



J R C T E C H N I C A L R E P O R T S

Developing an evidence base and related product policy measures for "Taps and Showers"

First questionnaire for stakeholders -
Supporting Information

M. Cordella, E. Garbarino, R. Kaps, O. Wolf

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Section I – Combined Nomenclature with corresponding PRODCOM codes

Table 1: 2009 Combined Nomenclature with corresponding PRODCOM codes¹

<i>Codes</i>	<i>Description</i>
CN 8481 80 11	Mixing valves for sinks, washbasins, bidets, water cisterns, baths and similar fixtures
Prodcom 28.14.12.33	Mixing valves for sinks, wash basins, bidets, water cisterns etc excluding valves for pressure reducing or oleohydraulic/pneumatic power transmissions, check valves, safety/relief valves
CN 8481 80 19	Taps, cocks and valves for sinks, washbasins, bidets, water cisterns, baths and similar fixtures (excl. Mixing valves)
Prodcom 28.14.12.35	Taps, cocks and valves for sinks, wash basins, bidets, water cisterns etc excluding valves for pressure-reducing/oleohydraulic transmissions, check, safety, relief and mixing valves
CN 7324 90 00	Sanitary ware, incl. parts thereof (excl. cans, boxes and similar containers of heading 7310, small wall cabinets for medical supplies or toiletries and other furniture of chapter 94, and fittings, complete sinks and washbasins, of stainless steel, complete baths and fittings)
Prodcom 25.99.11.31	Sanitary ware and parts of sanitary ware of iron or steel
CN 7418 20 00	Sanitary ware and parts thereof, of copper (excl. cooking and heating appliances of heading 7417, and fittings)
Prodcom 25.99.11.35	Sanitary ware and parts thereof of copper
CN 7615 20 00	Sanitary ware and parts thereof, of aluminum (excl. cans, boxes and similar containers of heading 7612, and fittings)
Prodcom 25.99.11.37	Sanitary ware and parts thereof of aluminum
CN 6910 90 00	Ceramic sinks, washbasins, washbasin pedestals, baths, bidets, water closet pans, flushing cisterns, urinals and similar sanitary fixtures (excl. of porcelain or china, soap dishes, sponge holders, tooth-brush holders, towel hooks and toilet paper holders)
Prodcom 23.42.10.50	Ceramic sinks, wash basins, baths... and other sanitary fixtures, n.e.c.
CN 6910 10 00	Ceramic sinks, washbasins, washbasin pedestals, baths, bidets, water closet pans, flushing cisterns, urinals and similar sanitary fixtures of porcelain or china (excl. soap dishes, sponge holders, tooth-brush holders, towel hooks and toilet paper holders)
Prodcom 23.42.10.30	Ceramic sinks, etc and other sanitary fixtures, of porcelain or china
CN 3922 90 00	Bidets, lavatory pans, flushing cisterns and similar sanitary ware, of plastics (excl. baths, shower-baths, sinks, washbasins, lavatory seats and covers)
Prodcom 22.23.12.90	Plastic bidets, lavatory pans, flushing cisterns and similar sanitary ware (excluding baths, showers-baths, sinks and wash-basins, lavatory seats and covers)
CN 3922 10 00	Baths, shower-baths, sinks and washbasins, of plastics
Prodcom 22.23.12.50	Plastic baths, shower-baths, sinks and wash-basins

¹ The 2008 'CN with corresponding PRODCOM codes' list is the same as this for 2009

Table 2: Taps and Showers - 2009 CN with corresponding PRODCOM codes

Codes		Description
CN	8481 80 11	Mixing valves for sinks, washbasins, bidets, water cisterns, baths and similar fixtures
PRODCOM	28.14.12.33	Mixing valves for sinks, wash basins, bidets, water cisterns etc excluding valves for pressure reducing or oleohydraulic/pneumatic power transmissions, check valves, safety/relief valves
CN	8481 80 19	Taps, cocks and valves for sinks, washbasins, bidets, water cisterns, baths and similar fixtures (excl. Mixing valves)
PRODCOM	28.14.12.35	Taps, cocks and valves for sinks, wash basins, bidets, water cisterns etc excluding valves for pressure-reducing/oleohydraulic transmissions, check, safety, relief and mixing valves

Section II – List of standards

Table 3. CEN standards for taps and showers

Standard	Title	Content and scope
EN 200:2008	Sanitary tapware – Single taps and combination taps for water supply systems of type 1 and type 2 – General technical specification	<p>Specifies the field of application for pillar taps, bib taps, single and multi-hole combination taps, for supply systems of type 1 and 2.^{a)}</p> <p>Specifies the dimensional, leak tightness, pressure resistance, hydraulic (flow rate), mechanical strength, endurance and acoustic characteristics of nominal size ½ and ¾ single taps and combination taps.</p> <p>The standard also includes test methods to verify these characteristics.</p>
EN 246:2003	Sanitary tapware – General specifications for flow rate regulators	<p>This standard specifies the dimensional, mechanical, hydraulic and acoustic characteristics with which flow rate regulators should comply.</p> <p>The standard also includes test methods to verify these characteristics.</p>
EN 248:2002	Sanitary tapware – General specification for electrodeposited coatings of Ni-Cr	<p>This standard specifies the condition of the exposed surfaces of tapware, the characteristics (resistance to corrosion, adherence) of the surface coating and the tests for verifying these characteristics.</p> <p>It applies to all sanitary fittings (supply or waste fittings) which have a metallic Ni-Cr coating.</p>
EN 806-1:2000 EN 806-2:2005 EN 806-3:2006	Specifications for installations inside buildings conveying water for human consumption.	<p>EN 806-1 specifies requirements and gives recommendations on the design, installation, alteration, testing, maintenance and operation of potable water installations within buildings. It covers pipes, fittings and connected appliances.</p> <p>En 806-2 gives recommendations, and specifies requirements, on the design of potable water installations within buildings. It applies to new installations, alterations and repairs.</p> <p>EN 806-3 describes a method to calculate the dimensioning of pipes for drinking water installations.</p>
EN 816:1997	Sanitary tapware – Automatic shut-off valves PN 10 ^{b)}	<p>This standard applies to single and mixer taps with automatic shut-off for use with sanitary appliances installed in washrooms.</p> <p>The standard specifies the marking, identification, chemical/hygiene, dimensional, leaktightness, pressure resistance, hydraulic, mechanical endurance, and acoustical characteristics of automatic shut-off tapware.</p> <p>The standard also includes test methods to verify these characteristics</p>
EN 817:2008	Mechanical mixing valves (PN 10 ^{b)}) - General technical specifications	<p>This standard specifies dimensional, leaktightness, pressure resistance, hydraulic performance, mechanical strength, endurance and acoustic characteristics for mechanical mixing valves.</p> <p>The standard applies to PN 10 mechanical mixing valves for use with sanitary appliances installed in rooms used for bodily</p>

