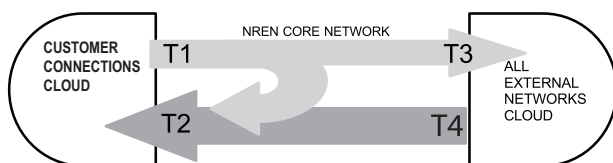


4. Traffic

In this section, a distinction is made between internal and external networking and network traffic. These terms are not immediately clear to all NRENs. The figure below illustrates how these terms were used for the purpose of the Compendium.



T1 - all outbound traffic from customer sites
 T2 - all inbound traffic to customer sites
 T3 - all outbound traffic to external network clouds
 T4 - all inbound traffic to the NREN backbone

NREN user services such as web servers, mirrors etc. are considered to be part of the traffic from/to customer sites.

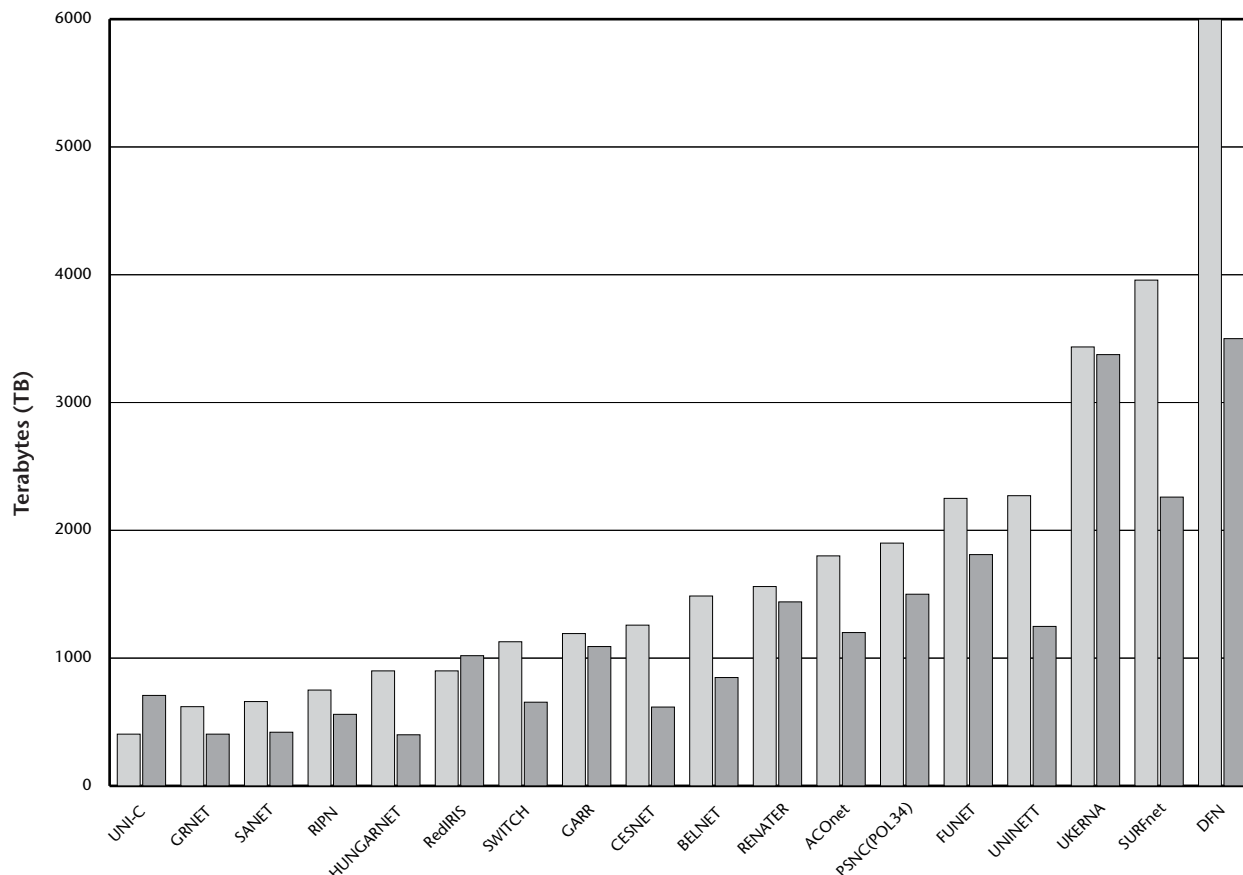
External traffic is all traffic to GÉANT, the Commodity Internet, etc. (made up of T3 and T4 above).

4.1 External Traffic

Note that external traffic is not the same as international traffic -- see the explanation above. For presentational purposes, two graphs are presented.

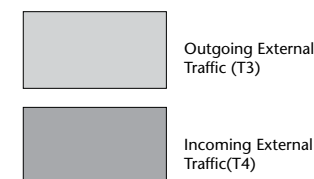
Graph 4.1.1 shows the information for those NRENs with total external traffic in 2002 of more than 1000 Terabytes.

