

# Supporting Internet Operations

## Special Source Access

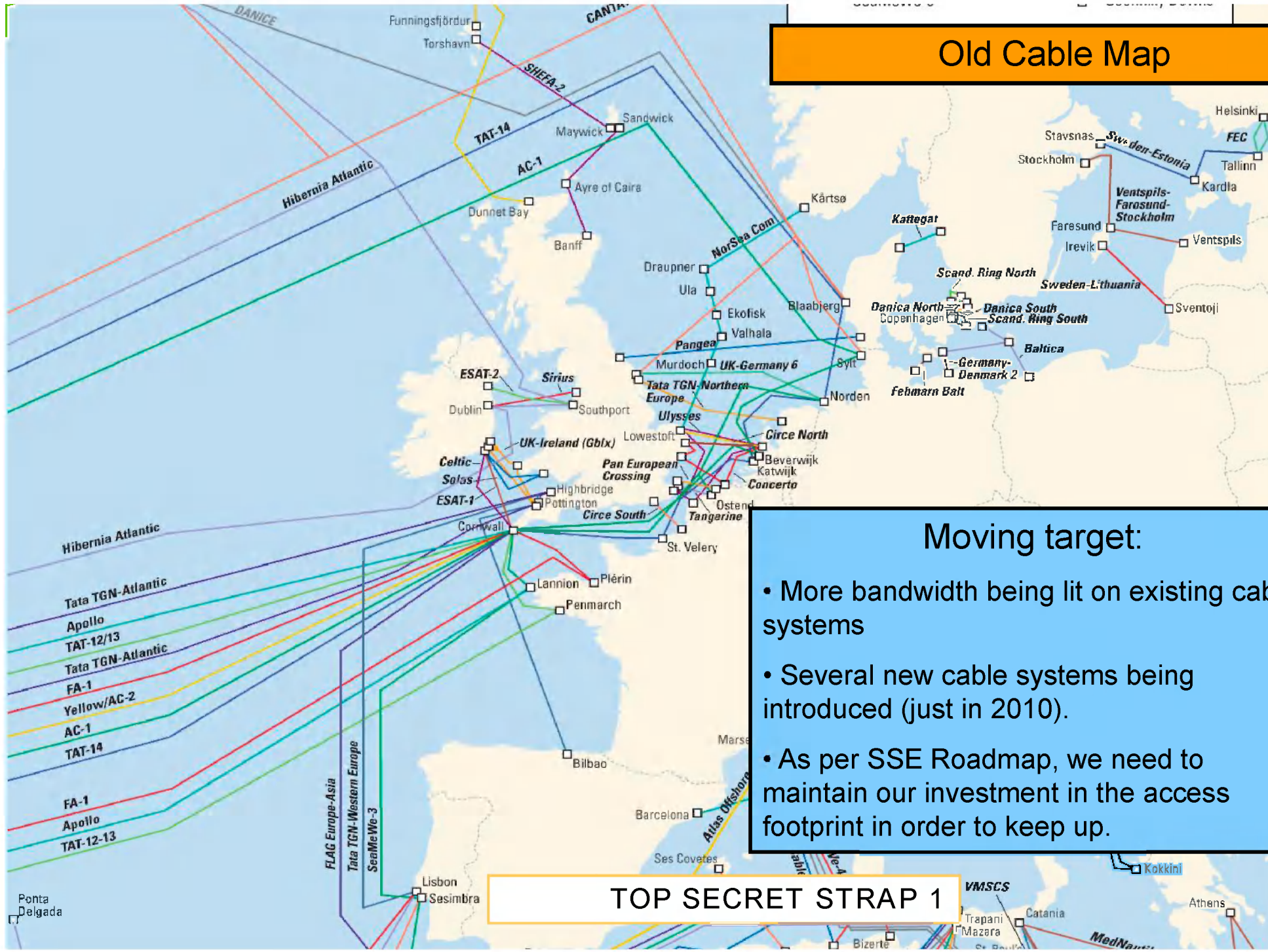


## 15 mins to cover:

- What does the environment look like
- What does the SSE Roadmap tell us:
  - Current posture
  - ..and where do we want to be
- Where are we now
- Access plans for FY 10/11