		<p>hygiene (cloakrooms, bathrooms, etc.) and in kitchens, i.e. for use with baths, wash basins, bidets, showers and sinks.</p> <p>The standard also includes test methods to verify these characteristics.</p>
EN 1111:1998	Sanitary tapware – Thermostatic mixing valves (PN 10 ^{b)}) – General technical specification	<p>Specifies the dimensional, leaktightness, pressure resistance, hydraulic performance, mechanical strength, endurance and acoustic characteristics with which mechanical mixing valves need to comply.</p> <p>The standard also includes test methods to verify these characteristics.</p>
EN 1112:2008	Shower outlets for sanitary tapware for water supply systems of type 1 and type 2 – General technical specification	<p>Specifies the dimensional, leaktightness, mechanical, hydraulic and acoustic characteristics with which shower outlets shall comply.</p> <p>The standard also includes test methods to verify these characteristics.</p>
EN 1113:2008	Shower hoses for sanitary tapware for water supply systems of type 1 and type 2 – General technical specification	<p>Specifies the dimensional, leaktightness, mechanical, hydraulic and acoustic characteristics with which shower hoses shall comply.</p> <p>The standard also includes test methods to verify these characteristics.</p>
EN 1286:1999	Sanitary tapware – Low pressure mechanical mixing valves - General technical specification	<p>Specifies the dimensional, leaktightness, mechanical, and hydraulic characteristics with which low pressure mechanical mixing valves shall comply.</p> <p>The standard also includes test methods to verify these characteristics</p>
EN 1287:1999	Sanitary tapware – Low pressure thermostatic mixing valves - General technical specifications	<p>Specifies the dimensional, leaktightness, mechanical, and hydraulic characteristics with which low pressure thermostatic mixing valves shall comply.</p> <p>The standard also includes test methods to verify these characteristics.</p>
EN 1717:2000	Protection against pollution of potable water in water installations and general requirements of devices to prevent pollution by backflow	<p>This standard describes how to prevent the pollution of potable water supplies and specifies the general requirements of protection devices to avoid pollution by backflow.</p> <p>The hygiene protection specifications of this standard are applicable to all the standards for systems or appliances connected to the private supply system for water intended for human consumption.</p> <p>This standard specifies the minimum requirements for product standards covering protection units.</p>
prEN 13618:2009	Flexible hose assemblies in drinking water installations – Functional requirements and test methods	<p>This standard specifies the requirements and test methods for materials, dimensions and function for “hose assemblies” designed for use with water with a maximum static pressure of 10 bar and a maximum operating temperature (still to be defined).</p> <p>The standard is applicable to hose assemblies intended to be used in water systems to connect sanitary tapware, heaters and similar appliances.</p>

EN 13904:2003	Low resistance shower outlets for sanitary tapware	This standard has been replaced by EN 1112:2008.
EN 13905:2003	Low resistance shower hoses for sanitary tapware	This standard has been replaced by EN 1113:2008.
EN 15091:2006	Sanitary tapware – Electronic opening and closing sanitary tapware	This standard specifies the requirements for marking, identification, leaktightness, electrical and operational safety and mechanical resistance for sanitary tapware with opening and closing controlled electronically. The tapware has to comply with electrical safety standards (e.g. EN 60355-1, EN 61000-6-1). The standard does not cover flow and temperature regulation devices installed either upstream or downstream of the tapware.

^{a)} In the case of water supply systems of type 1, all the devices using cold water are mains-fed. In the case of type 2 systems, the main supply feeds a cold water storage cistern which offers alternative cold water supply to (some of) the devices using cold water.

^{b)} PN 10 stands for a nominal pressure of 10 bars at 20 °C. Thickness of pipes and dimension of flanges have to be selected according to the nominal pressure.

Section III – List of relevant legislation

Table 4. Mandatory and voluntary legislation and labeling covering taps and showers in EU Member States

Country	Type	Criteria	Comment
EU level	Voluntary	Products ranked in 5 classes based on their water flow (0-6 l/min; 6-8 l/min; 8-10 l/min; 10-13 l/min; >13 l/min)	European Water Label ² , water efficiency label from the European Committee for the Valve Industry (CEIR)
Austria	Voluntary	Maximum flow rate of 6 l/min for bathroom/toilet taps Maximum flow rate of 9 l/min for kitchen taps Maximum flow rate of 12 l/min for bathtub taps and showerheads	Ecolabel for water efficient sanitary tapware
	Voluntary	Maximum flow rate of 12 l/min for taps and showerheads Maximum average flow rate of 8.5 l/min for all taps and showerheads	Ecolabel for tourist accommodation services
	Voluntary	Maximum flow rate of 10 l/min for taps and showerheads Maximum average flow rate of 8 l/min for all taps and showerheads	Ecolabel for campsites
Czech Republic	Voluntary	Maximum flow rate of 9 l/min for taps and showerheads for campsites Maximum flow rate of 8 l/min for taps and showerheads for tourist accommodation services	Ecolabel for tourist accommodation services and campsites
Germany	Voluntary	Classification systems (A to D) based on water flow and temperature control.	WELL ³ , Water Efficiency Label from EUnited Valves
Portugal	Voluntary	Classification system (A++ to E), different criteria for kitchen taps, bathroom taps, and showerheads	ANQIP water efficiency labelling scheme
Italy	Mandatory	Maximum flow rates of 8-12 l/min for taps except for bathtub taps	In some municipalities
Latvia	Voluntary	Maximum flow rate of 8 l/min for taps and 10 l/min for showerheads	Ecolabel for tourist accommodation services
Luxembourg	Voluntary	Maximum flow rate of 10 l/min for taps and 12 l/min for showerheads Taps have to be single-lever taps	Ecolabel for tourist accommodation services
Nordic Countries (Denmark, Sweden, Finland, Iceland, Norway)	Voluntary	Rinsing taps equipped with dead man's handle to switch off when lever is released or sensor control	Nordic Swan for restaurants
	Voluntary	90 % of mixer taps less than 8 l/min 90 % of showerheads less than 10 l/min 90 % of mixer taps should be single-	Nordic Swan for hotels and youth hostels

