

**DIALOG CONSULT / VATM:  
7th Joint Analysis of the  
Telecommunications Market**

– Charts –



– Results of a survey of member companies in the German  
“Federation of Telecommunications and Value-Added Service  
Providers” (VATM) in July/August 2005 –

Cologne  
26 September 2005

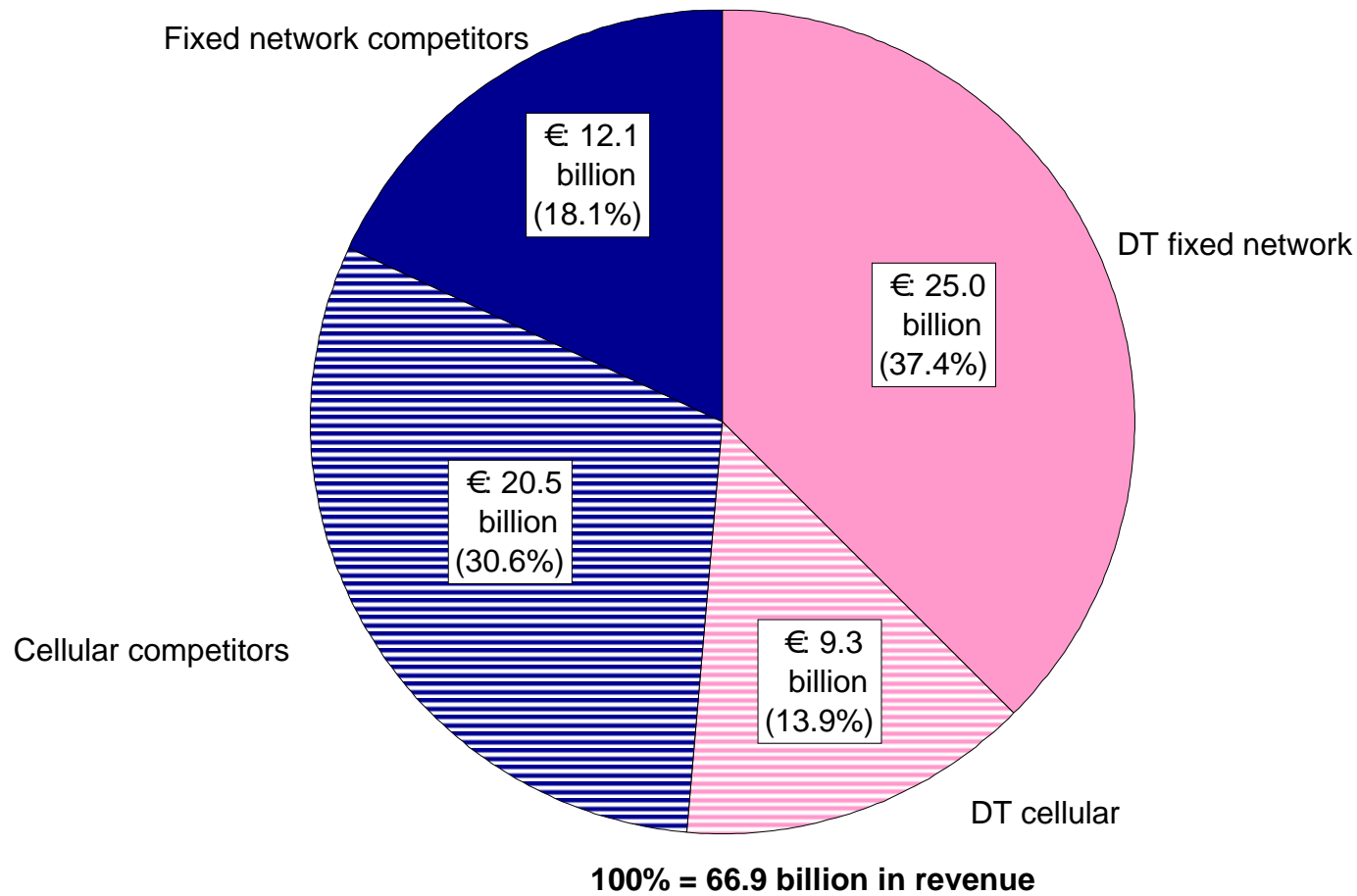
## **C o n t e n t s**

- I. Total market for telecommunications services in Germany
- II. Fixed network market
- III. Internet access market
- IV. Cellular market
- Annex

I. Total market for telecommunications services in Germany

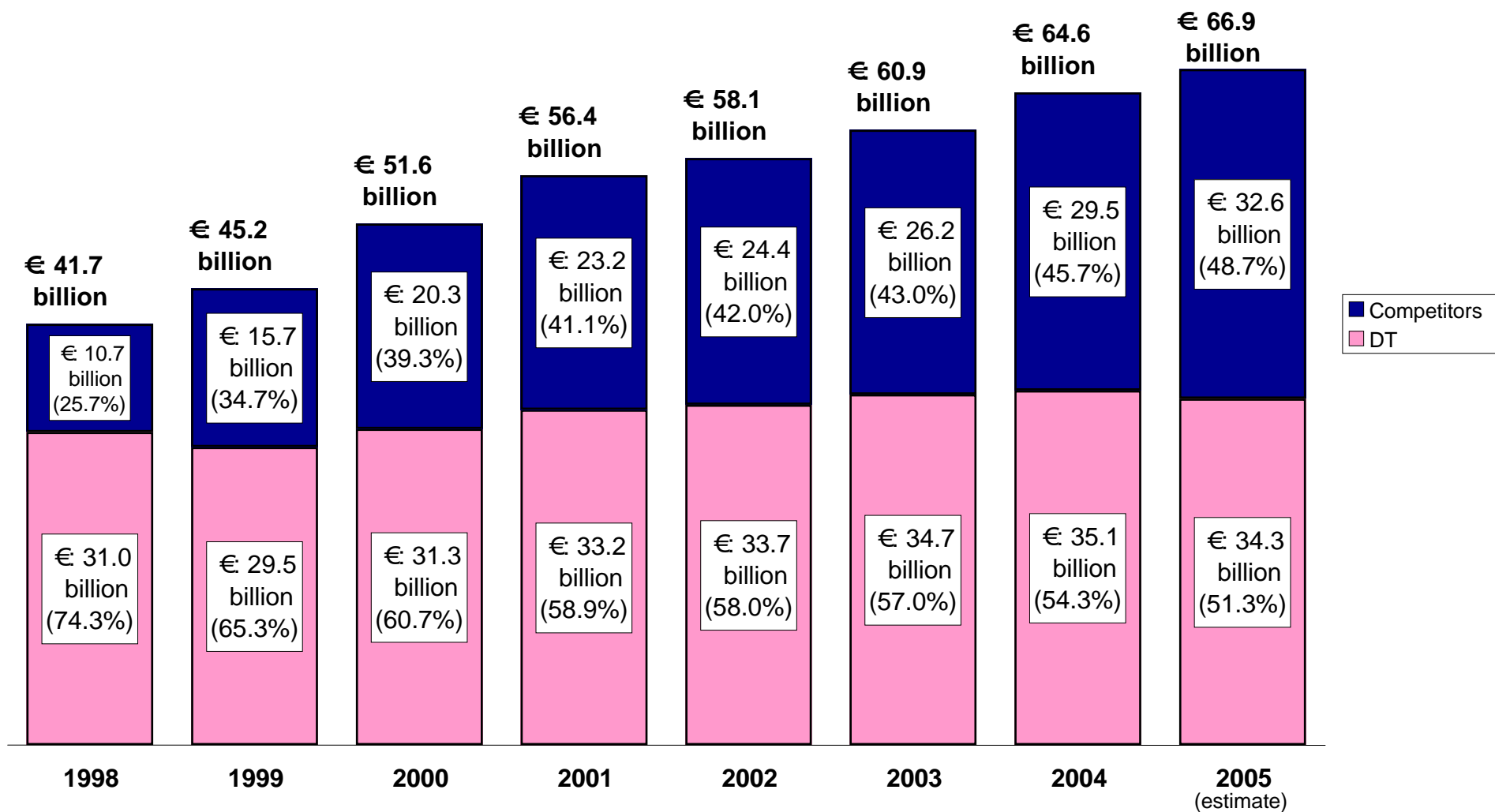
**Telecommunications services in Germany generated approx. 67 billion euros in 2005 – about half of that total still goes to Deutsche Telekom, which continues to be the dominant player in the fixed network segment**

**Figure 1: Total market for telecommunications services in Germany in 2005<sup>a</sup>**  
(estimate, revenue excluding TV signal transport)



## Revenue from telecommunications services will grow by around 4 percent in 2005 – due entirely to growth of the competitors

**Figure 2: Total market for telecommunications services in Germany<sup>a</sup>**  
(Revenue excluding TV signal transport)

