Market Profile: The year in private water

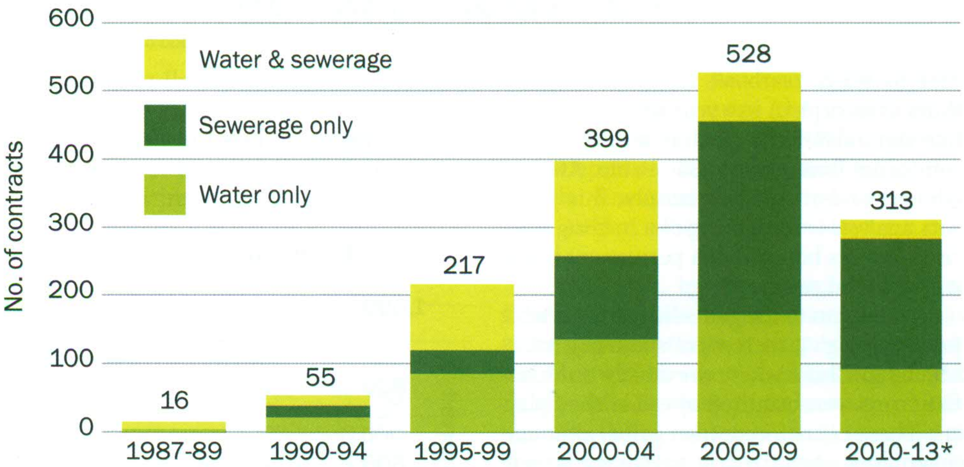
One billion people can't be wrong

David Lloyd Owen presents his fifteenth annual review of PSP in the international water arena. With a seventh of the world's population now served by the private sector, what's next in the market for outsourced services?

The total number of people who receive water or wastewater services from the private sector exceeded a billion for the first time earlier this year (1.049 billion, by our definition).

Looking at the pattern of contract awards, that billionth person was probably either a new urban dweller living in a new housing development in China, who had never before had a household connection, or an inhabitant of a village in India receiving piped water for the first time. It is telling that a seventh of the world's population now receives either water or wastewater services from the private sector, despite the many attempts to oppose or outlaw such services.

Number of new contract awards identified



** To end of October 2013*

PSP goes with the flow

While there is some evidence that the model for private sector participation (PSP) in water has shifted from 'classic' longer-term contracts towards shorter-term contracts (a five-year minimum remains our definition here), it is the emergence of service contracts, and in particular performance-based contracts, which is perhaps of most interest. Veolia's four-year contract to provide operational assistance to a utility serving nine million people in New York is a case in point, while Suez Environnement has been pushing its service model hard in India, securing a trio of "PPP lite" contracts in New Delhi, Bangalore and Pimpri-Chinchwad (*see story p38*).

There is still life in the 'old' type of PSP, though, and aligning my findings with GWI's project trackers unearthed a total of 122 new contracts and acquisitions serving an additional 60.8 million people since November 2012. This includes 53 for the whole of 2012 serving 20.2 million people, and 63 in 2013 serving 39.2 million, along with six older contracts covering a further 1.3 million people.

These older contracts emerged from further study of various Corporate Social Responsibility reports, which – while often weak on numbers – can be a useful source of case studies. Strictly speaking, the 18.8 million people covered under the Chinese acquisitions identified this year were already served by the private sector – the acquisitions merely brought them into the international spotlight for the first time.

China is still the driver...

While China continues to set the pace, with 51 new contracts serving 33.5 million people identified since last November (including 20.4 million for sewage only), this number is not as large a proportion of the global total as seen in some recent years. Most of the new contracts were gained by Beijing Enterprises and Shanghai Industrial's Singapore-listed SIIC unit.

...but India changes gear...

PSP in India has definitely stepped up a notch, with 34 new contracts identified, serving 11.9 million people, 7.4 million of which are for water only. While Veolia Environnement and Suez Environnement continue to establish their presence, it is the emergence of local champions such as SPML Infra, Jindal and VA Tech Wabag that is particularly noteworthy, especially as their contracts tend to be in towns and villages, rather than major cities.