² <http://www.europeanwaterlabel.eu/>

³ <http://www.well-online.eu/>

		lever taps or sensor-equipped	
Slovakia	Voluntary	Maximum flow rate of 12 l/min for taps and showerheads	Ecolabel for accommodation services Optional (point score criteria), the average maximum flow rate from all taps and showerheads (excl. bathtub) is 8.5 l/min
Spain	Mandatory	Water meters should be available for every single unit of consumption Taps in buildings with access for the public have to be equipped with water saving devices	National building codes
	Mandatory	Water using devices in public buildings have to be equipped with water saving devices	Regional regulations (e.g. Catalonia)
	Mandatory	Taps in public buildings equipped with switch off mechanisms	In some municipalities. In some regions, this also applies to showers
	Mandatory	Maximum flow rates of 10 l/min for taps and showers in new buildings	Madrid
	Mandatory	Maximum flow rates of 8 l/min for taps and 10 l/min for showers in new buildings	San Cristóbal de Segovia
	Voluntary	Maximum flow rate of 8 l/min for taps and 10 l/min for showers	Ecolabel in Catalonia for water using equipment
	Voluntary	Maximum flow rate of 8 l/min for taps and 10 l/min for showers	Ecolabel in Catalonia for tourist accommodation services and campsites
Sweden	Mandatory	Hot tap water should be obtained after 10 seconds with 12 l/min	Swedish building regulations (hygiene sections)
United Kingdom	Voluntary	Total water use limited to 80-120 l/min and person	Code for sustainable homes. Overall water consumption is rated. No criteria for individual WuP exist
	Voluntary	No fixed criteria	Waterwise marque

Table 5. Mandatory and voluntary legislation covering taps and showers in Third Countries

Country	Type	WuP	Criteria	Comment
Australia	Mandatory	Showerheads	Between 7.5 to 9 l/min (3 stars) to > 16 l/min (0 stars & warning)	WELS Australia
		Taps	< 4.5 l/min (6 stars) to > 16 l/min (0 stars & warning)	
		Flow controllers	< 4.5 l/min (6 stars) to > 16 l/min (0 stars & warning)	
Canada	Voluntary	Taps	< 6 l/min for kitchen taps and < 4 l/min for bathroom taps	BuiltGreen
		Showerheads	< 7.5 l/min	
	Mandatory	Taps	< 8.3 l/min for kitchen and lavatory taps in new constructions or renovations	British Columbia Building Codes
China	Voluntary	Faucets	Not known	Water

		Showerheads	Not known	conservation scheme
		Showers	Not known	
Hong Kong	Voluntary	Showerheads	Between < 9 l/min (grade 1) to > 16 l/min (grade 4)	WELS Hong Kong. Based on AS/NZS 3662:2005
Japan	Voluntary	Water-saving tops	70 % of initial water flow rate	Ecolabel Japan
		Aerators	80 % of initial water flow rate	
		Flow-control valves	80 % of initial water flow rate, not below 5-8 l/min	
		Divers taps	When equipped with devices like e.g. volume-controls, or time-controls	
		Showerheads	When equipped with device that allows for temporary switch-off	
New Zealand	Mandatory	Showers	From 7.5 - 9 l/min (3 stars) to > 16 l/min (0 stars)	New Zealand WELS (proposed)
		Taps	From < 4.5 l/min (6 stars) to > 16 l/min (0 stars)	
Singapore	Voluntary	Showerheads	< 5 l/min (excellent) to 7-9 l/min (good)	WELS Singapore. Introduced as a voluntary scheme, now mandatory for showerheads
	Mandatory	Shower taps and mixers	> 9 l/min (zero) to < 5 l/min (excellent)	
		Basin taps and mixers	> 6 l/min (zero) to < 2 l/min (excellent)	
		Sink taps and mixers	> 8 l/min (zero) to < 4 l/min (excellent)	
South Korea	Voluntary	Taps	< 9 l/min for kitchen taps, < 7.5 l/min for sink taps, < 9.5 l/min for other taps	Ecolabel Korea
		Showerheads	< 9.5 l/min	
		Thermostatic valves	< 3.5 W in operate mode	
Switzerland	Voluntary	Showerheads	< 12 l/min	Swiss energy label
		Single-lever mixers	< 9 l/min for sink/washbasin and bidet mixers, < 12 l/min for shower mixers	
		Thermostatic mixers	< 9 l/min for washbasin and < 12 l/min for shower mixers	
		Shut-off valves	Have to be equipped with automatic shut-off device	
		Flow rate regulators	< 9 l/min for washbasin and < 12 l/min for shower	
Taiwan	Voluntary	Taps	< 9 l/min	Ecolabel Taiwan
		Water saving devices for taps	< 9 l/min	
Thailand	Voluntary	Manual taps	< 6 l/min	Ecolabel Thailand
		Automatic taps	< 5 l/min	
		Showerheads	< 5 l/min	
United States	Mandatory	Showerheads	< 9.5 l/min	Energy Policy Act 1992
		Faucets and aerators	< 9.5 l/min	
		Metering faucets	< 1 l per cycle	

	Voluntary	Bathroom taps	< 5.7 l/min at 60 psi	EPA WaterSense scheme
		Showerheads	< 7.6 l/min at 20, 45, and 80 psi	
	Voluntary	Showerhead	< 9.5 l/min	Florida Water Star label; optional (point score criteria)
		Sink taps	< 6.1 l/min or < 3.8 l/min (points depend on flow rate and number of taps meeting the requirements)	
Others/worldwide	Voluntary	Showers	< 9 l/min	Green Key label for hotels
		Taps	< 8 l/min	