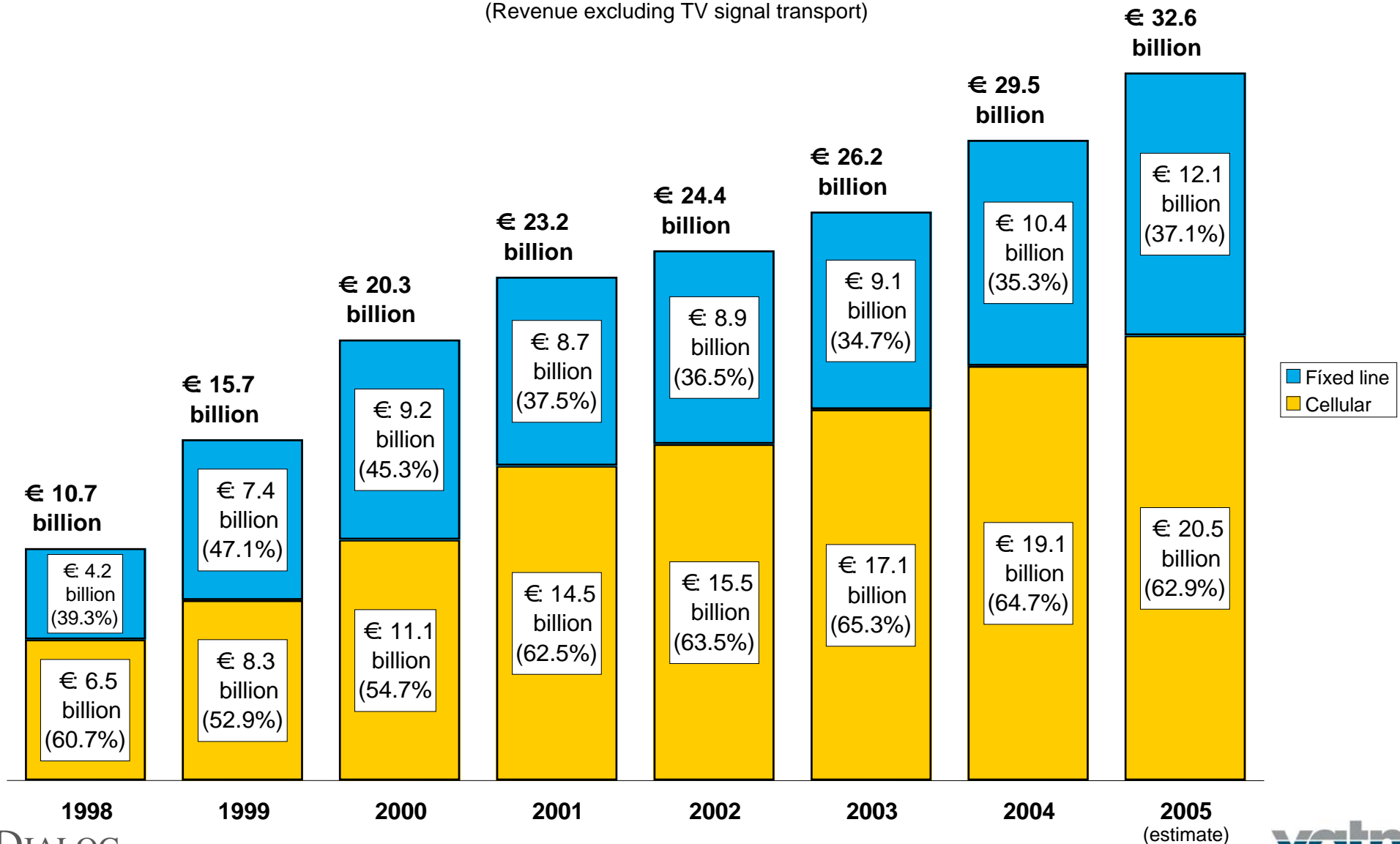


a) Incl. data services, leased lines and terminal equipment; excluding distribution services for TV content.  
b) Germany only, excl. mobile telephony, incl. final customer revenue of new carriers, billed through DTAG.

Source: DIALOG CONSULT-VATM analyses and forecasts

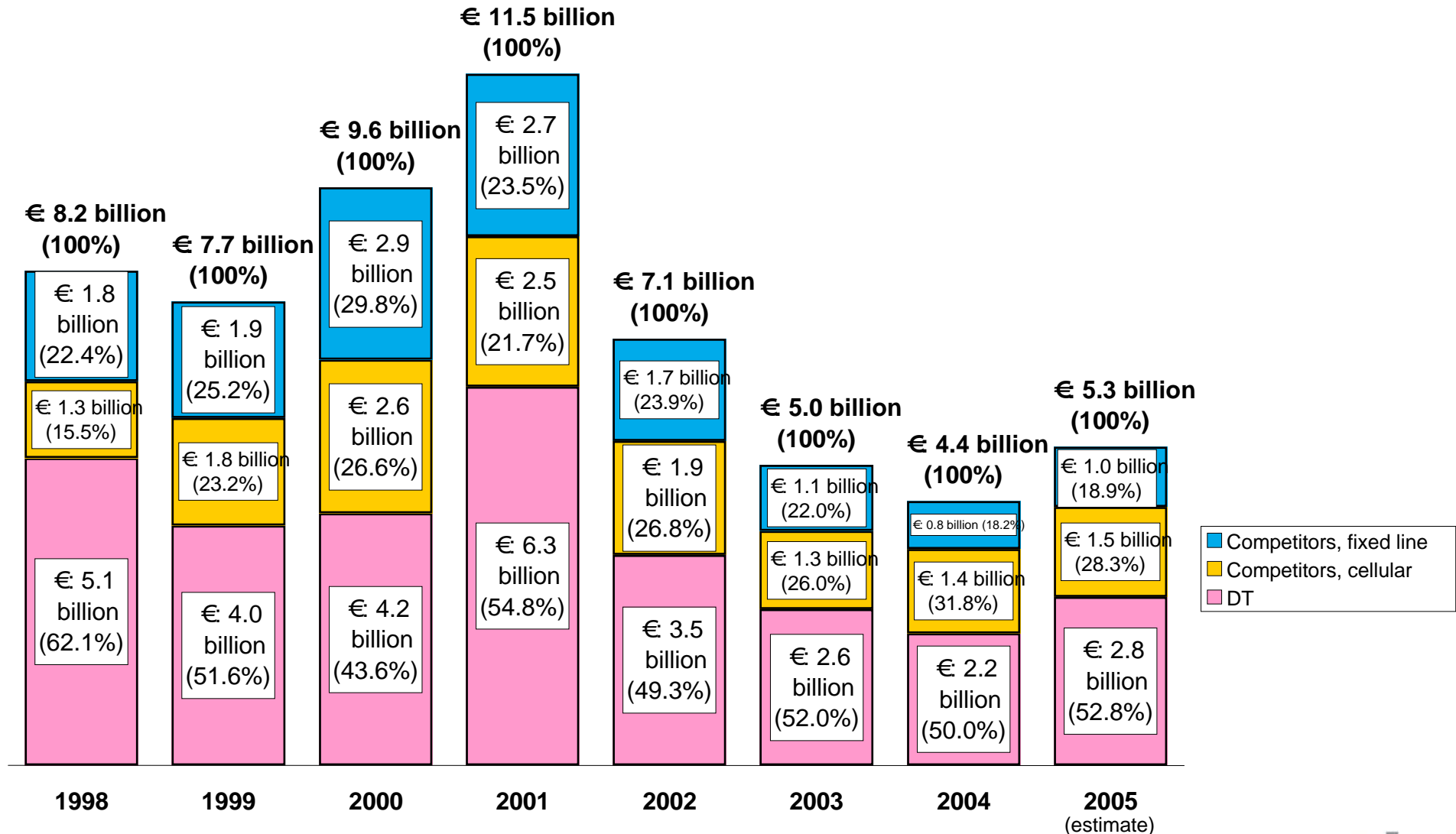
**Above-average revenue growth among the competitors in 2005 stems to a greater extent than in previous years from successes achieved in the fixed network segment, and less from increases in mobile telephony**

**Figure 3: Competitors' market, fixed network and mobile telephony services**  
(Revenue excluding TV signal transport)



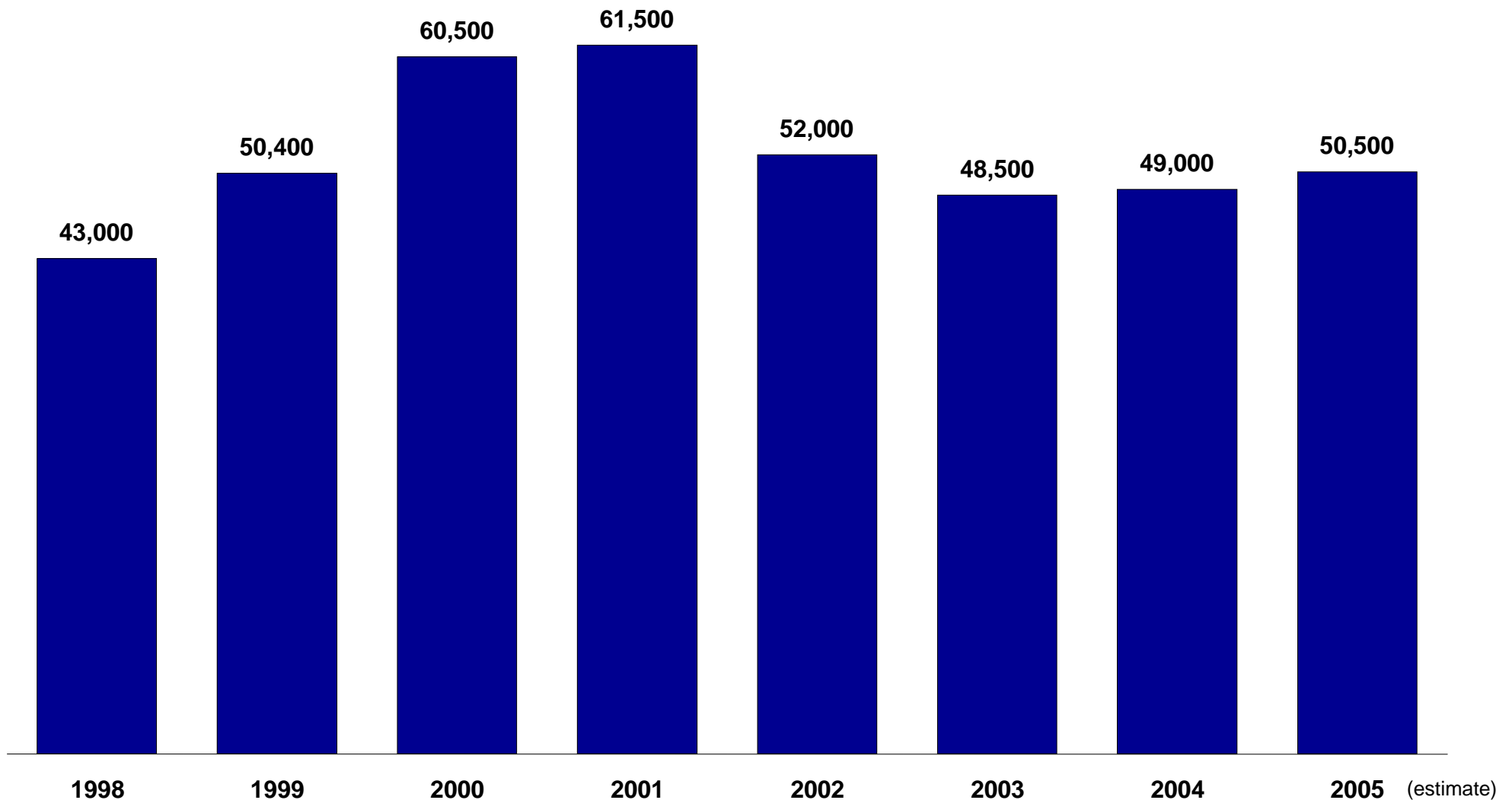
**Investments in fixed assets increased again in 2005 for the first time in four years – with the competitors and Deutsche Telekom each accounting for one half of the total.**

