

calls between these cards are virtually free. The latest examples of such promotions are the Noi Wind Pack and Noi Wind Pack SMS, both launched in 2Q07: the Noi Wind Pack SMS offers 4,000 SMS to Wind numbers for a monthly fee of €2 (US\$2.70); the 6 Noi Wind Pack offers 200 on-net voice minutes for up to 3 SIM cards at a monthly fee of €6 (US\$8.12).

The UK mobile market possesses similar qualities with the Italian one in terms of maturity, growth and penetration trends. Some factors that encourage multiple-SIM ownership in the UK are:

- Online distribution of 'free' SIM cards. This is mainly due to the operators' strategy of bulk-purchasing SIM cards at a low cost rather than merely keeping pace with demand. O2 has capitalized significantly on this strategy and had increased its market lead from just 136,000 subscriptions ahead in December 2004 to 3 million ahead in December 2007.
- High proliferation of MVNOs.
- Relatively large prepaid market: 65% of total subscriptions at the end of 2007 were prepaid.
- Longer postpaid contract periods of up to 24 months, causing some of these subscribers to opt for a secondary prepaid service with the latest market offer.
- SIM-only 'mini contracts' that last just 30 days.
- Operator on-net pricing strategies, which encourage users to purchase secondary SIMs in order to call friends cheaply on the same network.
- Another notable and related trend is that of subscribers themselves redistributing SIM cards.

Room for growth?

Informa Telecoms & Media estimates that actual subscriber (i.e. people) penetration in developed markets is between 70% and 75% and that the total addressable market is in the region of 85%. Countries will start moving closer to this figure as the population ages and people who got their first mobile phone in their 50s or 60s replace the current generation of 70- and 80-year olds who have never been mobile phone users. At the other end of the age spectrum, it is questionable whether mobile operators can push phone ownership down below the age of 10 or 11 – the age at which children start to spend time away from their parents.

However, a far bigger opportunity exists in connecting multiple devices and – in the future – a whole array of electronic gadgetry in and around the home and in business and society generally. The WiMAX community has done a lot of work in this area and the long-term vision for WiMAX is to embed WiMAX chips into a range of consumer electronics devices and home appliances generally. The timetable for realizing this vision depends on the

Hutchison Telecom should not cut its losses now and seek buyers for its various businesses. In 3's two major markets, the UK and Italy, its competitors have narrowed the gap in terms of pricing and 3 has struggled to compete in terms of branding and marketing with its established and profitable rivals. Hutchison Telecom has also failed to persuade potential financial investors that it should be viewed as a mobile media company with a higher valuation than a straightforward mobile operator.

Figure 2.2: Europe, subscriptions and market share for Hutchison 3 operators, 2Q06 and 2Q07

Country	Operator	Subscriptions (000s)		Market share 2Q07 (%)
		2Q06	2Q07	
Austria	Hutchison 3G	359	465	5.02
Denmark	HI3G Denmark	150	226	3.90
Ireland	Hutchison 3G	25	125	2.32
Italy	H3G	6,400	7,420	9.45
Sweden	HI3G	412	580	5.51
UK	Hutchison 3G	3,650	3,875	5.61
Total		10,995	12,691	

Source: Informa Telecoms & Media

Regulatory approaches vary between regions

Telecoms regulators do not have a pre-determined view of how many mobile operators their market can support. Licensing policies are more a function of spectrum availability than of a considered view of the optimum number of operators for a particular country. Furthermore, the shift towards spectrum auctions and allowing successful spectrum winners to use their spectrum for their preferred service (rather than a regulator awarding a licence for a specific service) means that regulators increasingly believe that the market should decide how many operators it should support. This approach is certainly true of North America and Europe where typically there were duopolies at 900MHz and between one and four more licences awarded at 1800MHz. Some countries saw a further one to two new operators emerge following 3G auctions. In the US, operators have rolled out 3G networks within their existing spectrum allocations.

Different approaches tend to prevail in developing markets and in countries where industrial policy is allowed to influence the shape of markets for telecoms services. Governments will attempt to manage competition in these markets and create strong, stable players either controlled – or part-owned – by local companies.

In poorer countries, the biggest single influence on policy is the maximisation of proceeds from licence awards. This can often mean licensing more operators than a market can reasonably be expected to support in the medium-to-long term.

The last mobile monopolies are now expiring – for example Dubai's second operator 'Du' launched commercial service in early 2007 – and most countries have moved, or are moving, to multi-operator markets.

was the first greenfield mobile operator in the world to launch a 3G network and its market positioning was around its 3G capabilities and services.

During 2000 and 2001, 3 built a significant in-house technical team. This team's role was to manage the operator's major network suppliers, Nokia and NEC, which were also learning 'on the job' about how to install a network based on the unproven WCDMA technology. By 2004, the technology had matured and the major vendors had gained in experience. A large in-house technical workforce was no longer necessary. Initially 3 redeployed its in-house team in Ireland where it also had a WCDMA licence but during this whole period it was engaging with potential managed services suppliers. Its own ability to use the UK 'blueprint' in Ireland and to share the same IN, messaging and value-added services platforms across the two operations convinced 3 of the benefits to be gained from outsourcing its network operations.

In 2007, Ericsson was awarded a seven-year contract to manage 3's whole UK network and IT infrastructure, including the development and management of its multimedia services environment. The contract is estimated to be worth over US\$3 billion and involved the transfer of over 1,000 staff from 3 to Ericsson. The fact that Ericsson was not one of its WCDMA network suppliers was significant – 3's management did not want its managed services provider to be biased in any way towards its own equipment. Indeed, 3 did look at a number of non-equipment vendors, such as the larger systems integrators, but none could demonstrate the knowledge or skills base necessary for such a large, complex project.

3's management has been very happy with Ericsson's performance to date and attribute this to the clarity with which KPIs and SLAs were defined and the interpersonal relationship it has established with the Ericsson team. The successful working relationship is largely due to the governance structure that was put into place for the contract, which was based on 3's internal reporting structures and processes.

3 continues to retain strategic control of network development and makes the ultimate decisions regarding capital purchases. However, Ericsson is part of the decision-making team mainly because operability of new equipment would impact on its ability to meet its SLAs.

A number of other activities are also outsourced by 3 including logistics, handset repairs and call centres. However, although some of the 3 companies have begun to adopt services hosting, so far 3 UK has chosen to own and deploy platforms internally. These platforms are all managed by Ericsson.

Outsourced and in-house centralised services hosting

A wide variety of value-added services are appropriate for services hosting; fig. 3.43 identifies the most common or traditional hosted services and those that are emerging as new growth areas.