



HITS HYBRID SITES

HIGH INTEGRITY TELECOMMUNICATIONS SYSTEM

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WHAT IS A HYBRID SITE?

The HITS network will provide an independent and highly resilient telecommunications network which will allow emergency responders across the country to communicate both with other Police Force Areas and with Central Government in the event of widespread telecommunications failure.

In order to provide this level of resilience, HITS will use the military-grade Skynet 5 constellation of satellites and will connect to them using a VSAT terminal. This means that HITS is independent of all commercial telecommunications networks, thus ensuring the necessary resilience. However, most HITS sites will also have a terrestrial (landline) connection for added resilience which will facilitate the break-out of calls onto other networks (such as the PSTN or mobile phone networks). HITS will therefore be able to fully interoperate with the Public Switched Telephone Network (PSTN, the main landline network across the UK). We refer to HITS sites that will have both satellite and terrestrial connections as Hybrid sites.



The above image shows a cut-away radome. Some Hybrid sites will require a radome for added weather resistance, although it is not essential. The Radome improves the stability of the dish so that the connection to the satellite is more stable during high winds. The Boxed Kit and the Transportables will not have a Radome.

WHAT OTHER TYPES OF SITE ARE THERE?

The majority of HITS sites are expected to be Hybrid sites. However, there are other types of sites in the HITS network:

- Boxed Kit: These will have a non-permanent satellite connection in addition to a terrestrial connection (see HITS Factsheet 4).
- Terrestrial only: These sites will not have a satellite connection to the HITS network, but will have a secure and resilient terrestrial connection to the HITS network.
- Transportable: These are not based permanently at any fixed HITS location, but are maintained in a state of readiness by the supplier (Paradigm Secure Communications Ltd). They will provide a satellite connection to the HITS network when deployed to a HITS fallback location (see HITS Factsheet 5).

WHAT ELSE?

Apart from the satellite dish, HITS sites will need some electronic equipment to provide the necessary system capabilities and encryption (to RESTRICTED). These will require approximately 22 contiguous U of rack space in a secure equipment room (a U is a standard size of height and width in an equipment rack). HITS sites will also require the building to have a minimum level of overall resilience (contact the HITS Team for more information) - generators are particularly important as they will provide power for HITS in the event of a blackout.

FURTHER INFORMATION

Please visit the HITS website for more details:

www.cabinet-office.gov.uk/HITS

If you have any questions please contact the HITS Team at HITS@cabinet-office.x.gsi.gov.uk

WHEN? HITS will be developed and tested during 2009, with IOC (Initial Operating Capability) at the end of the year. Full rollout of HITS should be complete by mid 2012.



version of this factsheet, please contact the HITS team via email on: HITS@cabinet-office.x.gsi.gov.uk