Section IV – Available market data

EU PRODUCTION

Table 6. Production, Sold volume in Thousands kilos/Value in Million Euros– 2008

	<i>PRODCOM</i> 28.14.12.33 [⊖]		<i>PRODCOM</i> 28.14.12.35 [⊖]	
	(10 ³ kg)	(M€)	(10 ³ kg)	(M€)
EU-27*	133,042	2,722	218,058	2,400
Austria	:C	:C	:C	:C
Belgium	-	-	:C	:C
Bulgaria	:C	:C	229	2
Cyprus	-	-	-	-
Czech Republic	3,527	27	:C	20
Denmark	1,215	97	-	-
Estonia	-	-	-	-
Finland	3,447	92	:E	5
France	1,154	41	9,576	208
Germany	37,851	968	:C	:C
Greece	-	-	-	-
Hungary	:C	:C	346	4
Ireland	-	-	-	-
Italy	38,668	687	76,421	955
Latvia	-	-	-	-
Lithuania	248	3	557	:E
Luxembourg	-	-	-	-
Malta	-	-	-	-
Poland	3,888	68	:C	31
Portugal	13,144	224	1,339	11
Romania	:C	:C	565	4
Slovakia	-	-	1,025	13
Slovenia	:C	:C	:C	:C
Spain	10,585	160	7,819	57
Sweden	2,514	79	:C	:C
The Netherlands	:E	:C	:E	:C
The United Kingdom	:E	72	:E	101

[⊖] See Table 2.

* Note that the EU 27 total includes estimates and confidential data not published here.

(:C)=Confidential, (:CE)=Confidential Estimated, (:E)=Estimated

All sold volumes are expressed in thousands

Table 7. Average products weight

Product	Average weight (kg)
Kitchen taps	2.2
Bathroom basin taps	1.8
Average for taps	2.0
Shower heads	0.4

Table 8. Calculated Production in Units (thousands of units)

	Taps	Showers
EU-27	164,578	54,859
Austria	:C	:C
Belgium	:C	:C
Bulgaria	107*	36*
Cyprus	-	-
Czech Republic	1,653*	551*
Denmark	569*	190*
Estonia	-	-
Finland	1,616*	539*
France	5,030	1,677
Germany	17,743*	5,914*
Greece	-	-
Hungary	162*	54*
Ireland	-	-
Italy	53,948	17,983
Latvia	-	-
Lithuania	377	126
Luxembourg	-	-
Malta	-	-
Poland	1,823*	608*
Portugal	6,789	2,263
Romania	265*	88*
Slovakia	480*	160*
Slovenia	:C	:C
Spain	8,627	2,876
Sweden	1,179*	393*
The Netherlands	:E	:E
The United Kingdom	:E	:E

* Incomplete data (data available for only one out of the two PRODCOM codes)

(:C)=Confidential, (:CE)=Confidential Estimated, (:E)=Estimated

EU TRADE

Table 9. Total Import/exports thousands kilos/Value in Million Euros– 2008

Country	CN 8481 80 11 [⊖]		CN 8481 80 11 [⊖]		CN 8481 80 19 [⊖]		CN 8481 80 19 [⊖]	
	Imports (10 ³ kg)	Exports (10 ³ kg)	Imports (M€)	Exports (M€)	Imports (10 ³ kg)	Exports (10 ³ kg)	Imports (M€)	Exports (M€)
EU27	139,682.0	127,130.3	1,951.3	2,340.9	76,453.4	44,534.6	820.5	706.6
Austria	4,564.2	3,991.8	74.3	52.8	2,000.2	512.4	30.3	7.3
Belgium	6,757.9	3,270.1	109.4	35.4	2,536.6	622.7	33.3	7.3
Bulgaria	1,160.5	8,218.1	10.8	110.6	599.9	10.5	4.2	0.1
Cyprus	544.9	5.1	8.1	0.1	159.7	0.5	1.7	0.0
Czech Republic	2,570.0	2,732.6	36.1	17.6	943.7	653.2	13.2	7.9
Denmark	2,660.5	2,853.6	43.1	75.0	972.0	954.4	19.4	29.4
Estonia	511.1	112.8	7.6	2.3	238.5	23.2	1.4	0.9
Finland	1,328.4	1,853.1	27.2	47.1	220.6	91.6	4.8	4.4
France	21,285.9	2,714.5	351.3	55.4	5,861.5	2,043.3	57.4	68.0
Germany	38,292.3	38,271.2	500.8	924.8	9,806.7	9,401.3	108.6	198.0
Greece	4,476.0	515.8	45.1	5.6	2,746.1	213.5	25.7	1.4
Hungary	1,652.9	758.3	20.5	10.6	723.7	94.5	7.0	1.8
Ireland	1,088.3	24.9	12.2	0.4	2,063.6	170.4	15.7	1.3
Italy	10,719.3	31,734.8	137.4	543.1	9,020.5	17,607.7	91.2	238.5
Latvia	476.6	18.5	6.8	0.3	113.0	21.8	1.3	0.3
Lithuania	1,461.1	740.7	15.6	7.1	529.0	668.9	4.1	15.8
Luxemburg	264.3	10.3	9.4	0.5	161.7	13.3	3.7	0.3
Malta	226.9	0.0	2.6	0.0	150.6	85.5	1.2	0.5
Poland	7,783.0	2,763.5	82.4	39.0	1,989.8	632.0	22.5	7.9
Portugal	2,022.8	13,022.6	26.8	196.4	1,071.4	2,133.5	11.7	22.8
Romania	3,508.4	5.0	18.0	0.1	1,766.3	149.3	15.5	1.1
Slovakia	885.5	128.1	13.8	2.0	1,064.3	56.1	9.1	0.7
Slovenia	1,067.2	2,496.2	11.9	30.7	585.1	1,698.2	5.3	16.8
Spain	6,509.8	5,508.8	114.2	85.7	7,855.6	3,893.7	86.2	39.0
Sweden	2,035.6	2,983.5	28.4	57.9	2,212.2	27.7	15.1	1.1
The Netherlands	5,315.2	629.5	105.1	7.3	2,909.9	241.2	21.7	6.4
United Kingdom	10,513.4	1,766.9	132.4	33.2	18,151.2	2,514.2	209.2	27.7

[⊖] See Table 2.

Mixing valves for sinks, washbasins, bidets, water cisterns, baths and similar fixtures (CN 8481 8011):

- Italy was the largest **producer** followed by the UK and Poland. Looking at the value of the production, Italy was again leading but followed by Germany.
- The largest **importers** were Germany, France, Italy and the UK, and it was the same countries that had the largest imports in term of monetary value.
- The largest **exporters** were Germany, Italy, Portugal and Bulgaria. Again the same countries had the largest exports in monetary value.