Brazil cements position among the BRICs

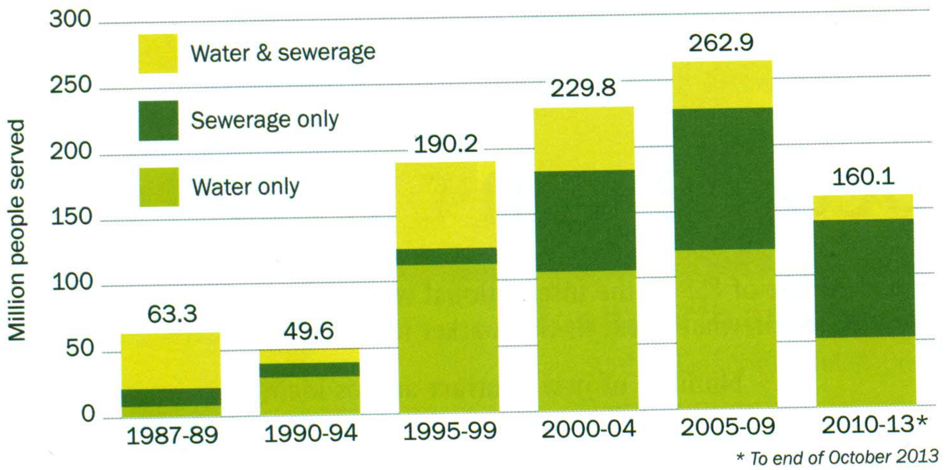
Private sector participation in Brazil continues to advance, with 13 new contracts serving 8.5 million people noted, 6.5 million of which are for sewerage only. International private water operators still seem to be largely shut out of this growing market, however, although they are cropping up more and more in bidding consortia. It can only be a matter of time before a sizeable new water concession in Brazil goes to one of the established global players.

In total, 102 new contracts from the BRIC nations (Brazil, Russia, China and India) were identified this year, covering 53.9 million people, some 88% of the global total of people covered by new contracts. The sheer importance of the BRICs in a global water PSP context means that the expression retains its currency here, despite the mainstream focus having shifted to such other colourful agglomerations as the TIMPs (Turkey, Indonesia, Mexico, Philippines) or the MISTs (Mexico, Indonesia, South Korea, Turkey).

A Post-Mortem Yearbook?

It is ironic that this review, which formerly provided the key data for the Pinsent

Number of people served under new water PSP contracts



Masons Water Yearbook, has become something of an orphan in a year when its former title continues to be cited as a reference by companies from Paris to São Paulo. After 14 editions under the same banner, this year's data analysis is something of a holding exercise, and it is hoped that a permanent home will be found next year.

In addition to the gains listed in the table (*see below, right*), there were six major transactions in China where previously unidentified firms were acquired by established players. These count as contract gains, although untangling when the original contracts were awarded is more of a challenge.

To date, 1,529 contracts have been identified, compared with 1,405 at the same point last year, 1,056 as of November 2010, and just 548 contracts in November 2007.

The contracts database starts in 1987. For markets such as France, the US and the UK, where there were a number of pre-existing contracts and asset-owning companies, these are covered in the 'traditional markets' section later in this review.

Combined water & sewerage projects accounted for 35-45% of all new contract awards in the 1995-99 and 2000-04 periods, compared with just 9-14% during the 2005-09 and 2010-13 timeframes. This reflects a fundamental shift towards fewer combined water and wastewater service contracts, as well as a move towards more specific contracts addressing one particular part of the water cycle.

The 1989 data has been adjusted to take into account the statutory water companies already serving 13.8 million people in England and Wales at the time. With the exception of 1989, when the entire water industry in England and Wales was privatised, it is evident that in population terms, water contracts have reached more people in every five-year period right up to the present decade. Certain models of PSP may fall in and out of favour, but the overall rate of growth has been maintained.

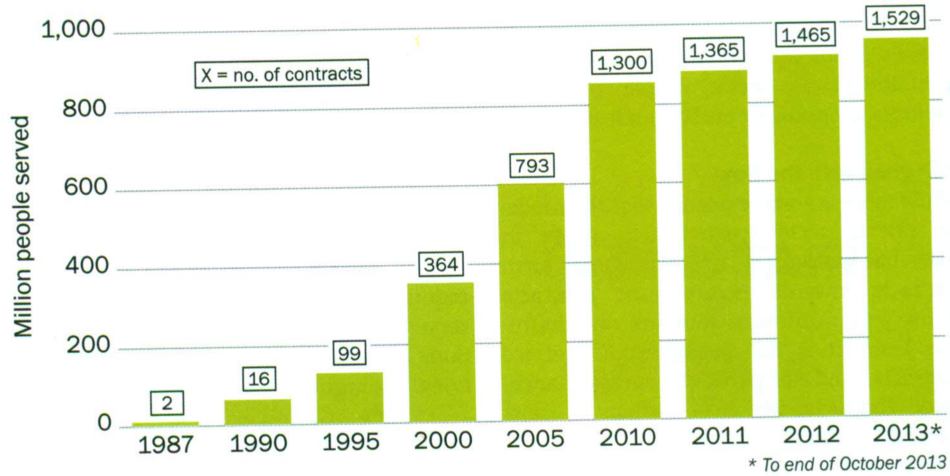
The biggest shift continues to be towards sewage treatment and water reuse contracts. Up until 2000, these were comparatively rare unless they formed part of a combined services package. Since then, sewage-related contracts have become more frequent and, indeed, have dominated overall activity since 2005.