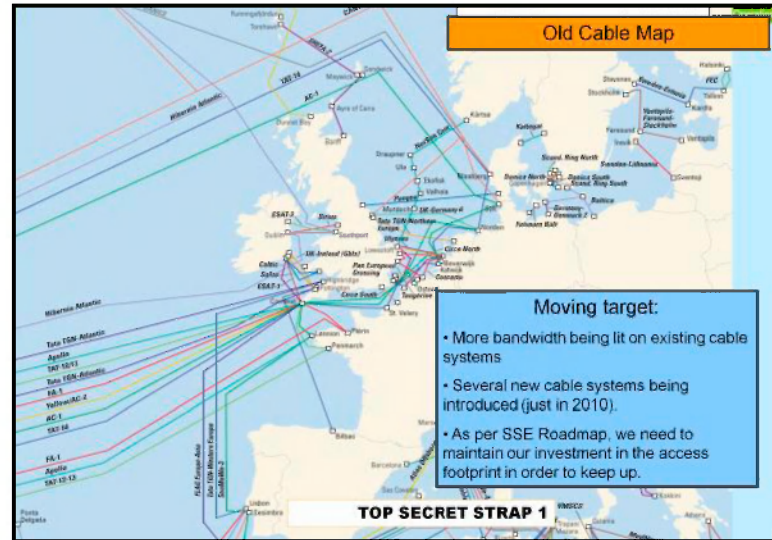
# Old Cable Map



**Moving target:**

- More bandwidth being lit on existing cable systems
- Several new cable systems being introduced (just in 2010).
- As per SSE Roadmap, we need to maintain our investment in the access footprint in order to keep up.

TOP SECRET STRAP 1



1. This is a view of the commercial cable systems transiting the UK. There are around 1600 available 10Gs within these cables.
2. This is 25% of all internet traffic
3. Although the total percentage processed may seem in the lower percentile range we can actually survey the majority of the 1600.
4. This allows us to select the most valuable to switch into our processing systems.
5. Advancing techniques will allow a greater rate of processing by using targeted techniques (bulk presence events and TIPC).

## Current Capability

- Following the efforts made for the July deliverable, and the progress being made towards the 100 March 2010 target, GCHQs current 10G SSE capability is:
  - We can intercept/touch: ~800x 10Gs (See note #1)
  - We can cyclic survey: 188
  - We can egress to GCHQ processing: 87 (See note #2)
- In addition we are working with GERONTIC to agree an IRU which will enable a significant reduction in annual running costs (~£2M saving p.a), along with a further 10x 10G egress.

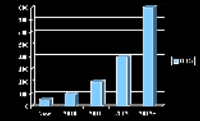
Note #1. Does not include CIRCUIT/WAYGOOD

Note #2. HIASCO access/egress to Bude complete – awaiting extra ARCANO egress



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## SSE Roadmap / Future Capability