Graph 4.1.1 External Traffic 2002, > 1000 TB

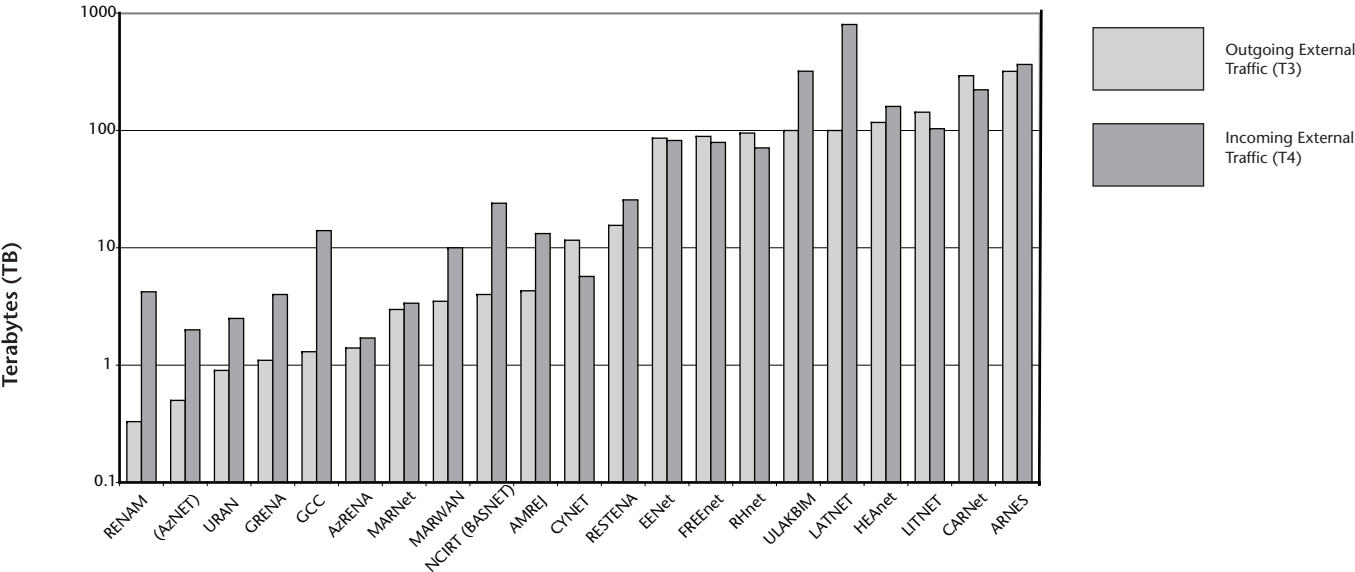


Graph 4.1.2 gives the same information for those NRENs with total external traffic below 1000 Terabytes. Note that for presentational purposes, a *logarithmic* scale has been chosen for graph 4.1.2.

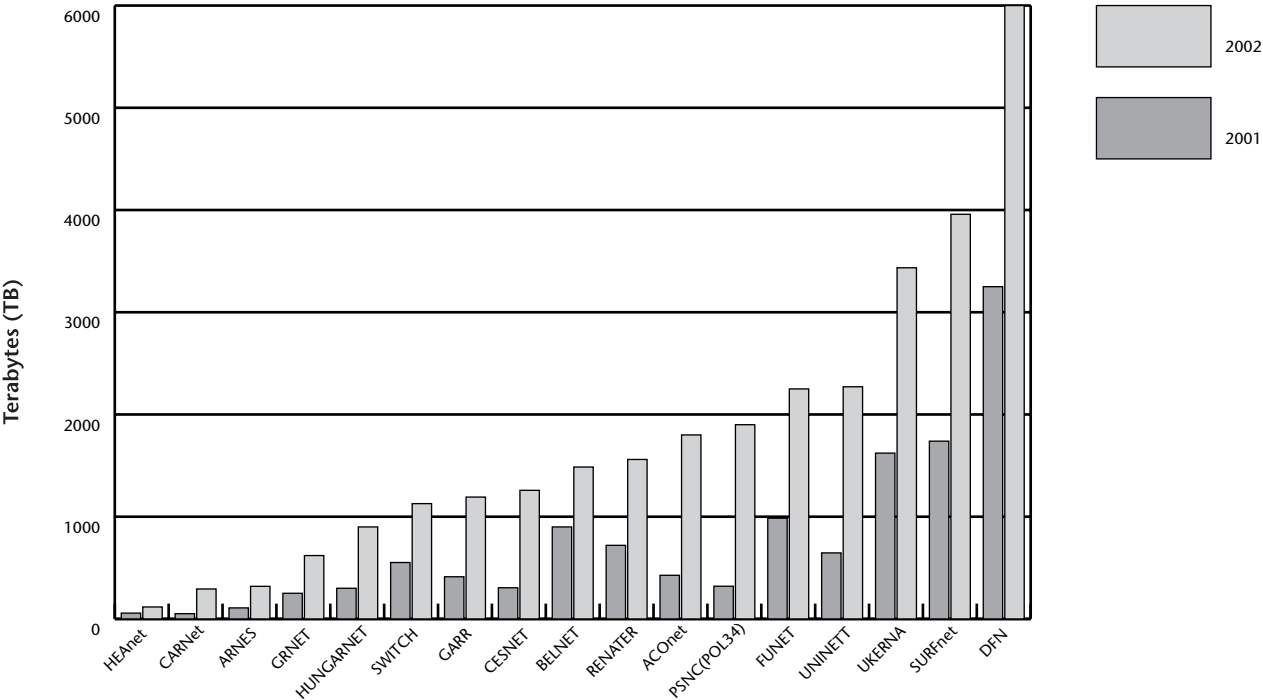
These graphs should be seen in conjunction with those of section 4.4, which give the external traffic per student for 2002.



Graph 4.1.2 External Traffic 2002, < 1000 TB



Graph 4.1.3 Outgoing External Traffic, 2001 and 2002



A comparison between 2001 and 2002 gives an impression of the traffic growth. Graph 4.1.3 shows the evolution in outgoing external traffic (T3) for a number of countries. As can be seen from this data, traffic growth has been fierce, ranging between 65% (Belgium) and 494% (Poland).