The average number of people served under water-only contracts has consistently fallen since 1987, while there is no clear pattern in the average population served under new sewerage-only contract awards. The average number of people served by newly awarded combined water and sewerage service contracts is also on the rise again, after a dip. Overall, however, it is evident that contract sizes are falling, as the World Bank's original paradigm of major concessions has moved on towards more specialised offerings.

Contract losses

Everybody likes to announce a contract award, but losing a contract usually elicits a more reticent response (except from the

Cumulative total of water PSP contract awards (1987-2013)



Major PSP contract gains, Nov 2012-Oct 2013 (million people)

Country	Contract	Company	Water	Sewage
Brazil	Three contracts	Aguas do Brasil	0.040	1.850
Brazil	São Lourenço-Alto Juquiá	Andrade Gutierrez	1.500	0.000
Brazil	Three contracts	CAB Ambiental	0.395	0.203
Brazil	Itapoá	Aguas do Brasil	0.012	0.012
Brazil	Two contracts	Foz do Brazil	0.000	4.000
Brazil	Serra	Sonel	0.000	0.490
Canada	Greater Sudbury	N-Viro	0.000	0.250
China	Huangshi Hexi	Anneng Group	0.000	0.300
China	Bohai New Area, Hebei	Aqualyng	0.050	0.000
China	Seven contracts	Beijing Ent Water	0.850	1.500
China	Zhangqui	China Everbright	0.000	0.150
China	Nanshan Water Supply	GDI	0.400	0.000
China	Zhejiang, Jiangsu	Golden State	0.000	2.000

Continued on next page

Major PSP contract gains, Nov 2012-Oct 2013 (million people) (contd.)

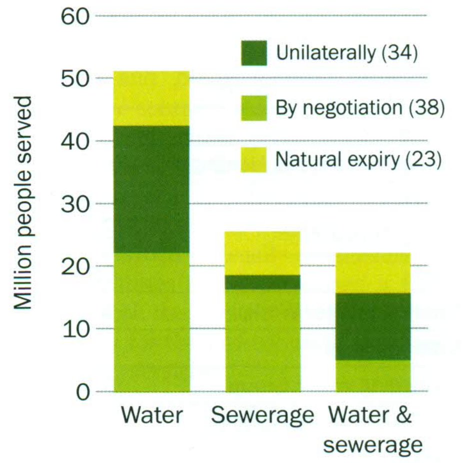
Country	Contract	Company	Water	Sewage
China	Yantai	Goldis	0.000	0.100
China	Two contracts	HanKore	0.000	0.325
China	Huizhou Lvke EP	Huizhou Dayawan Xiayong	0.000	0.025
China	WWTPs, Zhejiang Province	HydroChina Zhongnan	0.000	0.250
China	Ludian & Lvyou Xincheng	Nanjing Zhongdian EP	0.000	0.400
China	Zhongxiang	Origin Water	0.000	0.125
China	Xinxiang, Henan	Ranhill	0.000	0.250
China	11 contracts	SIIC Environment Holdings	0.170	0.000
China	11 contracts	Sound Global	1.200	4.300
China	Tianjin Jinghai Daqiuzhuang	Tianjin Binhai Water	0.200	0.000
China	Qiqihar, Heilongjiang	ZOC Investment	0.000	1.000
India	Kengeri, Bangalore	Acciona Agua	0.000	0.300
India	Hisar Town	Balaji	0.000	0.075
India	Sivagangai, Tamil Nadu	Balaji Industrial	0.000	0.025
India	Narmada Gudhamalani	Gammon	0.350	0.000
India	Salawasa, Jodhpur	Geo Miller	0.000	0.250
India	Five contracts	Jindal	1.130	1.550
India	Jodhpur	Megha Engineering	0.500	0.000
India	Lambaline	SMS Paryavaran	0.050	0.000
India	Eight contracts	SPML	2.420	0.000
India	Five contracts	Suez Environnement	0.800	0.800
India	Four contracts	VA Tech Wabag	1.000	1.250
India	Three contracts	Veolia	1.177	0.000
India	Gujarat Finance Tec City	Voltas (Tata)	0.250	0.250
Ireland	Arklow [1]	AECOM	0.025	0.000
Israel	Akko	Global Env Solutions	0.000	0.050
Japan	Hiroshima	Mitsubishi	1.174	1.174
Japan	Kyoto	Veolia	0.000	0.051
Japan	Matsuyama	Veolia	0.000	0.515
Kuwait	Az-Zour North [1]	GdF Suez	0.500	0.000
Mexico	Ramos Arizipe	Suez Environnement	0.000	0.075
Nepal	Melamchi WS, Kathmandu	VA Tech Wabag	0.450	0.000
Oman	Al Ghubrah	Sumitomo/Malakoff/ Cadagua	0.100	0.000
Philippines	Agoo	Calapan	0.100	0.000
Poland	Konstancin	SAUR	0.000	0.024
Serbia	Zrenjanin	EVN	0.080	0.000
Spain	Aigües Ter Llobregat [2]	Acciona Agua	0.000	0.000
Spain	Jerez de la Frontera, Andalucía	aqualia	0.200	0.200
Spain	Villapérez, Asturias	Dragados	0.000	1.000
Spain	Valdáliga	Valoriza	0.002	0.002
USA	Davis-Woodland [1]	CH2M Hill	0.100	0.000
USA	Adelanto, CA	PERC	0.031	0.000
USA	Rialto, CA	Veolia	0.500	0.500
Total			**15.966**	**25.821**