**Figure 4: Investments in fixed assets**



## Business growth in 2005 is having a positive impact on job levels among alternative fixed and cellular service providers

Figure 5: Total jobs provided by new service providers in fixed and cellular networks

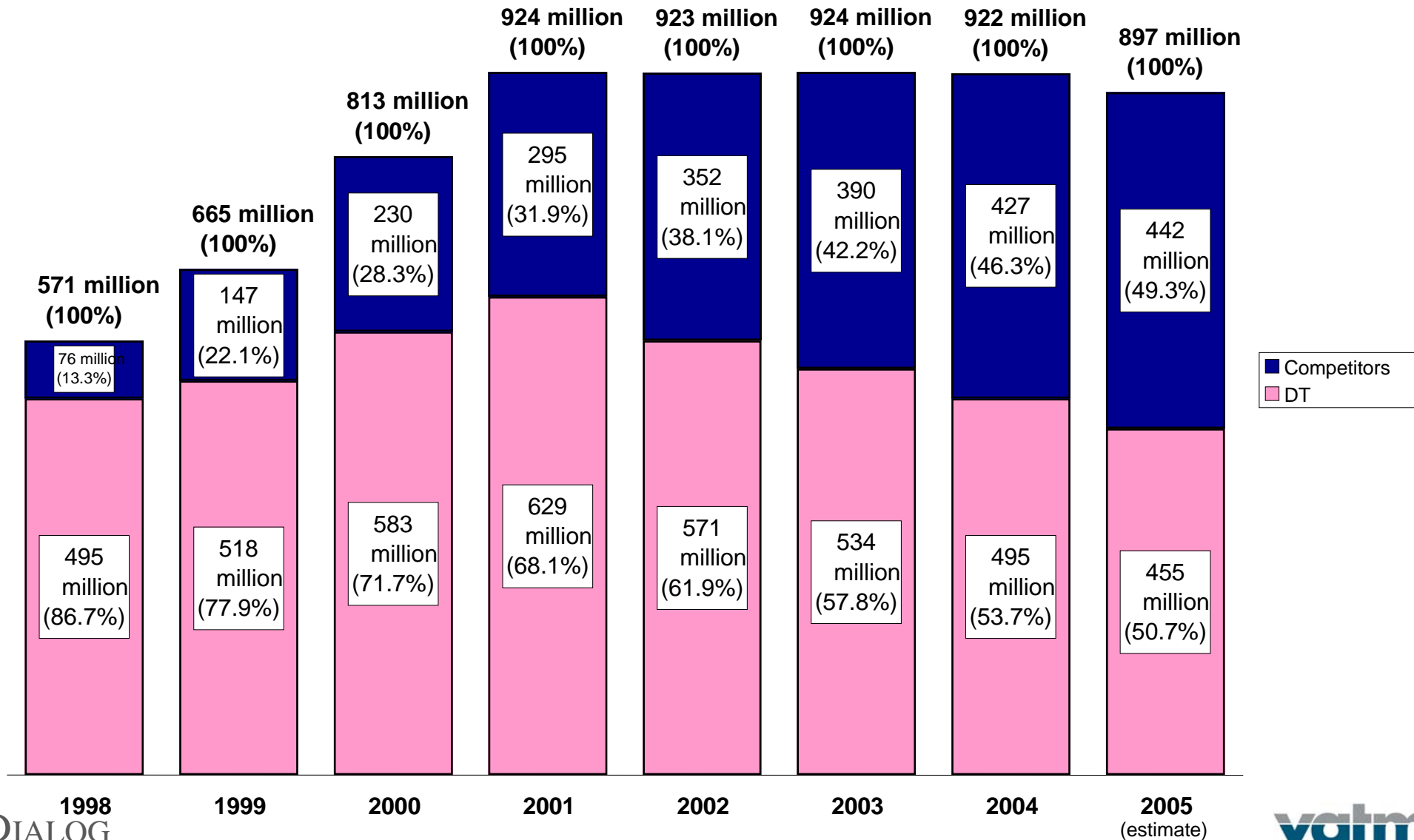




II. Market for fixed network services, in sales revenue and minutes

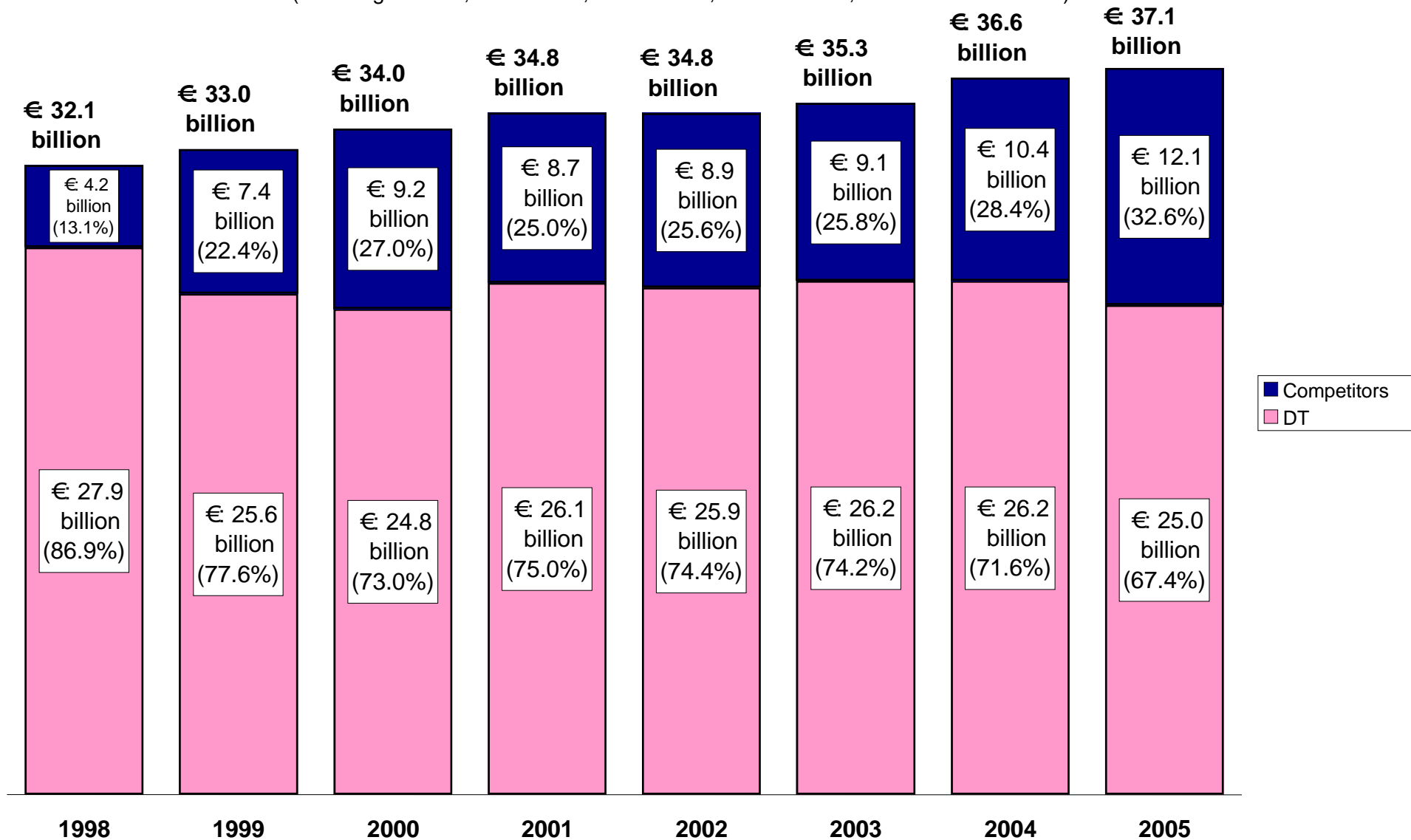
## The slowed decline in market share held by Deutsche Telekom is arresting the growth of competitors – the slight decline in total connection minutes is mainly caused by DSL products

**Figure 6: Development of total German market for fixed lines, in connection minutes per day**  
(total market including local, near region, long-distance, international and cellular connections, Internet, IN services)



## The competitors and their 4.2 percent revenue growth are the source of overall growth

**Figure 7: Development of the market for fixed line services in Germany, expressed in revenue**  
 (including Internet, IN services, leased lines, data services, inter-carrier revenue<sup>a)</sup>)