Intra EU27 Imports

Intra EU imports in kg represented nearly 60% of all imports within the EU27. Germany was the largest importer of goods from within the EU27 representing 25% of all intra Europe imports, followed by France (21%), Italy (7%), Spain and the Netherlands (both 5%), in kg.

- 42% of Germany's imports were from Portugal and 27% from Italy (kg)
- 39% of France's imports were from Germany and Italy (both 39%) and Spain (8%) (kg)
- 70% of Italy's imports were from Germany (kg)

In terms of value (euro), the intra Europe imports within EU27 represented 73.5% of the total value of all the EU imports. France and Germany intra EU imports both represented 21% of all intra Europe imports (and 18% and 26%, respectively, of all imports), followed by the Italy, the Netherlands and Spain (all approximately 6.5%).

- Germany's imports were mainly from Portugal (43%) and Italy (26%)
- France's imports came mainly from Italy 41% and Germany (40%)

Intra EU27 Exports

Intra Europe exports represented 70% of all exports in kg. Further analysis of the intra Europe export data indicated that Germany and Italy were the most important exporters representing 27% of the quantity (kg) of all intra EU exports, followed by Portugal with 14%, and Bulgaria with nearly 7%.

- Germany exported to almost all MS and mainly to France (20% of all German exports), 13% to Italy as well as the Netherlands, 9% to Austria, and 7% to both Spain and the UK
- Italy exported mainly to France (29%), Germany (17%), the UK (15%) and to Spain (7%)
- Portugal mainly exported to Germany (70%) and to Spain (24%)

In terms of value (euro), the intra Europe exports represented 68% of the total value of all the EU exports. Germany exports represented 35% of intra EU27 exports (and nearly 40% of all exports), followed by Italy (26%) and Portugal (12% of the intra Europe export value).

- Germany exported mainly to France – 18% of its overall intra Europe export; followed by the Netherlands with 16%
- Italy exported mainly to France (32%), Germany and the UK (both 16%)
- Portugal exported mainly to Germany (72%)

Extra EU27 Imports

- The largest imports (in weight) to Europe came from China, representing 80% of all extra Europe imports, but just 33% of all European imports (intra and extra). In value terms import from China represented 68% of the extra Europe imports, but just 18% of all European imports.
- Import from China represented more than 50% of all imports for some MS such as:
 - Romania (70%) of all imports
 - Poland (66%)
 - Lithuania (67%)
 - Bulgaria (61%)
 - the UK (55%)

Extra EU27 Exports

- Europe main export destination was Russia which represented 22% of all extra Europe exports (expressed in weight), but just 7% of all exports.
- The following Member States exported to Russia:
 - Hungary – 68% of all export to Russia came from Hungary (in kg) and this represented 70% of Hungarian export value (in euro)
 - Lithuania – 62% of its extra EU27 exports were to Russia, which represented 58% of the export value (in euro)
 - Latvia - 58% of its extra EU27 exports in kg were to Russia, representing 58% of the export value (in euro)

For taps, cocks and valves for sinks, washbasins, bidets, water cisterns, baths and similar fixtures (excl. mixing valves) (CN 8481 8019)

- Italy is the largest **producer** followed by Germany and Portugal. However, looking at the value of the production it appears that Germany is the largest producer, followed by Italy.
- The largest **importer** was the UK, followed by (in order) Germany, Italy and Spain. Again the same countries had the largest monetary value.
- The largest **exporters** were topped by Italy, followed (in order) by Germany, Spain and the UK. In terms of monetary value, the export were topped by Italy, but followed by Germany, France and Spain.

Intra EU27 Imports

Intra EU imports in kg represented 50% of all imports within the EU27. The UK was the largest importer of goods from within the EU 27 representing 16% of all intra Europe imports, followed by Germany with 13%, Spain (10%) and France (9%).

- 66% of the UK's imports were from Italy, and 16% were from Germany
- 46% of Germany's intra Europe imports came from Italy, 12% from the Netherlands, and 9% from Portugal
- 76% of Spain's intra Europe imports came from Portugal, and 8% from Italy

- 46% of France's intra Europe imports came from Italy

In terms of value (euro), the intra Europe imports within EU27 represented 61% of the total value of all the EU imports. The UK intra EU imports represented 19% of all intra EU imports, followed by Germany (12%), Spain (11%) and Italy (7%).

- UK's imports were mainly from Italy (59%)
- German's imports came mainly from Italy, representing 39% of the overall value of intra Europe imports
- Spain's imports came from Portugal (68%)
- Italian intra Europe imports were mainly from Germany (77%)

Intra EU27 Exports

Intra Europe exports represented 50% of all exports (in kg). Further analysis of the intra Europe export data indicated that Italy was the biggest intra EU27 exporter representing 29% of the quantity (kg) of all intra EU exports, followed by Germany with 27%, the UK and Spain – both with 7%.

The MS that exported the most within the EU 27 were:

- Italy with 37% of its overall exports being to other MS. Italy mainly exported to Germany representing 31% of its intra EU exports followed by France (22%) and Greece (15%). Again Italy also exports to almost every MS.
- Germany, where 64% of all exports were to other MS. Germany mainly exported to Austria (representing 17% of Germany's intra EU exports), followed by the Netherlands (13%). It can be noted that Germany exports to almost all MS.

Looking at the value (in Euro) of intra EU exports, they represented 54% of all exports for the EU27.

- Germany intra EU export represented 35% of the total value of intra EU exports. It mainly exported to the Netherlands (14%), Austria (13%) and Belgium 12%.
- Italy was the second largest intra EU exporter, representing 25% in value (euro) of all intra EU exports. Italy exported mainly to Germany (23%), France (22%) and the UK (15%).

Extra EU27 Imports

- The largest imports to Europe came from China – 88% of all extra Europe imports originated from there; however it constituted just 44% of all European imports (intra and extra). In terms of value (euro), the imports from China represented 75% of all imports value (extra EU27), but just 30% of the overall European imports value.
- Imports from China (in weight) represented more than 50% of all imports for some MS such as:
 - Italy – 80%
 - Malta – 64%
 - the UK – 54%
- The second largest imports to Europe came from Taiwan (representing just 2% of all European imports (both – in weight and value terms).