[1] Subject to completion of construction

[2] Bulk water contract to an area already served by Agbar / Suez Environnement

NB: Where a company has gained several smaller contracts in any one country, these have been grouped together.

Contract endings (1997-2013)



anti-PPP brigade). Just one major contract loss was noted in 2012 (the repurchase of Suez Environnement and RWE's interests in Budapest's water utility), and one in 2013 (Veolia Environnement's impending exit from Berlin), which together affect 6.1 million people.

Both ended by negotiation – no matter how reluctant the private sector partner was to let go – and the next major contract ending may well be when Suez Environnement finally sells its stake in Indonesian concessionaire Palyja, which is likely to result in the management of the assets reverting to the public sector.

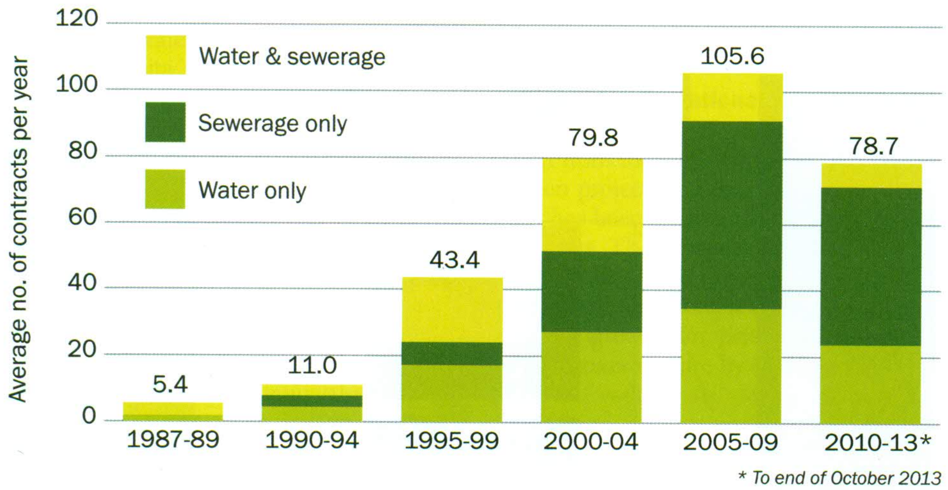
As various contracts reach their natural expiry and are not renewed, the number of contract endings will continue to rise. That is the nature of a business such as the outsourced provision of water and wastewater services. There is also the matter of what may be termed 'zombie contracts', i.e. those whose status is uncertain. It is likely that the number of contracts ending at expiry is an understatement, especially since 2010. This is a topic which will be looked at more exhaustively in the next review, and highlights how a survey such as this always remains a work in progress.

The average contract ending on its natural expiry date endures for 8.4 years, against 5.3 years for those ending by negotiation and 4.6 for those ending unilaterally.