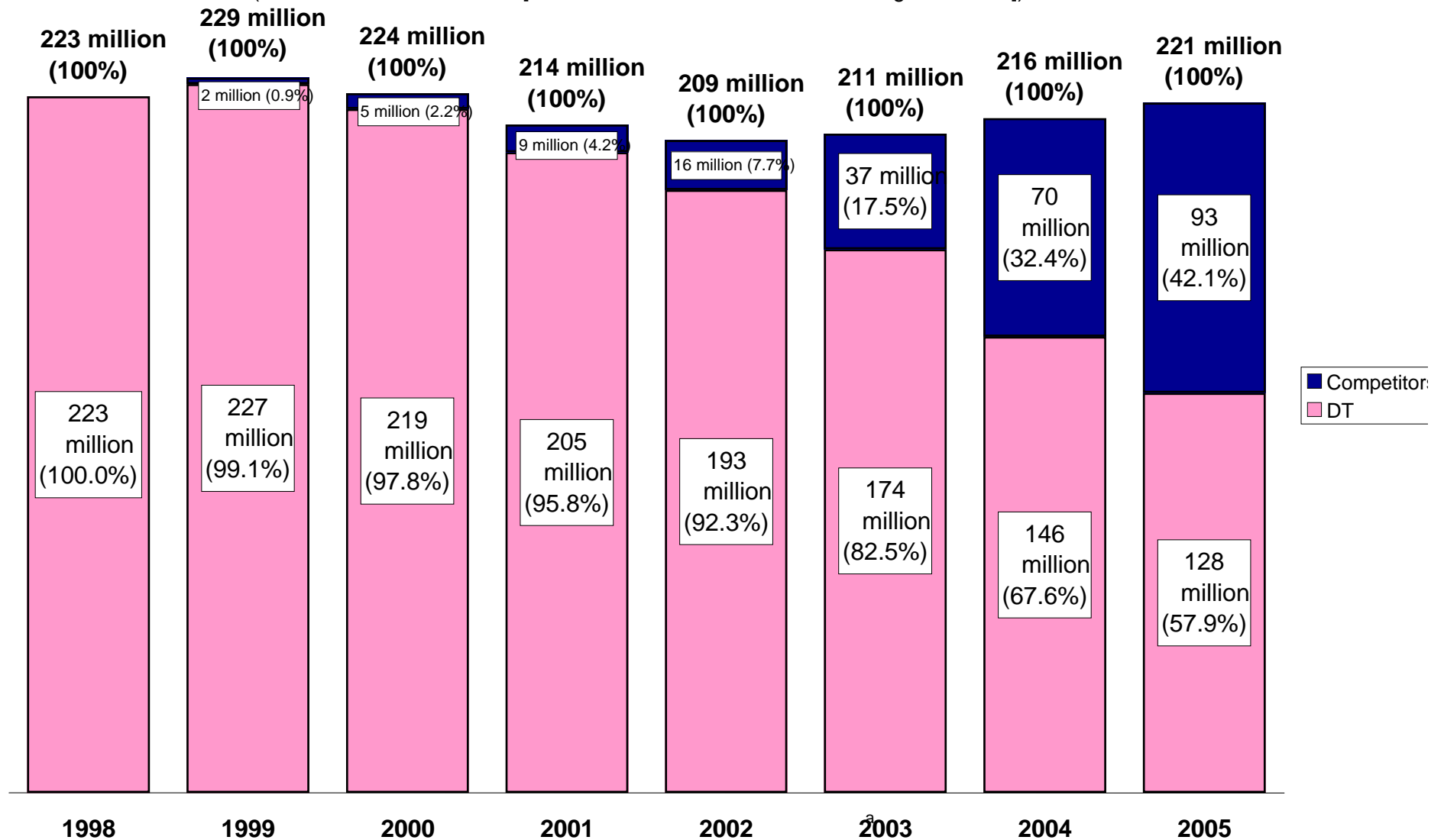


a) Virtually all the alternative fixed line carriers must buy inter-carrier services (e.g. interconnection, fixed line calls, subscriber lines, equipment rooms) from Deutsche Telekom, and added to the latter's revenue.

Source: DIALOG CONSULT-/VATM analyses and forecasts

## Intensified competition for local calls is leading to a definite increase in the competitors' market share and in local call traffic in general

**Figure 8: Development of the local network market for fixed line voice services in Germany, connection minutes per day**  
 (local network connections [= connections within the same dialling code area])

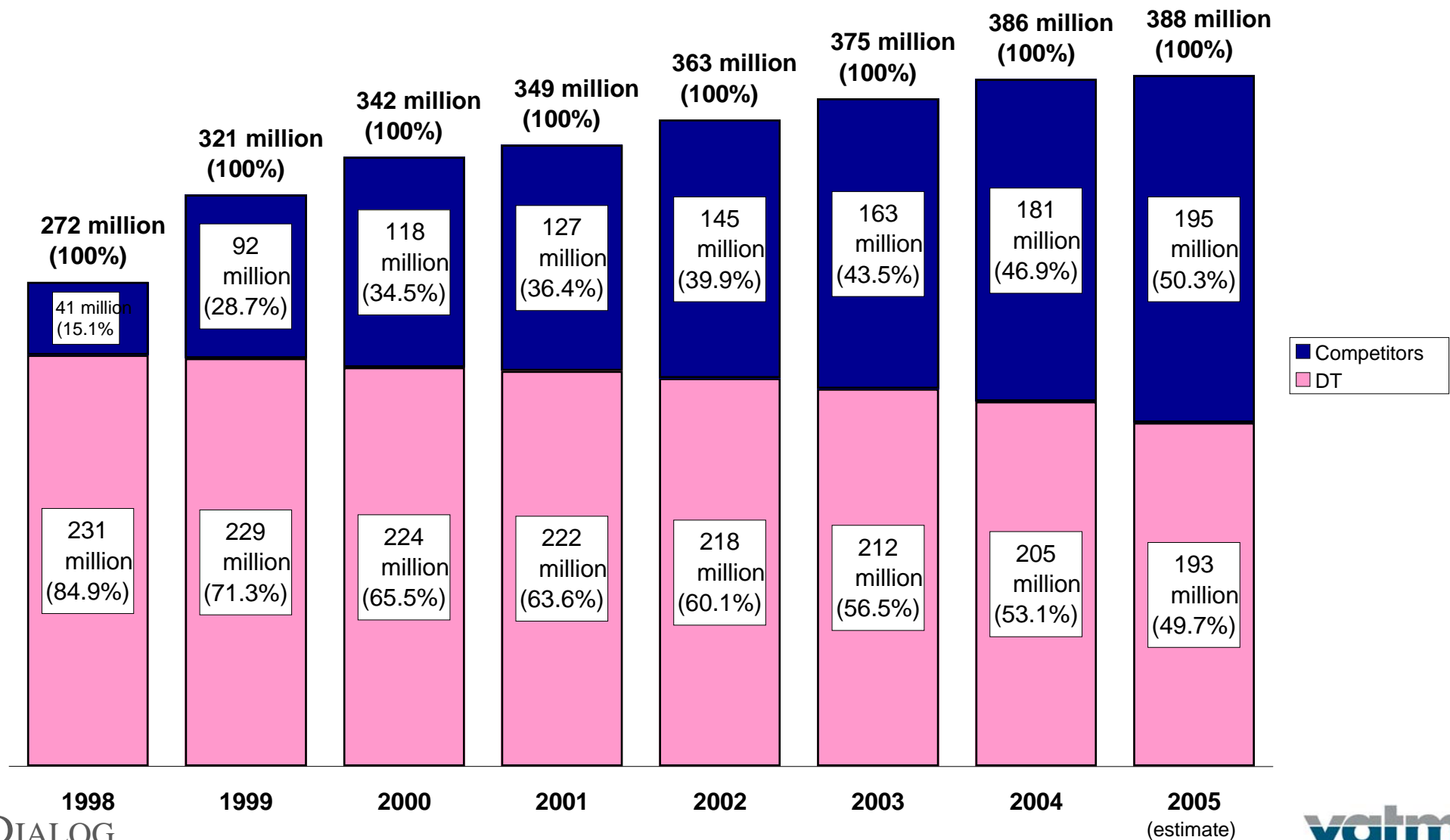


a) Local networks formally opened to local loop operators since 1 January 1998 (de facto when leasing of last mile commenced at the end of 1998), for carriers on 25 April 2003 (call-by-call) and on 9 July 2003 (pre-selection).

Source: DIALOG CONSULT-VATM analyses and forecasts

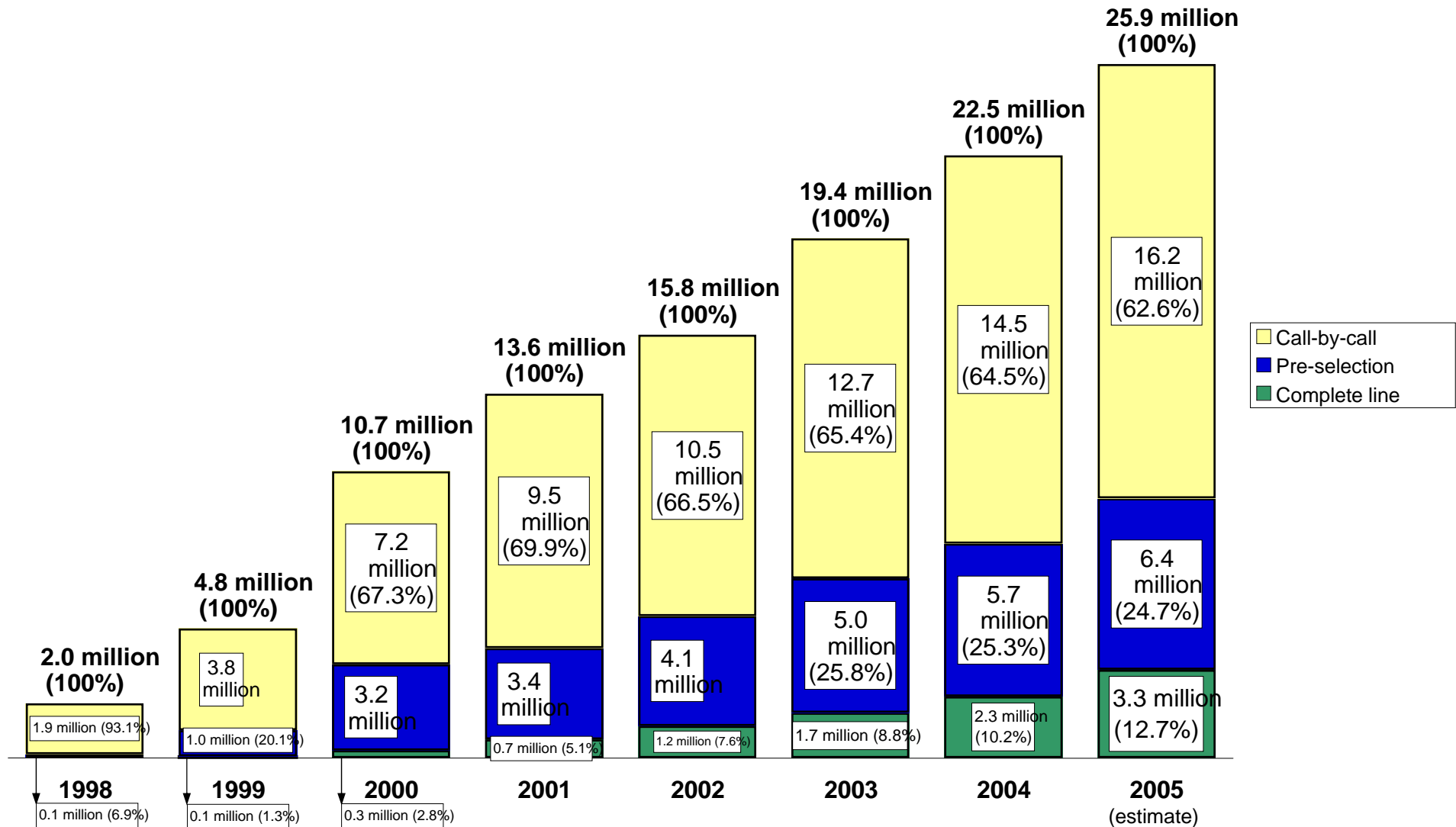
## The competitors have increased their market share of voice connections beyond the local loop by 3.4 percentage points