Extra EU27 Exports

- Europe main export destination were the Unites States which represented 15% of extra Europe export expressed in weight, but just 7% of the overall exports; in term of value (euro) the US represented 8% of all export.
- Saudi Arabia was the second main export destination with 7% (kg) of all export from Europe, representing just 5% of the value (euro) of all EU exports.

IMPORTS AND EXPORTS IN PRODUCT UNITS

Table 10. Calculated Imports of Taps and Showers (thousands of units)

	<i>Taps</i>	<i>Showers</i>
EU27	101,313.5	33,771.2
Austria	3,077.1	1,025.7
Belgium	4,356.8	1,452.3
Bulgaria	825.2	275.1
Cyprus	330.3	110.1
Czech Republic	1,647.0	549.0
Denmark	1,702.7	567.6
Estonia	351.4	117.1
Finland	726.1	242.0
France	12,725.3	4,241.8
Germany	22,546.4	7,515.5
Greece	3,385.4	1,128.5
Hungary	1,114.0	371.3
Ireland	1,477.5	492.5
Italy	9,253.0	3,084.3
Latvia	276.4	92.1
Lithuania	932.9	311.0
Luxemburg	199.7	66.6
Malta	177.0	59.0
Poland	4,581.0	1,527.0
Portugal	1,450.4	483.5
Romania	2,472.5	824.2
Slovakia	914.0	304.7
Slovenia	774.5	258.2
Spain	6,733.8	2,244.6
Sweden	1,991.2	663.7
The Netherlands	3,855.5	1,285.2
United Kingdom	13,436.5	4,478.8

Table 11. Calculated Exports of Taps and Showers (thousands of units)

	<i>Taps</i>	<i>Showers</i>
EU27	80,467.9	26,822.6
Austria	2,111.3	703.8
Belgium	1,824.8	608.3
Bulgaria	3,857.2	1,285.7
Cyprus	2.6	0.9
Czech Republic	1,587.1	529.0
Denmark	1,785.0	595.0
Estonia	63.8	21.3
Finland	911.6	303.9
France	2,230.2	743.4
Germany	22,346.5	7,448.8
Greece	341.9	114.0
Hungary	399.8	133.3
Ireland	91.5	30.5
Italy	23,129.3	7,709.8
Latvia	18.9	6.3
Lithuania	660.8	220.3
Luxemburg	11.1	3.7
Malta	40.1	13.4
Poland	1,591.6	530.5
Portugal	7,104.4	2,368.1
Romania	72.3	24.1
Slovakia	86.3	28.8
Slovenia	1,966.1	655.4
Spain	4,407.4	1,469.1
Sweden	1,411.5	470.5
The Netherlands	408.1	136.0
United Kingdom	2,006.8	668.9

APPARENT CONSUMPTION

Sales in EU-27 = Production in EU-27 – export to third countries (from EU-27) + imports from third countries (to EU-27)

Table 12. EU Apparent Consumption (thousands of units)

	<i>Taps</i>	<i>Showers</i>
EU-27	185,424	61,808
Austria	966	322
Belgium	2,532	844
Bulgaria	(-2,925)	(-975)
Cyprus	328	109
Czech Republic	1,713	571
Denmark	487	163
Estonia	288	96
Finland	1,431	477
France	15,525	5,175
Germany	17,943	5,981
Greece	3,044	1,015
Hungary	876	292
Ireland	1,386	462
Italy	40,072	13,358
Latvia	258	86
Lithuania	649	217
Luxembourg	189	63
Malta	137	46
Poland	4,812	1,605
Portugal	1,135	378
Romania	2,665	888
Slovakia	1,308	436
Slovenia	(-1,192)	(-397)
Spain	10,953	3,652
Sweden	1,759	586
The Netherlands	3,447	1,149
The United Kingdom	11,430	3,810

MARKET AND STOCK DATA

Stock

Table 13. Average number of taps and showers per 100 apartments and houses

	<i>Apartment</i>	<i>House</i>
<i>Average number of taps</i>	450	550
<i>Average number of showers</i>	125	125

Stock of non-domestic premises

Table 14. Categories of Businesses

	<i>Number of employees</i>
Micro	<10
Small	<50
Medium	<250
Large	251>

Table 15. Lifespan of taps and showers

	<i>Taps</i> (years)	<i>Showers</i> (years)
Domestic dwelling	16	10
Non-domestic sector	10	7

Taps:

- The stock of taps from the **domestic** sector is by far the largest with more than 1 billion units installed across all Member State. The non-domestic stock represents just 7% of the Domestic one with around 70 million units installed.
- The taps stock within the **non-domestic** sector is forecasted to grow by around 36% between 2007 and 2020
- The tap stock within the **domestic** sector is forecasted to grow by around 13% between 2007 and 2020 to a total of 1.154 billion units installed
- The MS with the largest stock of taps within the **non-domestic** sector in 2007 were:
 - Italy (17%)
 - France (14%)
 - Spain (12%)
 - Germany (11%) and
 - UK (10%)
- The MS with the largest stock of taps within the **domestic** sector in 2007 were:

- Germany (19%),
 - France (13%),
 - UK (13%),
 - Italy (12%) and
 - Spain (8%).
- Malta is the country with the smallest stock of taps with just 0.15% (non-domestic) and 0.06% (domestic sector) of the European stock.

Showers:

- The stock of showers from the Domestic sector is by far the largest with more than 248.5 million units installed across all Member State in 2007. The Non-Domestic stock represents just 11% of the Domestic almost 28 million units installed.
- The taps stock within the **non-domestic** sector is forecasted to grow by around 33% between 2007 and 2020
- The showerhs stock within the **domestic** sector is forecasted to grow by around 13% between 2007 and 2020 to a total of 282.5 million units installed
- The MS with the largest stock of showers within the **non-domestic** sector in 2007 were:
 - France (18%)
 - Italy (16%)
 - Germany (12%)
 - Spain (11%) and
 - UK (11%)
- The MS with the largest stock of showers within the **domestic** sector in 2007 were:
 - Germany (19%),
 - France (13%),
 - UK (13%),
 - Italy (12%) and
 - Spain (8%).

Malta is the country with the smallest stock of shower with just 0.15% (non-domestic) and 0.06% (domestic sector) of the European stock.