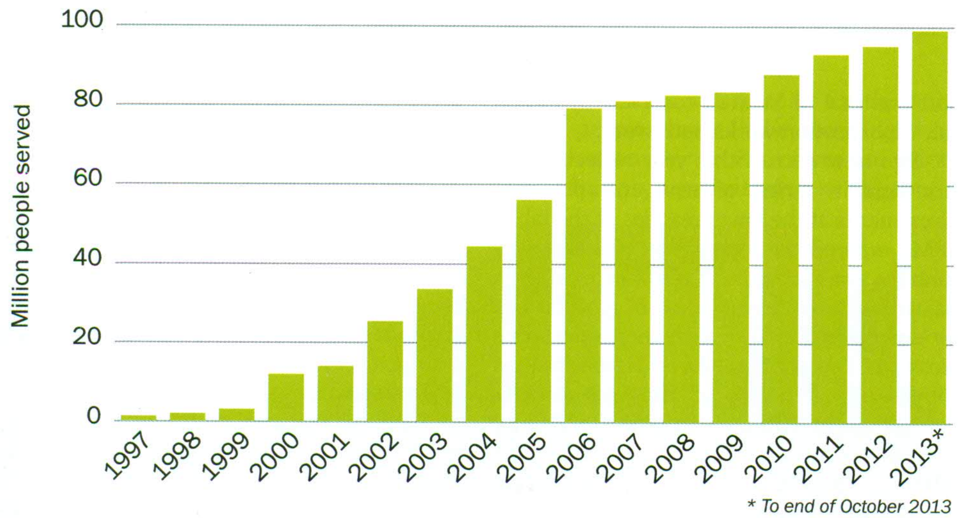
The World Bank notes that 63 out of 814 water and/or wastewater contracts it logged between 1991 and 2012 are either cancelled or in distress. The projects in question represent 30% of the total funds invested in projects falling under our definition of PSP which were supported by the World Bank and regional development banks. This figure compares against 29% in 2008, but is down from 34% in 2009. The numbers compare poorly to sectors such as energy (5%), telecoms (3%) and transport (6%), Leading 50 private water and wastewater service companies in 2013, by population served

Company	Latest water turnover (m)	Total pop. served	% home	Y-O-Y change
Veolia Environnement [2]	€12,078	123,580,000	20%	-7,680,000
Suez Environnement [1] [4]	€7,325	118,473,000	10%	1,023,000
Beijing Enterprises Water	HK$2,655	48,602,000	99%	20,142,000
Sabesp	BRL10,754	28,760,000	100%	300,000
Shanghai Industrial Holdings [7]	HK$1,597	23,620,000	100%	6,120,000
FCC [8]	€866	23,461,000	56%	-6,490,000
Sound Global [6]	RMB2,653	18,400,000	100%	2,800,000
ACEA	€830	17,980,000	65%	0
American Water Works	$2,877	16,200,000	98%	200,000
NWS Holdings [4]	-	16,120,000	100%	0
Chongqing Water Group	RMB3,738	15,000,000	100%	0
SIIC Environment Holdings	RMB805	14,750,000	0%	6,120,000
Copasa	BRL2,786	14,300,000	100%	700,000
RWE	-	14,265,500	64%	-4,000,000
Thames Water	£1,792	13,800,000	100%	0
Severn Trent	£1,705	13,630,000	60%	380,000
Manila Water	PHP13,886	13,300,000	47%	0
Beijing Capital	RMB1,841	12,600,000	100%	0
Tianjin Capital Environmental	RMB1,541	12,350,000	100%	0
ECP / Bouygues	CAF111,000	12,000,000	0%	1,200,000
China Water Affairs	HK$2,250	11,550,000	100%	750,000
SAUR	€1,306	11,528,000	57%	-715,000
Andrade Gutierrez	BRL1,876	11,010,000	100%	1,500,000
Guozhen Environmental Ptn.	-	10,000,000	100%	2,000,000
Golden State Environment	-	9,500,000	100%	2,000,000
Grupo ACS	-	8,700,000	76%	0
China Everbright	HK$839	8,650,000	100%	150,000
Maynilad Water	PHP15,883	8,200,000	100%	1,600,000
HanKore Environment	RMB245	7,975,000	100%	325,000
Gelsenwasser	€266	7,700,800	76%	0
Jiangxi Hongcheng Waterworks	RMB1,042	7,500,000	100%	0
Acciona Agua	€506	7,335,000	64%	435,000
United Utilities	£1,636	7,250,000	100%	0
Aguas Andinas [5]	CLP382,886	7,120,000	100%	180,000
Puncak Niaga	MYR1,599	7,100,000	100%	0
Mitsui	-	7,100,000	0%	0
Anglian Water	£1,163	7,042,000	82%	0
Cheung Kong Infrastructure	£611 [3]	6,542,000	0%	0
Guangdong Investment	HK$4,775	6,200,000	100%	400,000
SPML Infra	INR10,944	6,120,000	100%	New Entry
Rosvodokanal	-	6,100,000	100%	0
Kelda Group	£936	5,993,000	100%	0
Remondis Aqua	-	5,870,000	30%	525,000
Sembcorp	-	5,667,000	7%	-403,000
Hyflux	S$682	5,230,000	17%	0
Gruppo IREN	€438	5,090,000	100%	0
China Water Industry	HK$328	5,000,000	100%	0
GS Engineering	-	5,000,000	0%	0
Lydec [5]	MAD1,459	5,000,000	100%	New Entry
Heilongjiang Interchina Water	RMB352	4,750,000	100%	0

Average number of new water PSP contracts awarded per year



Major water PSP contract losses (cumulative total)



reflecting the water sector's higher risk profile and its political nature, especially when it comes to cost recovery.