**Figure 9: Development of the market for fixed line voice services in Germany, in connection minutes per day**  
 (near-region and long-distance calls, calls to German cellular networks and international calls, excluding local, Internet and IN connections)



**Alternative carriers again achieved a substantial increase in absolute customer numbers in 2005, for all types of fixed line access – the strongest relative increase, at 43.5%, was in complete line customers**

**Figure 10: Number of customers of alternative fixed line carriers, by access type**



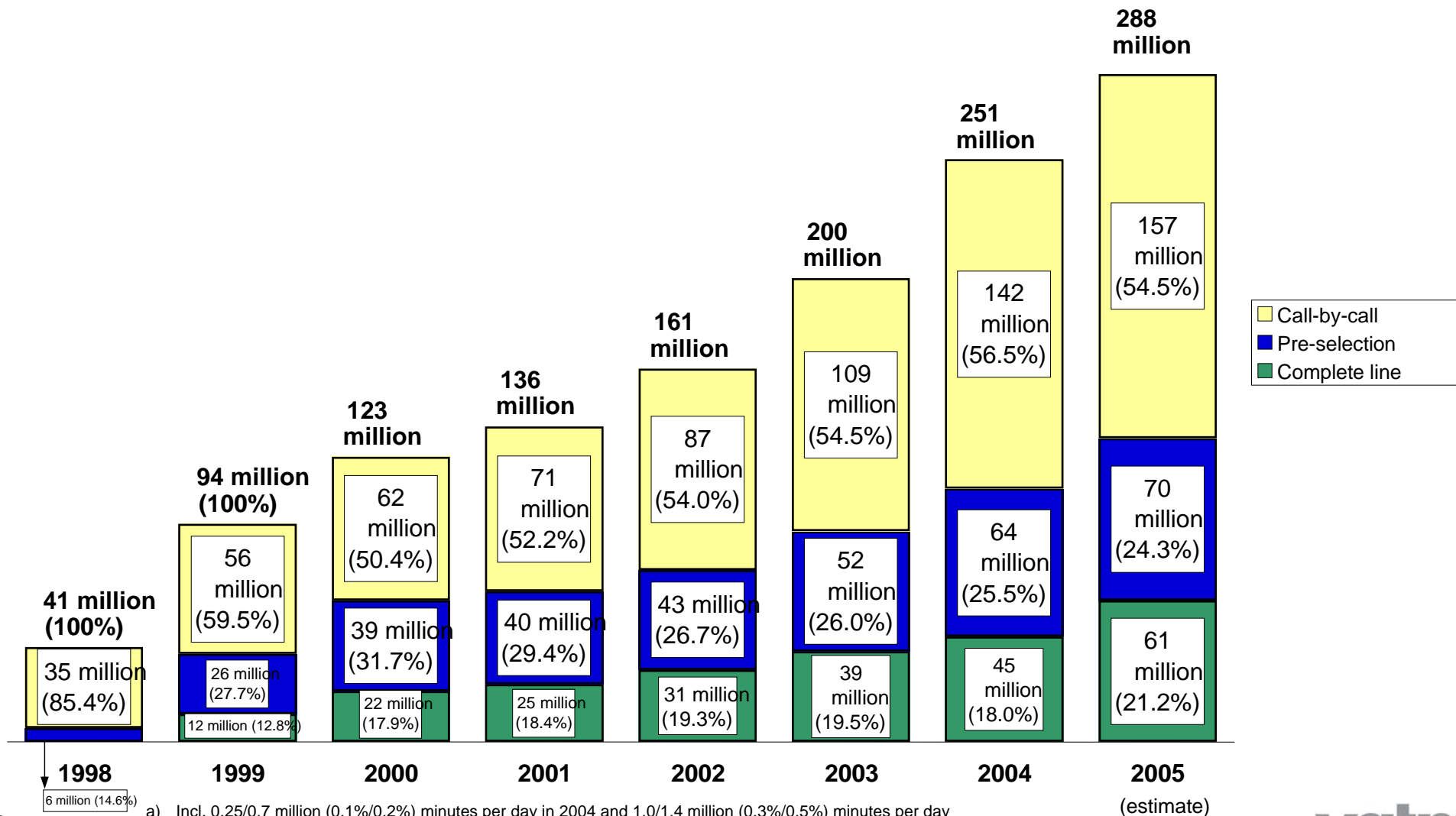
a) Incl. 0.1/0.05 million (0.4%/0.2%) Voice-over-IP-/cable network connections in 2004 and 0.2/0.1 million (0.8%/0.4%) Voice-over-IP-/cable network connections in 2005.

Source: DIALOG CONSULT/VATM analyses and forecasts

**In 2005, again, more than half of all call minutes handled by alternative fixed network carriers were by call-by-call customers (who are weakly tied to specific providers)**

**Figure 11: Daily connection minutes of alternative fixed network carriers, by type of carrier access**

(excluding Internet access, IN services, information services)

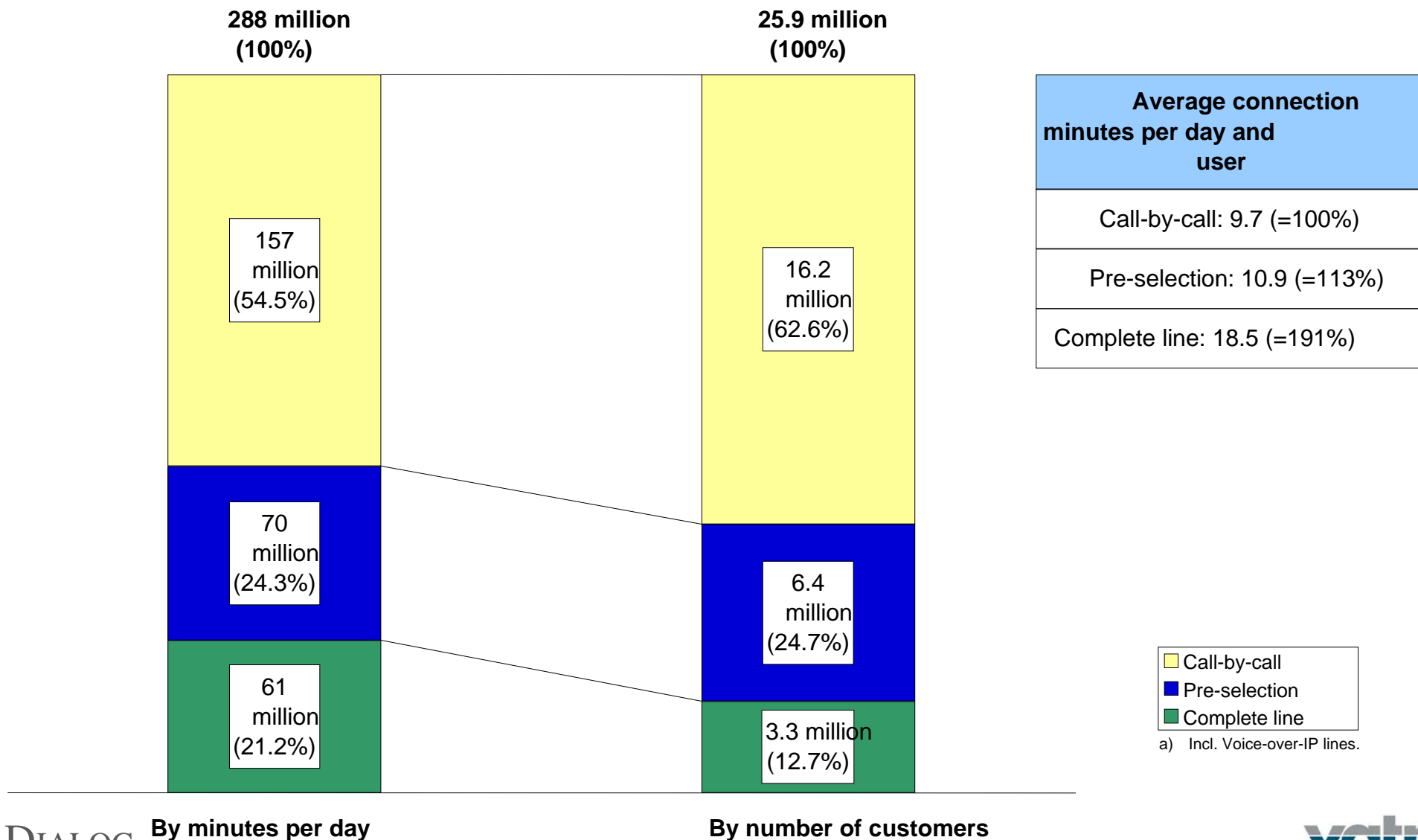


a) Incl. 0.25/0.7 million (0.1%/0.2%) minutes per day in 2004 and 1.0/1.4 million (0.3%/0.5%) minutes per day in 2005 from Voice-over-IP/cable network connections.