Non Domestic sector Stock

Table 16. Stock Taps (units) – Non-Domestic (to nearest thousand)

<i>Stock of Taps</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2012</i>	<i>2015</i>	<i>2020</i>
EU-27	66,580,000	68,177,000	69,810,000	77,951,000	83,513,000	95,041,000
Austria	1,394,000	1,414,000	1,433,000	1,614,000	1,698,000	1,851,000
Belgium	1,242,000	1,251,000	1,267,000	1,366,000	1,406,000	1,479,000
Bulgaria	732,000	774,000	847,000	1,122,000	1,332,000	1,816,000
Cyprus	170,000	170,000	172,000	176,000	177,000	179,000
Czech Republic	2,323,000	2,240,000	2,317,000	2,457,000	2,507,000	2,594,000
Denmark	805,000	820,000	828,000	921,000	965,000	1,048,000
Estonia	126,000	140,000	145,000	200,000	248,000	363,000
Finland	634,000	657,000	678,000	775,000	840,000	964,000
France	9,859,000	10,053,000	10,097,000	10,911,000	11,331,000	12,079,000
Germany	7,233,000	7,498,000	7,582,000	8,315,000	8,643,000	9,222,000
Greece	2,334,000	2,365,000	2,394,000	2,624,000	2,781,000	3,092,000
Hungary	1,521,000	1,488,000	1,467,000	1,428,000	1,391,000	1,332,000
Ireland	392,000	415,000	424,000	520,000	576,000	687,000
Italy	11,546,000	11,715,000	12,006,000	13,045,000	13,637,000	14,689,000
Latvia	181,000	194,000	204,000	250,000	276,000	329,000
Lithuania	298,000	336,000	344,000	437,000	508,000	658,000
Luxembourg	107,000	108,000	109,000	119,000	123,000	129,000
Malta	103,000	103,000	106,000	108,000	110,000	113,000
Netherlands	2,142,000	2,250,000	2,281,000	2,447,000	2,557,000	2,764,000
Poland	3,762,000	3,837,000	3,965,000	4,396,000	4,583,000	4,923,000
Portugal	2,180,000	2,214,000	2,220,000	3,156,000	4,072,000	6,356,000
Romania	1,335,000	1,393,000	1,400,000	1,712,000	1,944,000	2,431,000
Slovakia	287,000	306,000	298,000	388,000	446,000	582,000
Slovenia	260,000	276,000	283,000	330,000	355,000	403,000
Spain	7,986,000	8,252,000	8,431,000	9,571,000	10,337,000	11,754,000
Sweden	1,729,000	1,811,000	1,854,000	2,053,000	2,188,000	2,438,000
United Kingdom	5,900,000	6,098,000	6,656,000	7,509,000	8,483,000	10,767,000

Table 17. Stock of showers (units) Non Domestic (to nearest thousand)

<i>Stock of shower</i>	2005	2006	2007	2012	2015	2020
EU-27	26,475,000	27,094,000	27,908,000	30,162,000	32,365,000	37,065,000
Austria	799,000	800,000	809,000	855,000	879,000	923,000
Belgium	438,000	434,000	435,000	431,000	427,000	423,000
Bulgaria	236,000	261,000	287,000	400,000	518,000	817,000
Cyprus	86,000	85,000	85,000	81,000	80,000	78,000
Czech Republic	603,000	592,000	606,000	636,000	648,000	669,000
Denmark	370,000	373,000	372,000	377,000	378,000	381,000
Estonia	41,000	46,000	49,000	72,000	97,000	163,000
Finland	237,000	236,000	241,000	251,000	258,000	273,000
France	5,129,000	5,217,000	5,186,000	5,415,000	5,539,000	5,755,000
Germany	3,311,000	3,361,000	3,377,000	3,450,000	3,567,000	3,772,000
Greece	817,000	833,000	843,000	916,000	977,000	1,090,000
Hungary	443,000	434,000	420,000	391,000	376,000	353,000
Ireland	195,000	199,000	201,000	240,000	261,000	299,000
Italy	4,333,000	4,449,000	4,582,000	4,979,000	5,265,000	5,780,000
Latvia	45,000	48,000	49,000	61,000	71,000	91,000
Lithuania	70,000	74,000	76,000	89,000	100,000	124,000
Luxembourg	58,000	58,000	58,000	60,000	61,000	63,000
Malta	41,000	39,000	41,000	41,000	41,000	42,000
Netherlands	1,075,000	1,092,000	1,095,000	1,148,000	1,183,000	1,244,000
Poland	979,000	976,000	993,000	1,045,000	1,064,000	1,098,000
Portugal	581,000	593,000	600,000	739,000	872,000	1,191,000
Romania	405,000	417,000	420,000	467,000	504,000	577,000
Slovakia	157,000	158,000	147,000	173,000	183,000	205,000
Slovenia	79,000	82,000	83,000	92,000	96,000	105,000
Spain	3,044,000	3,136,000	3,166,000	3,492,000	3,754,000	4,234,000
Sweden	689,000	734,000	755,000	809,000	848,000	918,000
United Kingdom	2,216,000	2,366,000	2,932,000	3,453,000	4,318,000	6,397,000

Domestic sector stock

Table 18. Stock taps (units) Domestic sectors (to nearest thousand)