It is of interest to note that the according to the World Bank's PPIAF database, 2012 saw the highest number of concession awards in the water sector since 2007, and the highest amount of funding from multilateral development banks ($4 billion) disbursed since 2004.

Notes to "Top 50" table opposite

[1] Includes Suez Environnement's stake in the Jakarta concession, which is currently up for sale

[2] Net of certain divested activities in Portugal (CGEP), Germany (BWB) and Morocco (Amendis/Redal)

[3] Nine months to Dec 2012

[4] Includes the Sino French joint venture between Suez Environnement and NWS Holdings

[5] Also included in Suez Environnement

[6] Singapore and PRC companies combined

[7] Revenues for General Water only, people served includes SIIC

[8] Net of the Proactiva stake divestment (due to close 30 November 2013)

How many people are served by the private sector?

There were six markets with an extensive private sector presence at the start of 1987: the USA (mainly regulated activities, rather than the non-regulated O&M outsourcing contracts which emerged in the 1990s); France (where the private sector share advanced from 72% in 1987 to 80% in 2010); Italy (where 11% of the market was served by the private sector and semi-private companies in 1987); Spain (where the private sector share advanced from 35% in 1987 to nearly 50% in 2012); Germany (Gelsenwasser, RWE, Remondis, Veolia Environnement and E.ON, along with certain local companies, hold about 13% of the market through long-term contracts); and England & Wales (there were 29 statutory water companies serving 13.8 million people in 1989). The figures below are net of major contract awards since 1987 (e.g. English & Welsh water and sewerage companies and the Italian ATOs), and represent our estimate of the current state of play.

To count as private sector participation, contracts have to be of at least five years' duration and be a formally established O&M/lease contract, a concessional contract or an outright asset privatisation. So, for example, the US O&M contracts in the table above are all of at least five years in duration. In this context, private water service companies are defined as legally established commercial entities that have signed a formal contract with the relevant municipal or state authorities for the provision of water and/or wastewater services.

In order to distinguish between such contracts and formal or quasi-legal contracts drawn up with small local entities, these contracts must also cover at least 10,000 people and/or be awarded to one of the recognised players. Contracts for industrial water services or for developing industrial zones are excluded until they meet the population criteria.

A global figure – over a billion served

The uncorrected total does not take into account all population growth within contract areas since the original contract award date, nor is all service extension work included. Neither does it include small, formal PSP projects such as those highlighted by the 2006 World Bank study by Triche et al. (Engaging local private operators in water supply & sanitation services: Water Supply & Sanitation Working Notes, No. 12, December 2006, World Bank, Washington, D.C., USA). To give an example, the 18 member companies of Uganda's Association of Private Water Operators served 880,000 people in 2011.

The contract service extension figure given below reflects Marin's 2009 study by the World Bank (Public-Private Partnerships for Urban Water Utilities: A Review of Experiences in Developing Countries, World Bank, Washington, D.C., USA), which highlighted service gains for 24 million people under 36 contracts. Wherever possible, service extension has already been factored in the data used. For example, service extension gains of 6.8 million have been recorded in this year's survey and are included in the main contract database. A further 10 million served through population gains may be a conservative estimate (*see chart p46*). Population growth and urbanisation data is very hard to qualify. Populations are steady or even falling in parts of Europe, and rising rapidly in many developing economies, with the result that our estimate may still represent a global understatement by some 10-15 million.