Source: DIALOG CONSULT-VATM analyses and forecasts

**In 2005, a typical complete line customer of new competitors consumed 91 percent more connection minutes per day than a call-by-call customer, whose intensity of use was only 13 percent less than that of pre-selection customers**

**Figure 12: Use of services provided by alternative fixed network carriers, end of 2004 (estimate)**

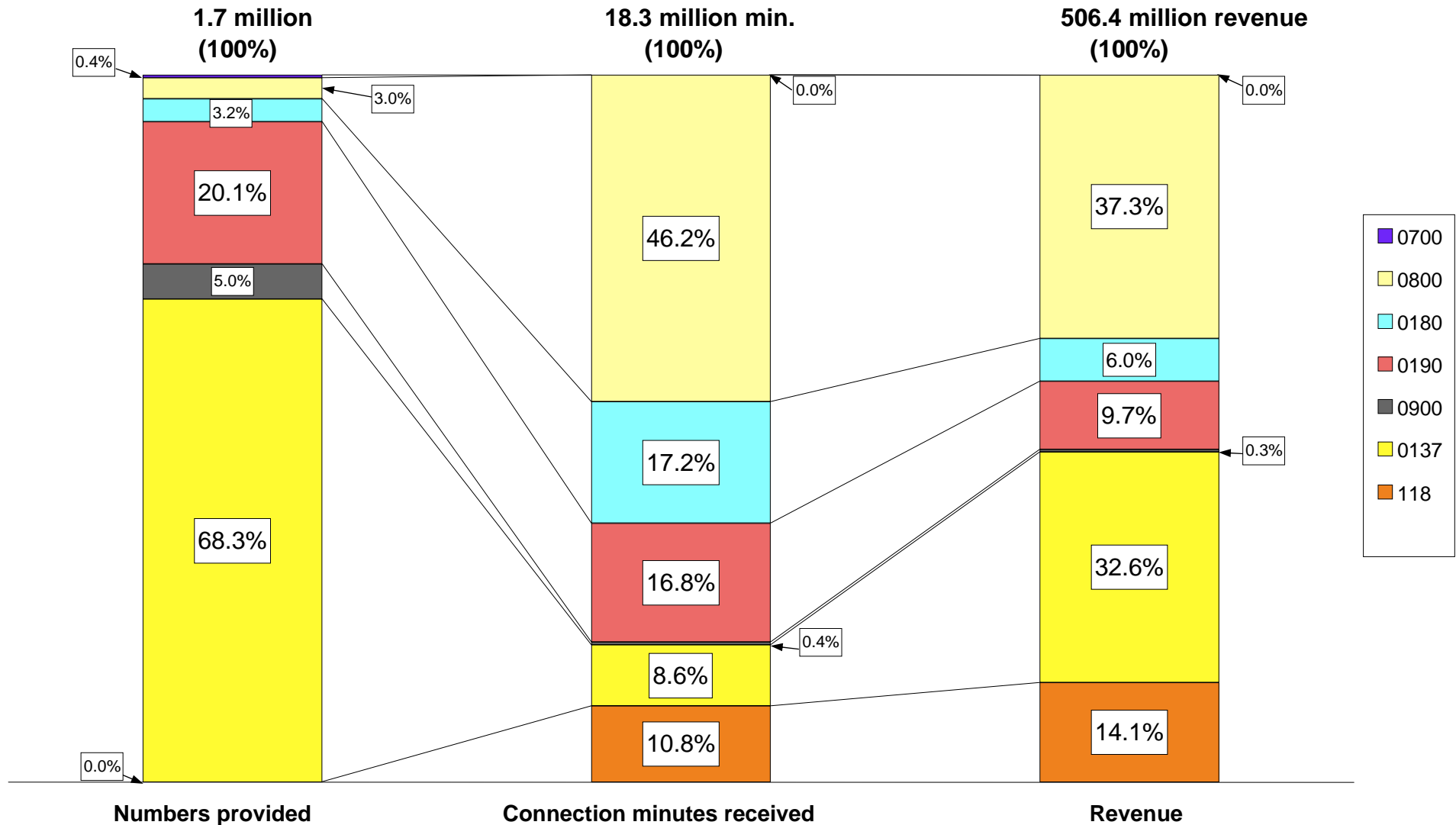




## In the value-added segment, the competitors generated considerable revenue with 0800- and the innovative 0137- numbers

**Figure 13: Development of the market for fixed line services in Germany, June 2005**

(IN<sup>a</sup>- and information numbers connected by the competitors, and number of calls to these numbers)<sup>b</sup>



Source: DIALOG CONSULT-VATM analyses and forecasts

a) These include calls to numbers beginning with 0137, 0180, 0190, 0700, 0800, 0900 or 118. These numbers are always billed through the local exchange carriers and cannot be reached with call-by-call or pre-selection.

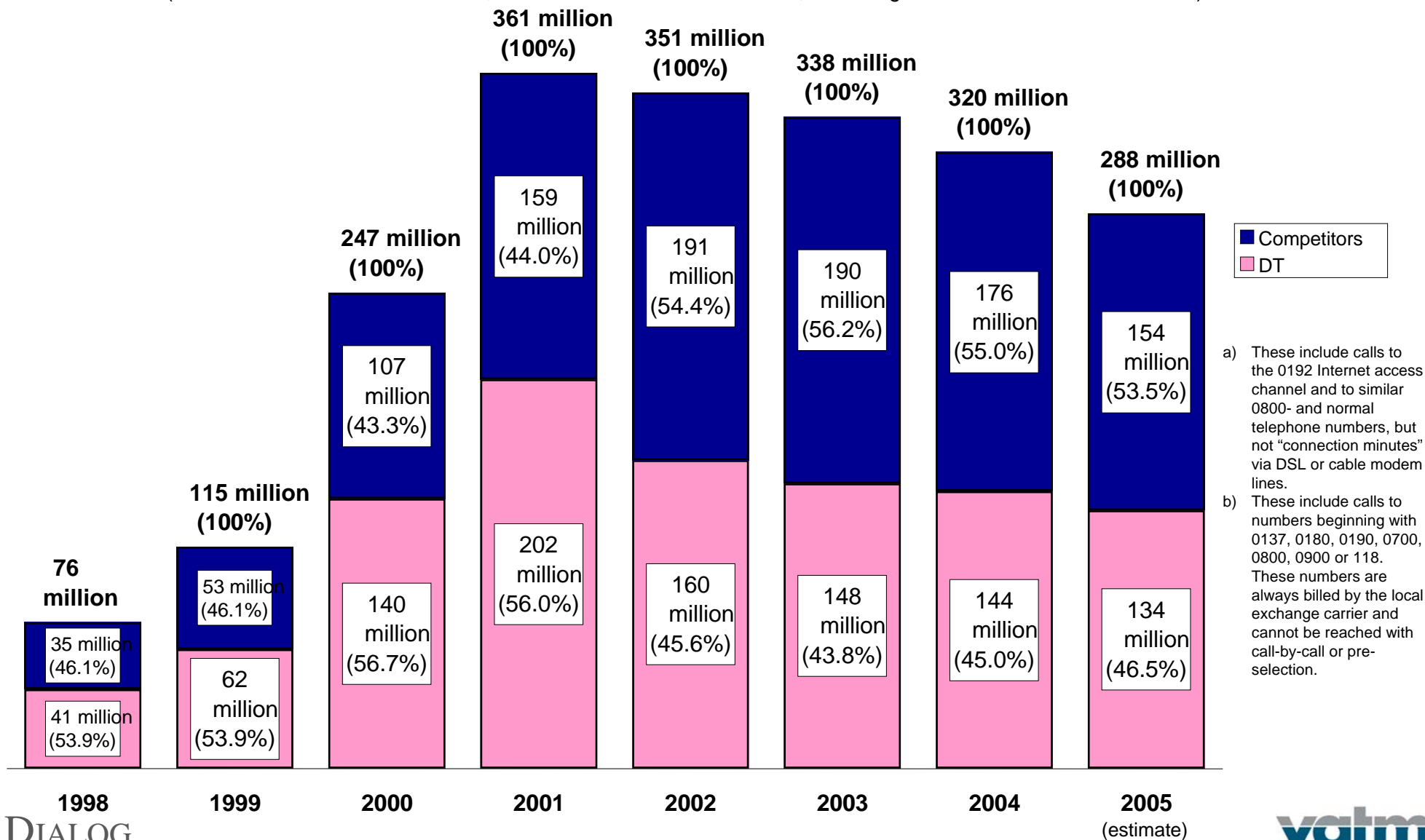
b) These data were collected for the first time in 2004.

### III. The Internet access market

**In 2005, the incumbent is able to increase its market share for the second time in respect of connection minutes to Internet access, IN- and information number, in a context of declining total demand**

**Figure 14: Development of the market for Internet access services in Germany, by connection minutes per day**

(calls to Internet access numbers<sup>a</sup>, to IN<sup>b</sup>- and information numbers, excluding DSL and cable modem access)

