

1.1 Dual Continuity Solution

- 1.1.1 **Overview.** The Dual option is a redundancy solution for the Business VPN Service in case the primary Access Circuit or primary CE Router is out of service. The redundancy is implemented by means of an additional Access Circuit installed at the Location, thereby equipping the Business VPN Service at that Location with dual Access Circuits.
- 1.1.2 **Site Profile Availability.** The Dual option is only available for Business VPN Corporate and Business VPN Small Site Profiles. The availability of the Dual optional feature will vary from country to country.
- 1.1.3 **Secondary Router and Secondary Access Circuit.** If Customer orders the Dual option, Orange will install a second CE Router at the Location to back up the primary CE Router. Orange will connect the secondary CE Router to a secondary Access Circuit. The secondary Access Circuit will be similar to the primary Access Circuit in terms of bandwidth and access medium (e.g. leased line, SDSL, Ethernet, Dedicated Internet Access, Broadband Internet Access, etc.). Orange will also install a backup Business VPN plug at the Location. If available and depending on whether Customer requires Full Path Diversity or Last-Mile Diversity (as described in Clause 1.1.4.3 and Clause 1.1.4.4, respectively), Customer can order different types of access medium for the primary and secondary Access Circuits (e.g. primary Ethernet access backed up by a lease line access). The secondary Access Circuit can be connected to a different Orange point of presence ("**PoP**"), subject to additional Charge.
- 1.1.4 **Access Circuit Configuration Options**
- 1.1.4.1 **Active-Passive Option.** If Customer orders the active-passive option, Orange will set up the primary Access Circuit to remain in active mode and the secondary Access Circuit to remain in passive mode. All traffic goes through the primary Access Circuit unless it or the primary CE Router is out of service. The secondary Access Circuit and the secondary CE Router will stay on standby, and they will only actively transport traffic when either the primary Access Circuit or primary CE Router is out of service. When the secondary CE Router detects a failure in the primary Access Circuit or the primary CE Router, the secondary CE Router will route all traffic through the secondary Access Circuit. Traffic will switch back to the primary Access Circuit when the primary Access Circuit or the primary CE Router, as the case may be, is restored to operational condition.
- 1.1.4.2 **Load Balancing Option.** If Customer orders the load balancing option, Orange will set up the dual Access Circuits as concurrent primary Access Circuits ("**Active-Active Mode**"). All traffic will be distributed to either Access Circuit according to a statistical per-destination distribution scheme.
- 1.1.4.3 **Full Path Diversity Option.** Subject to availability, Orange can request the Access Provider to provision the dual Access Circuits at the Location with full path diversity whereby each such circuit will be routed by the Access Provider from its network to the Location using two different physical paths, and those Access Circuits will be connected to a different PoP. Both Access Circuits must be provided by the same Access Provider, and the full path diversity must be confirmed and maintained by the Access Provider during the entire Service Term. The Full Path Diversity option is applicable only with Business VPN Corporate Site Profile.
- 1.1.4.4 **Last-Mile Diversity Option.** Subject to availability, Customer can order last-mile diversity for Business VPN Small whereby both Dedicated Internet Access ("**DIA**") circuits will be configured as Active-Active Mode and will be routed by the Internet service provider ("**ISP**") to the Location over different ISP network facilities. The dual Access Circuits must both be DIA circuits and must be provided by the same ISP.
- 1.1.5 **Main Features.** Dual continuity option includes the following features:
- multi-protocol integration;
 - backup access mode, which is provided through a dedicated access (whether ATM, Direct Access, Internet, or Ethernet);
 - backup service bandwidth; and
 - monitoring of the primary and secondary CE Routers in case failure.