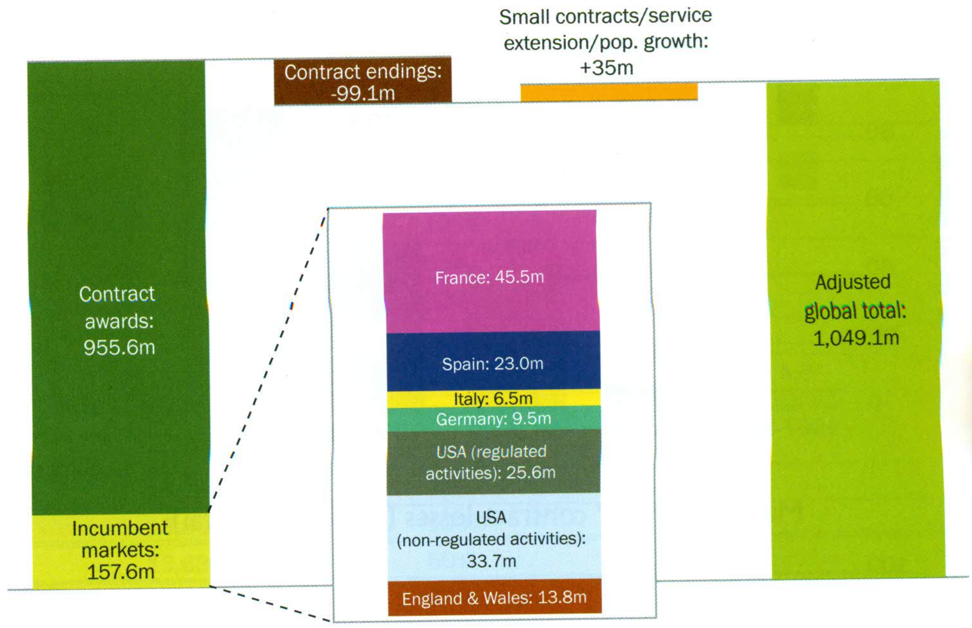
The final figure compares with, for

example, 563 million people identified as being served by the private sector in 2005, and is three times the 335 million identified in 2000. The rise of 115 million over the November 2011 figure both reflects improved data, as well as contract awards in recent years.

Amongst the top 50, a net increase of 29.2 million people served has been noted. There is inevitably some double-counting in these figures (Shanghai Industrial and SIIC, and Suez Environnement and Aguas Andinas, for example), but the buyout of FCC's stake in Proactiva by Veolia Environnement and the re-municipalisation of Berliner Wasserbetriebe also make an impact. The top 50 serve an estimated 788.6 million people, before double-counting is taken into account. It is estimated that some 33 million people in this table are double-counted.

While we have a good handle on most Chinese companies, we are looking forward to extending this coverage even further in next year's data sweep. The granularity of our coverage has continued to advance in recent years, and over the past two years, the two Chinese companies that have stood out have been Beijing Enterprises and Shanghai Industrial. Shanghai Industrial has made substantial progress both through General Water (new contracts are not recorded in this analysis, as they are at the framework stage) and through its majority holding in SIIC Environment (formerly Asia Water Technology). Beijing Enterprises Water, meanwhile, has become by some distance the third-largest private water company worldwide in terms of population served. This has been achieved through a combination of acquisitions (which added 13 million people) and people being served through newly negotiated contracts and contract expansions (6.1 million). Perhaps the most notable acquisition was that of Veolia's contracts in Portugal. Globalisation works both ways.

How many people are served by private water operators?



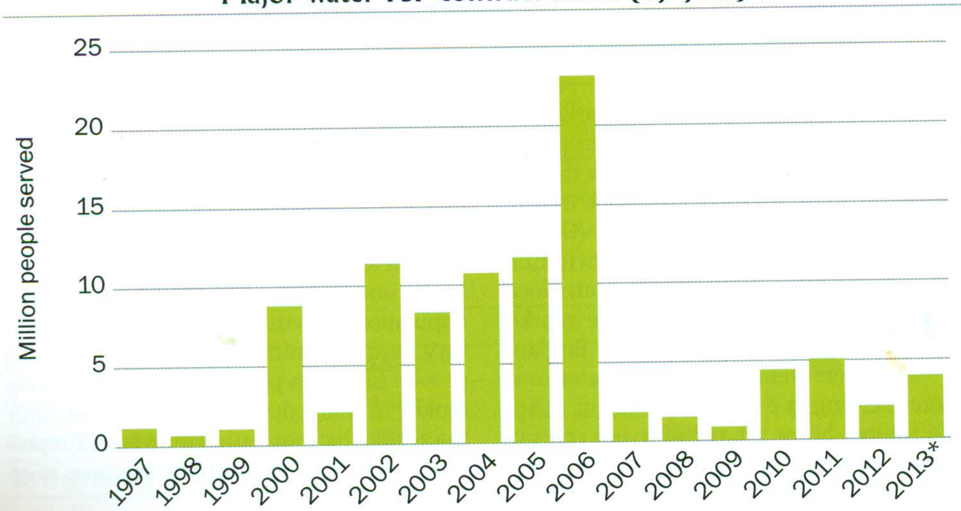
Two new entries this year reflect a quieter year in terms of new entrants, and divestments at the lower reaches of the table. SPML entered the top 50 due to a series of contract awards across India – especially in Rajasthan – while population growth and service extension in Casablanca saw Lydec cross the five million served figure. Salcon slipped out of the top 50 after announcing the sale of its Chinese activities to Beijing Enterprises Water, while Southern Water's relatively pedestrian rate of population growth in its core franchise area meant that it was easily overtaken by more dynamic international players.