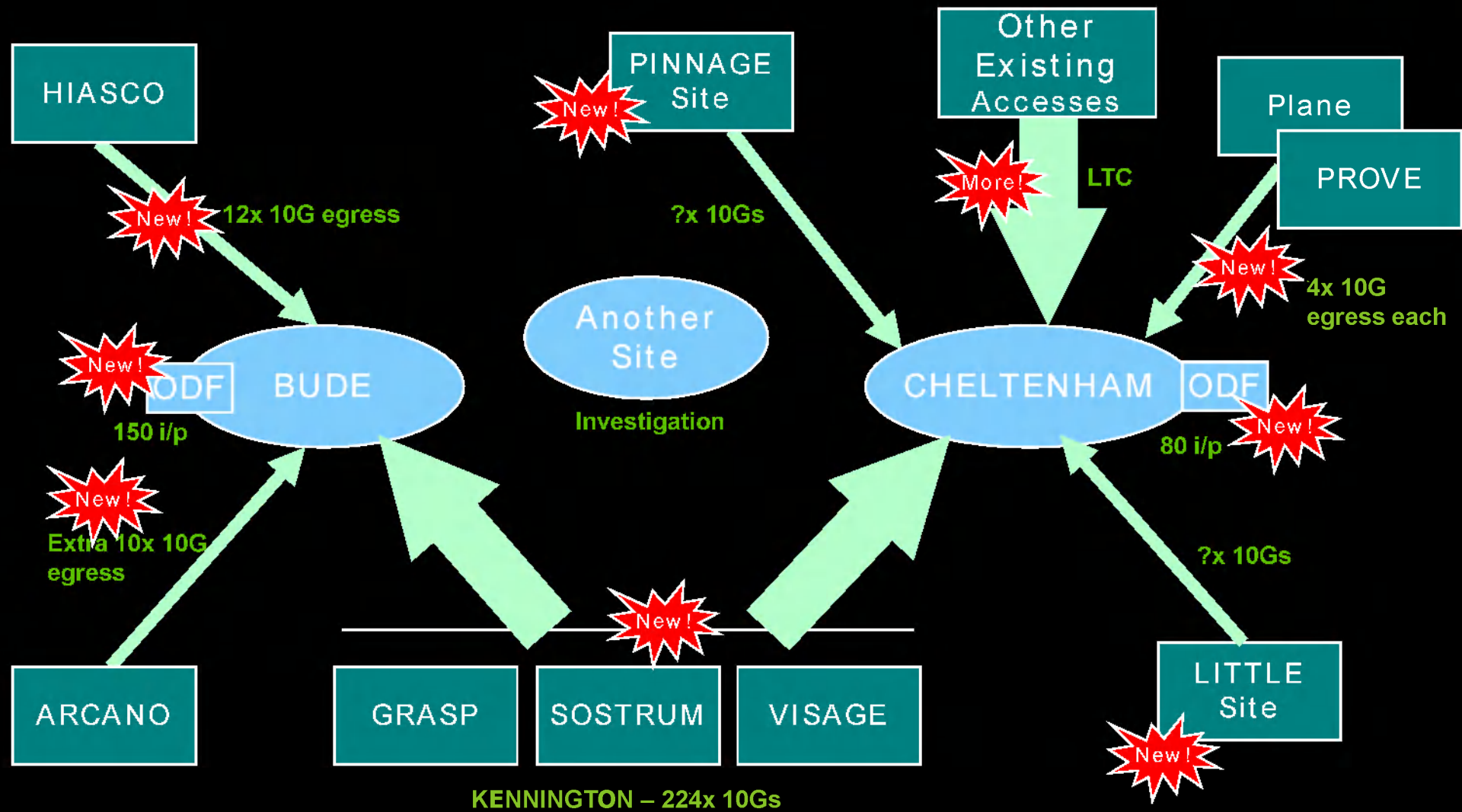
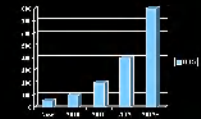


- The SSE Roadmap is still valid though needs re-visiting to update/validate the recommended intercept and egress expansion.
- Along with TEA and SRT (and ECB) we are developing new relationships to expand our access footprint, to bring the number of 10G bearers:
  - Intercepted by Mar 2011 to: 1513 (or thereabouts...)  
(+70 if we include CIRCUIT/WG)
  - Egressed to GCHQ processing systems by Mar 2011 to: 415

*Eagle eyed will have noticed that this doesn't align with the projected processing and storage profile.*

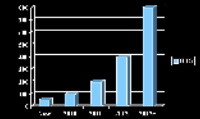


# SINO Access Plans for 2010



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## SINO Access: Where are we



- 10 x 10G from HIASCO now available at Bude: awaiting DEBIT CARD commissioning to process
- 8 out of 10 additional ARCANO bearers for Bude - on track for March 2010
- KENNINGTON agreement complete to enable increased SOSTRUM, GRASP and VISAGE access and egress
- PLANE & PROVE sites available:
  - Egress comms from PROVE to Cheltenham will be in place by March 2010 (PLANE to follow)
  - Initial capability planned for March includes KEA, SD and FKB
- OSDS:
  - Bude OSDS IOC's today (capability now – 150\*)
  - Cheltenham OSDS upgraded December (capability now - 78)
- New relationships and access – PINNAGE and LITTLE progressing but no dates yet.
- Assessment of potential RPC-2 (and 3/4) sites underway



Questions..



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