NEITHER fixed-line nor mobile operators can afford to ignore the increasing number of consumers making calls over the internet, the OECD has warned.

The research from the Organisation for Economic Cooperation and Development, which groups 30 leading industrialised countries, identified new voice over internet protocol (VoIP) as the latest innovation set to overhaul the industry.

VoIP allows consumers to make calls over their broadband internet connections at rates up to 80 per cent lower than on a traditional fixed-line telephone, the OECD report claimed.

"The growing popularity of internet telephony threatens the fixed-line revenues of traditional carriers, especially for international calls," the report said.

Underlining the rapidly-changing nature of the industry, the number of fixed line telephones fell in 2003 "for the first time ever" in OECD countries, the organisation said.

Mobile operators, which have succeeded in many countries in gaining market share at the expense of fixed-line companies, are no longer alone at the forefront of technological innovation.

They, too, must adapt to changing consumer behaviour.

"VoIP presents a challenge to mobile telephones, which in many countries are now more numerous than fixed connections," the OECD said.

Also, a new generation of mobile handsets enabling callers to link up to VoIP providers via the internet risk circumventing mobile networks. This could be particularly useful for travellers, who currently pay high tariffs when using their mobile phones abroad.

The market for VoIP has been pioneered by Skype, one of the first companies in the sector. Skype services are most commonly used in the Netherlands, Poland and Denmark among the OECD countries.

According to data from investment bank Lehman Brothers and comScore Media Metrix, cited by the Financial Times, IP telephony revenues are forecast to nearly double to nearly $US8 billion dollars ($10.6 billion) by 2007.

The latest product from Google, the internet giant known best for its search engine technology, is called Google Talk, an open-platform internet-based instant message and voice service.

"We are going to try to be the first in the world to connect everyone to everyone," said Georges Harik, director of new products at the US company.

The OECD made a number of other predictions for changes in the telecommunications market.

The rise in popularity of the internet for communications and as a source of media content will require "a new approach to industry regulation".

In particular, the requirement from national regulators that incumbent telecoms groups must provide a fixed-line telephone to every citizen, known as 'universal access'.

"Incumbents are getting their revenues eaten away by VoIP and they have more and more difficulties in supporting a universal service," said Dimitri Ypsilanti, head of the OECD's telecom unit.

The repercussions of faster, cheaper and more accessible internet access will also be felt in the television industry, the OECD said.

"The growing popularity of downloading video from the internet will reduce the time people spend watching free-to-air TV, driving down audience share and advertising revenue for broadcasts and making it harder for public-service broadcasters to meet their social policy objectives," the report said.

Agence France-Presse

This report appears on australianIT.com.au.