M&A machinations

The failed bid to take Severn Trent off the stock exchange earlier this year set the tone for much of the activity which followed in the UK regulated market. Two UK companies changed hands: South Staffordshire (from Alinda to KKR) and East Surrey Holdings (to Sumitomo), while most of the remaining global activity centred around established players re-positioning existing portfolios. All in all, 111 companies have changed hands since 1997, and the level of activity remains relatively high.

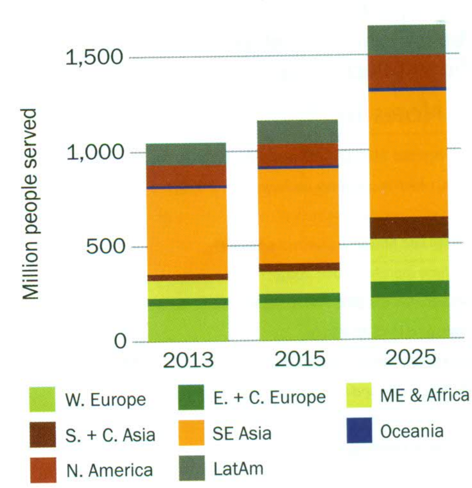
The reshuffling of Veolia Environnement's water portfolio in the light of its ongoing divestment programme gave rise to a significant chunk of the M&A action witnessed so far this year. Veolia agreed to buy out FCC's stake in Proactiva for €150 million (approximately €49 per customer served), and will thus gain full control of a portfolio of contracts across Latin America. The

Major water PSP contract losses (by year)



** To end of October 2013*

Water PSP penetration forecast



group also announced that it would divest its Portuguese activities (CGEP) to Beijing Enterprises Water Group for €95 million (€350 per capita for water and wastewater concessions, or 2.3 times revenues), as well as its Moroccan interests, serving approximately 2.2 million people, for €370 million. The pending sale of its 24.95% stake in Berliner Wasserbetriebe to the City of Berlin for €602 million (€600 per capita for a water and wastewater concession) was also formalised, while Veolia also offloaded its 50% stake in Delfluent Services late last year.

FCC's aqualia has concentrated on its core activities, whilst realising value through the sale of its 50% stake in Proactiva and 49% of SmVaK (Czech Republic), which was sold to Mitsui. At €97 million, this represents €152 per capita for a water and wastewater concession, or 1.8 times revenues.

In the US, smaller players such as Connecticut Water, as well as Canadian hopefuls Corix Infrastructure and Liberty Utilities, continue to build market share by buying up established players, while Aqua America's exit from Florida proved to be rather less simple than the company had at first hoped. Southwest Water, meanwhile, finally completed its protracted exit from the US contract operations business.

IPOs – an International Paucity of Offerings

Apart from the usual trickle of Omani desalination project developers listing in Muscat, 2013 has been rather quiet in terms of share flotations. The prospect of a deal from Brazilian utility Nova Cedae remains a distant possibility, while Russia could yet be a happy hunting ground for private players looking to gain market share by taking equity stakes in local vodokanals. While the prospect of Filipino concessionaire Maynilad coming to the stock market has diminished, its ambitions for expansion have not. In May, it emerged as one of the entities considering the possibility of taking PSE-listed Calapan Ventures private, just two years after its IPO.

Polishing the scrying glass

We have nudged our forecast for the number of people who will be receiving water and/or wastewater services from the private sector in 2015 upwards, due to the continued pace of expansion in both South and South East Asia. 2025, by contrast, has been trimmed slightly, although both remain unchanged in terms of the overall percentage of the forecasted global population they represent (16% and 21%, respectively).

Local PSP for local circumstances

Second-tier companies (i.e. local players without a market listing who chiefly operate in secondary cities and towns) continue to emerge, and to date, we have identified 154 such players in 24 countries. While some of those identified previously have been taken over or have left the sector, others have been promoted to a full entry. The impact of these companies ought to be put into the global context. The 1,318 contracts which relate to companies meriting a full entry in the database serve 909.2 million people, while 46.4 million people are covered by the 211 contracts held by second-tier companies. Second-tier players thus continue their gentle advance, and while these local players account for 14% of the contracts and 5% of the people served, they certainly remain one of the crucial engines of the sector's growth.