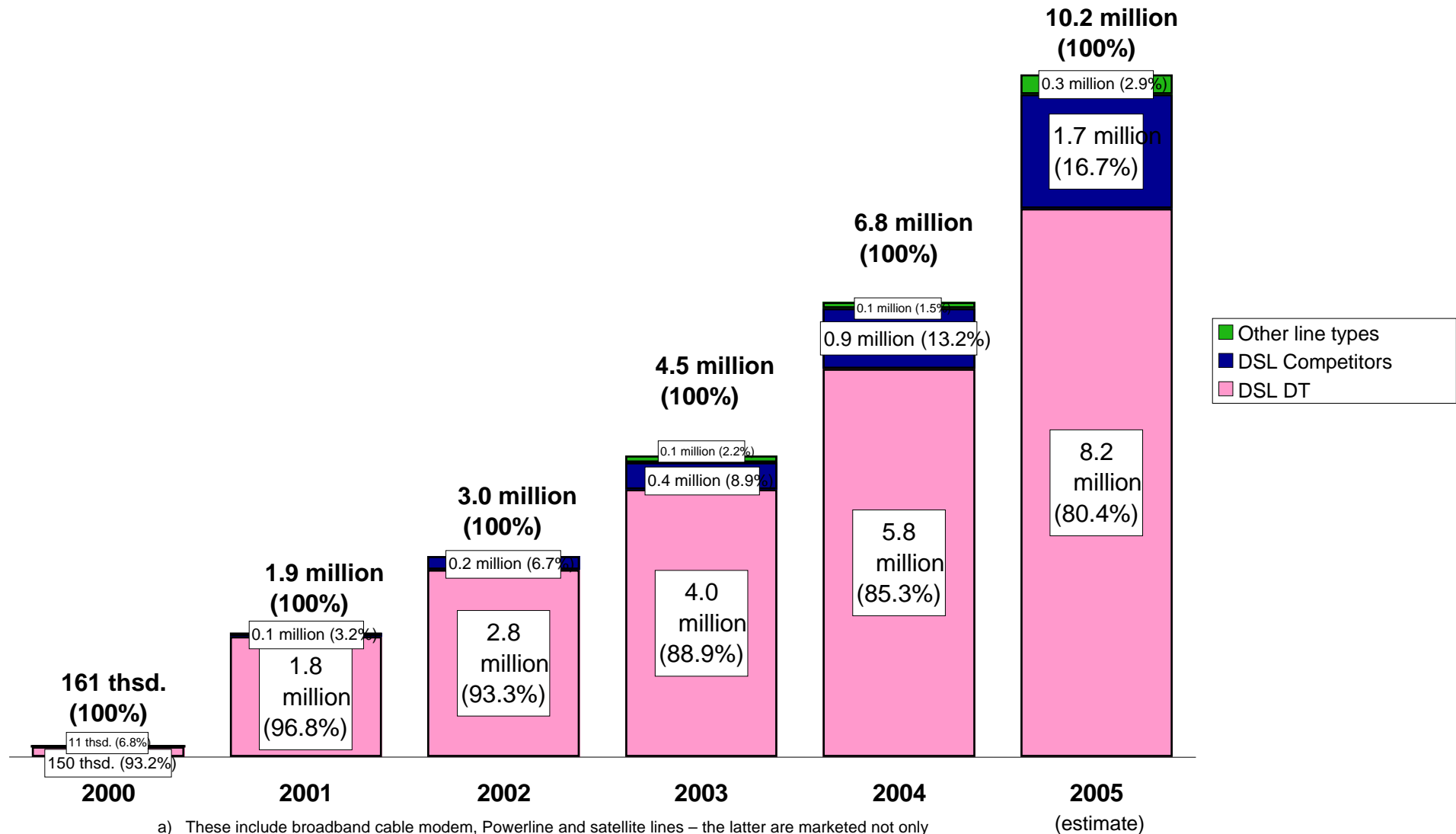


a) These include calls to the 0192 Internet access channel and to similar 0800- and normal telephone numbers, but not "connection minutes" via DSL or cable modem lines.

b) These include calls to numbers beginning with 0137, 0180, 0190, 0700, 0800, 0900 or 118. These numbers are always billed by the local exchange carrier and cannot be reached with call-by-call or pre-selection.

**By the end of 2005, the number of broadband lines in Germany will easily reach 10 million – in the DSL field, Deutsche Telekom is slowing its decline in market share by reselling**

**Figure 15: Directly connected broadband lines in Germany**

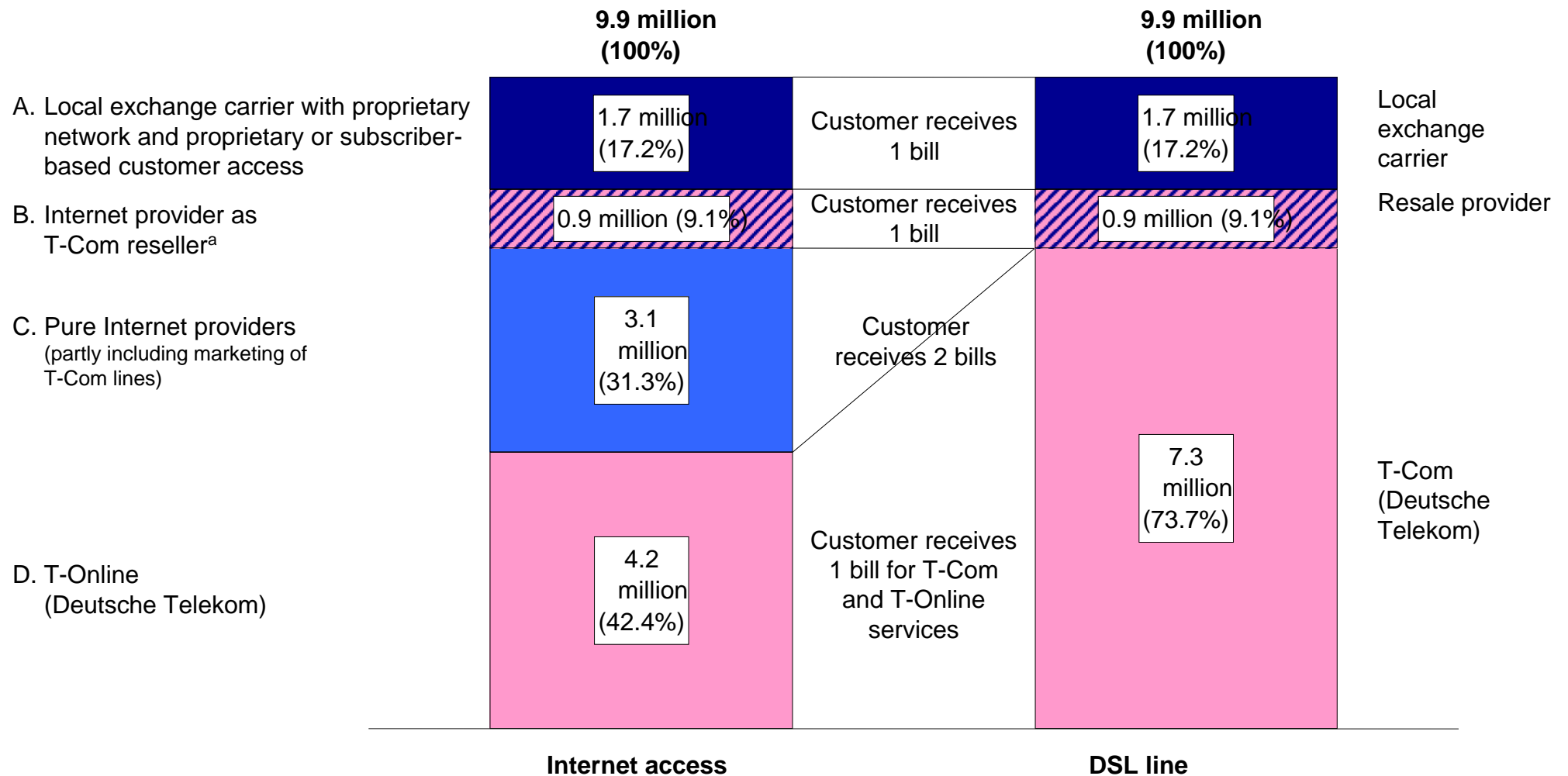


- a) These include broadband cable modem, Powerline and satellite lines – the latter are marketed not only competitors, but in some cases by Deutsche Telekom as well.
- b) Including approx. 0.25 million resold lines in 2004 and 0.9 million resold lines in 2005.

Source: DIALOG CONSULT-VATM analyses and forecasts

**Despite reselling starting in 2004, three quarters of all DSL customers in Germany will still be billed for their broadband connection by Deutsche Telekom at the end of 2005**

**Figure 16: DSL customer distribution in Germany at the end of 2005 (estimate)**



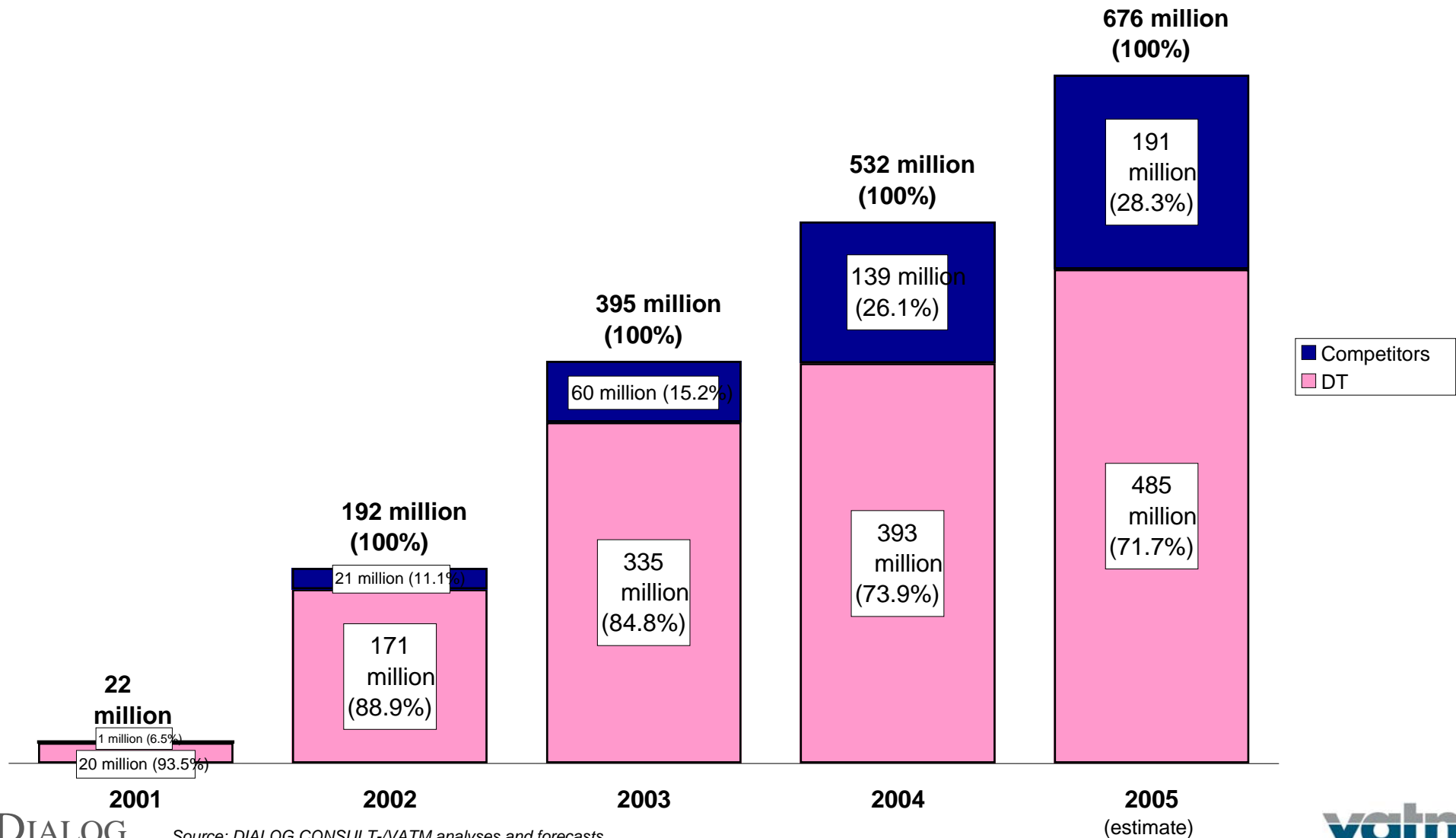
a) See the Annex for definitions of the terms "Internet access" and "DSL line".

