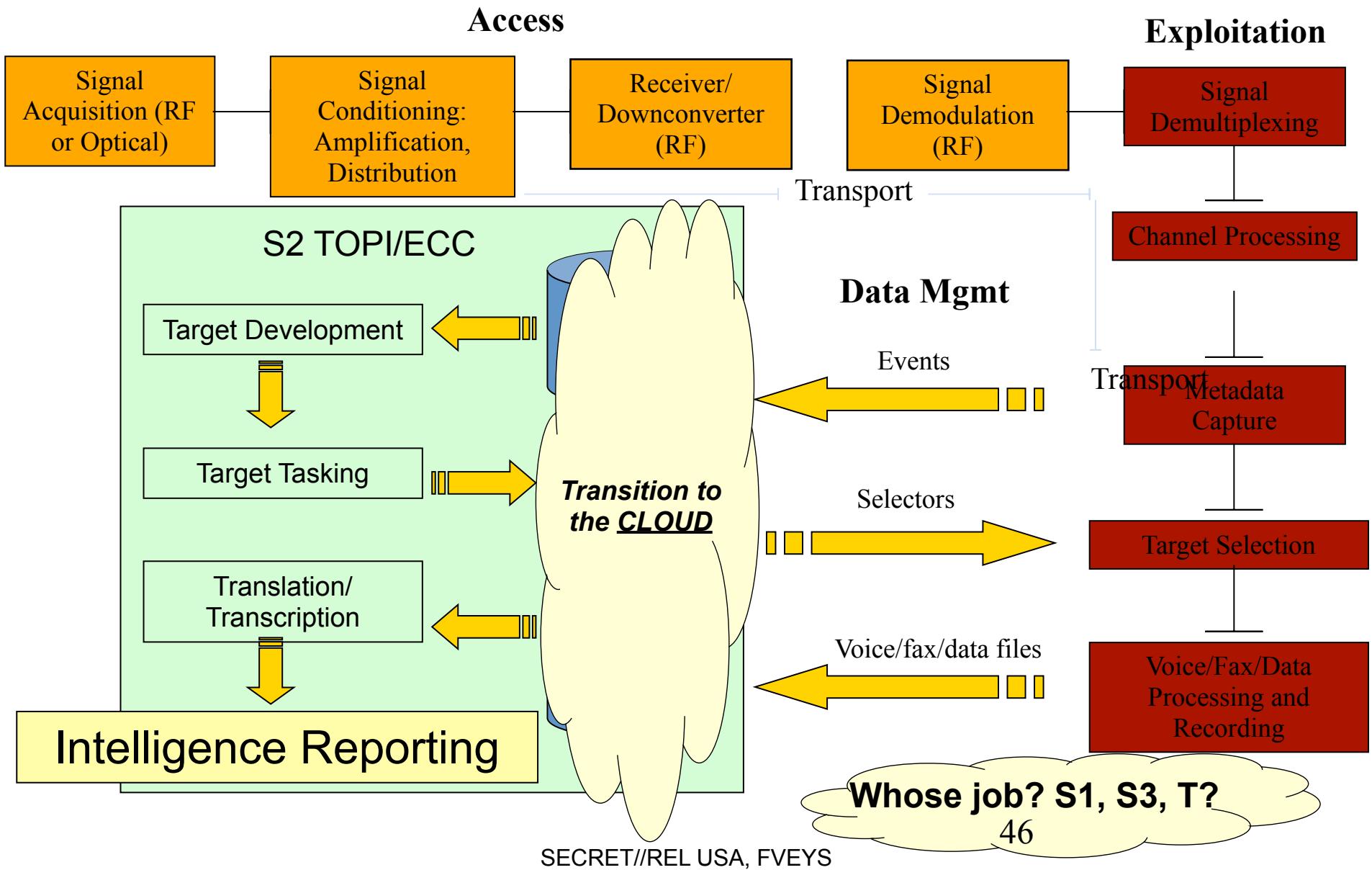


- (S//FVEY) 54% of current ECC DNI tasking based on QFD data
- (S//FVEY) QFDs provide better access to metadata for European & North African targets than any other access at ECC due to poor passive collection
- (C//FVEY) Flexibility provided by the use of TDIs and the first stage query allows for better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

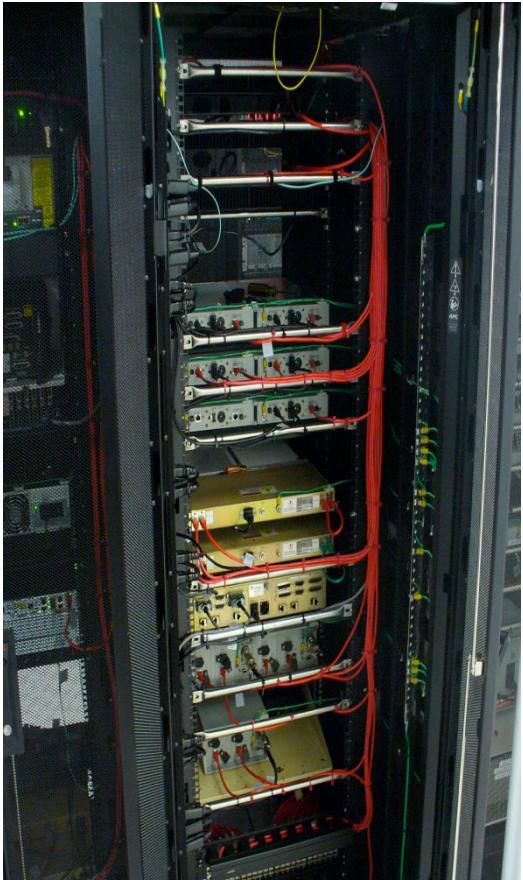
# (U) Batch: MapReduce Analytics



- (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](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?**