b) Resale of T-Com-DSL lines was not possible until 01.07.2004

Source: DIALOG CONSULT-VATM analyses and forecasts

**Driven by growth in DSL lines, the volume of broadband traffic in Germany is increasing in 2005 by more than 25 percent year-on-year**

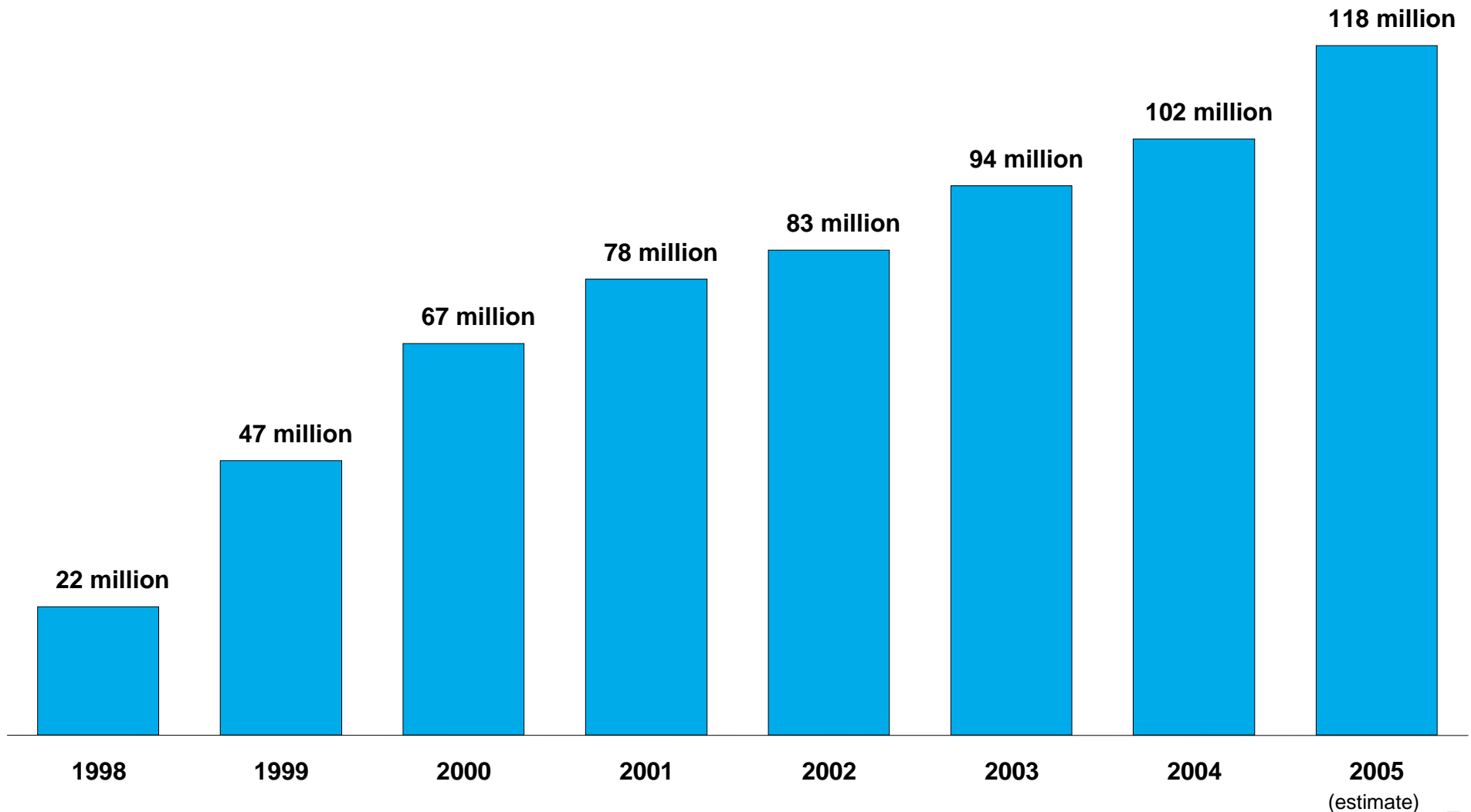
**Figure 17: Growth in volume of broadband Internet traffic in Germany (GB per month)**



## IV. The cellular market

## The latest marketing drives by cellular network operators are resulting in substantial increases in total connection minutes in 2005

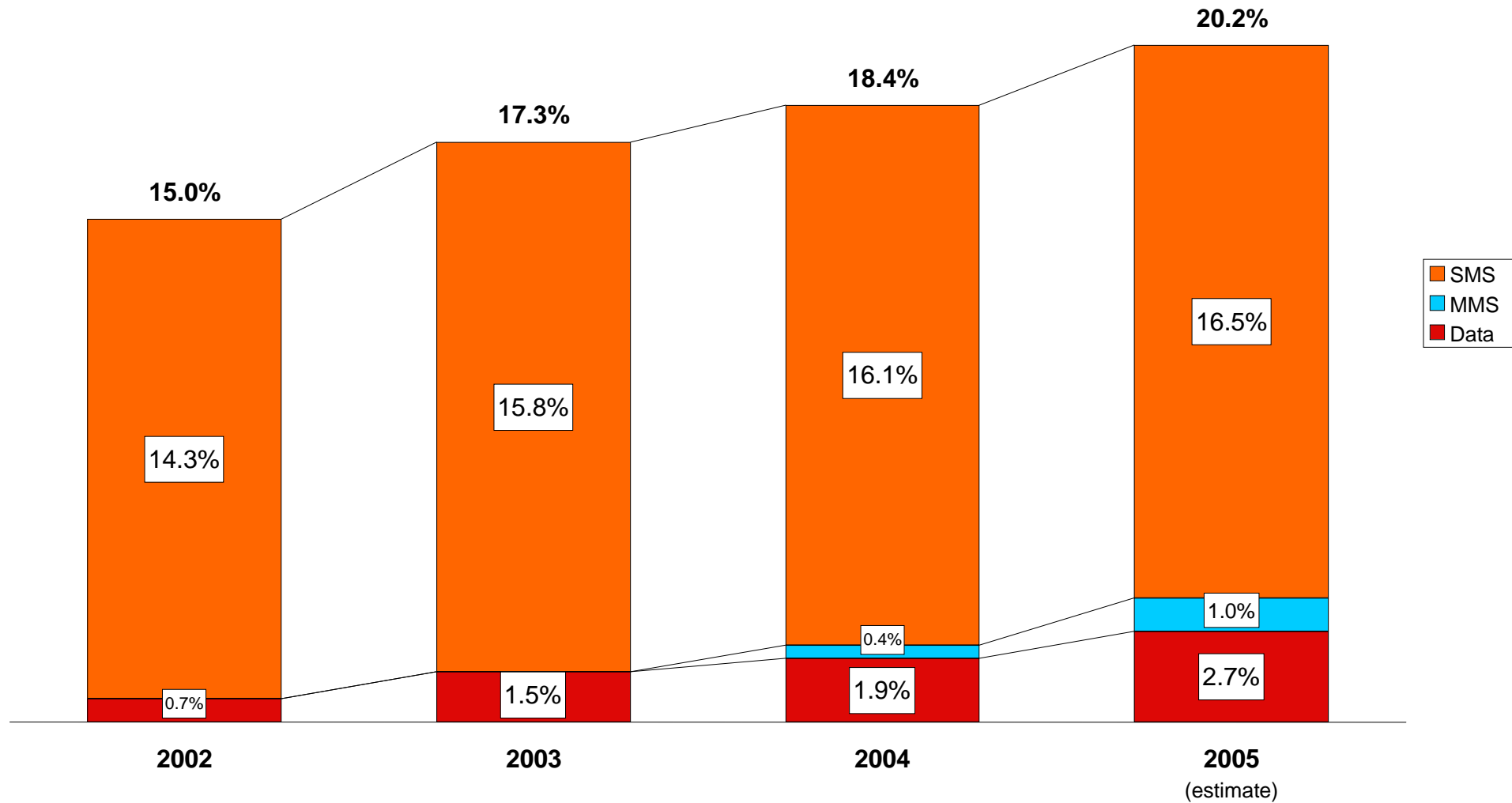
**Figure 18: Development of the overall market for cellular services in Germany, by connection minutes per day**  
(outgoing calls to the same and to other cellular networks, to the German fixed network, to foreign countries and to IN numbers)





**Data services – predominantly driven by MMS and data transfer – are acquiring an ever larger share of service revenue in the cellular market**

**Figure 19: Share of data services in total revenue from cellular services in Germany**



Annex

## When the “DSL line” is provided by Deutsche Telekom (T-Com), Internet access can be provided either by T-Online or by a different Internet Service Provider

Figure A-1: Schematic diagram of Internet access and DSL use