<i>Stock of Taps</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2012</i>	<i>2015</i>	<i>2020</i>
EU-27	990,520,000	997,223,000	1,015,257,000	1,069,367,000	1,101,314,000	1,153,998,000
Austria	16,878,000	17,480,000	17,740,000	18,675,000	19,264,000	20,266,000
Belgium	21,176,000	21,094,000	22,381,000	23,167,000	23,615,000	24,325,000
Bulgaria	14,642,000	14,703,000	14,672,000	14,412,000	14,204,000	13,843,000
Cyprus	1,184,000	1,215,000	1,276,000	1,427,000	1,522,000	1,685,000
Czech Republic	20,564,000	20,890,000	21,048,000	22,596,000	23,600,000	25,292,000
Denmark	11,885,000	11,895,000	12,017,000	12,353,000	12,528,000	12,811,000
Estonia	2,558,000	2,619,000	2,655,000	2,821,000	2,873,000	2,958,000
Finland	12,145,000	12,145,000	12,268,000	12,657,000	12,876,000	13,221,000
France	126,327,000	127,470,000	131,815,000	137,052,000	142,087,000	150,514,000
Germany	196,114,000	197,023,000	196,609,000	203,761,000	206,981,000	212,303,000
Greece	20,007,000	21,018,000	21,186,000	22,618,000	23,666,000	25,401,000
Hungary	19,604,000	19,512,000	19,481,000	19,649,000	19,863,000	20,209,000
Ireland	9,128,000	9,376,000	9,653,000	10,930,000	11,664,000	12,722,000
Italy	113,482,000	113,125,000	118,786,000	127,060,000	131,540,000	138,765,000
Latvia	4,309,000	4,247,000	4,176,000	4,518,000	4,617,000	4,784,000
Lithuania	6,024,000	6,085,000	6,065,000	6,885,000	7,276,000	7,985,000
Luxembourg	904,000	909,000	924,000	1,001,000	1,047,000	1,125,000
Malta	659,000	638,000	638,000	698,000	704,000	713,000
Netherlands	35,557,000	35,731,000	35,777,000	36,804,000	36,800,000	36,742,000
Poland	63,151,000	64,667,000	64,851,000	67,352,000	68,740,000	71,022,000
Portugal	18,751,000	19,088,000	19,323,000	20,340,000	21,055,000	22,219,000
Romania	39,422,000	37,370,000	37,574,000	37,457,000	37,394,000	37,245,000
Slovakia	8,275,000	8,490,000	8,536,000	8,899,000	9,136,000	9,532,000
Slovenia	3,640,000	3,620,000	3,814,000	3,938,000	4,053,000	4,233,000
Spain	73,187,000	75,607,000	78,247,000	90,748,000	98,029,000	109,928,000
Sweden	20,012,000	20,127,000	20,327,000	21,185,000	21,686,000	22,491,000
United Kingdom	130,937,000	131,080,000	133,418,000	140,364,000	144,493,000	151,664,000

Table 19. Stock of Showers (units) Domestic sectors (to nearest thousand)

<i>Stock of Showers</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2012</i>	<i>2015</i>	<i>2020</i>
EU-27	242,530,000	244,171,000	248,587,000	261,836,000	269,658,000	282,558,000
Austria	4,133,000	4,280,000	4,344,000	4,573,000	4,717,000	4,962,000
Belgium	5,185,000	5,165,000	5,480,000	5,672,000	5,782,000	5,956,000
Bulgaria	3,585,000	3,600,000	3,593,000	3,529,000	3,478,000	3,390,000
Cyprus	290,000	298,000	313,000	349,000	373,000	413,000
Czech Republic	5,035,000	5,115,000	5,154,000	5,533,000	5,779,000	6,193,000
Denmark	2,910,000	2,913,000	2,943,000	3,025,000	3,068,000	3,137,000
Estonia	626,000	641,000	650,000	691,000	704,000	724,000
Finland	2,974,000	2,974,000	3,004,000	3,099,000	3,153,000	3,237,000
France	30,931,000	31,211,000	32,275,000	33,557,000	34,790,000	36,854,000
Germany	48,019,000	48,241,000	48,140,000	49,891,000	50,680,000	51,983,000
Greece	4,899,000	5,146,000	5,188,000	5,538,000	5,795,000	6,219,000
Hungary	4,800,000	4,778,000	4,770,000	4,811,000	4,863,000	4,948,000
Ireland	2,235,000	2,296,000	2,363,000	2,676,000	2,856,000	3,115,000
Italy	27,786,000	27,699,000	29,085,000	31,111,000	32,208,000	33,977,000
Latvia	1,055,000	1,040,000	1,023,000	1,106,000	1,131,000	1,171,000
Lithuania	1,475,000	1,490,000	1,485,000	1,686,000	1,782,000	1,955,000
Luxembourg	221,000	223,000	226,000	245,000	256,000	276,000
Malta	161,000	156,000	156,000	171,000	172,000	175,000
Netherlands	8,706,000	8,749,000	8,760,000	9,011,000	9,011,000	8,996,000
Poland	15,463,000	15,834,000	15,879,000	16,491,000	16,831,000	17,390,000
Portugal	4,591,000	4,674,000	4,731,000	4,980,000	5,155,000	5,440,000
Romania	9,653,000	9,150,000	9,200,000	9,171,000	9,156,000	9,119,000
Slovakia	2,026,000	2,079,000	2,090,000	2,179,000	2,237,000	2,334,000
Slovenia	891,000	886,000	934,000	964,000	992,000	1,036,000
Spain	17,920,000	18,513,000	19,159,000	22,220,000	24,003,000	26,916,000
Sweden	4,900,000	4,928,000	4,977,000	5,187,000	5,310,000	5,507,000
United Kingdom	32,060,000	32,095,000	32,668,000	34,368,000	35,379,000	37,135,000

Sales of taps:

- Non domestic sales for taps are forecasted to grow from almost 7 million units in 2007 to more than 9.5 million in 2020, and increase of more than 35% across the EU overall
- Member states with the highest sales in the **non-domestic** sector in 2007 were:
 - Italy (17%)
 - Spain (12%)
 - France (14%)
 - Germany (11%) and
 - UK (9%)
- Domestic sales of taps are forecasted to grow from 63.5 million units to more than 72 million in 2020 across the EU.
- Member states with the highest sales in the **domestic** sector for taps in 2007 were:
 - Germany (19%)
 - UK (13%)
 - France (13%)
 - Italy (12%) and
 - Spain (8%)

Sales of showers:

- **Non-domestic** sales of showers are forecasted to grow from just over 4 million units in 2007 to more than 5.3 million units in 2020 across the EU.
- Member States with the highest sales in the **non-domestic** sector in 2007 were:
 - France (19%)
 - Italy (16%)
 - Germany (12%)
 - Spain (11%) and
 - UK (11%)
- Within the **domestic** sector the sales of showers was just over 25 million units in 2007, and is forecasted to be almost 28.5 million units in 2020.
- Member States with the highest sales in the **domestic** sector in 2007 were:
 - Germany (19%)
 - UK (13%)
 - France (13%)
 - Italy (12%) and
 - Spain (8%)

Non-domestic sector estimated sales

Table20. Estimated sales of taps (units) Non-Domestic sectors (to nearest thousand)

<i>Sales of taps</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2012</i>	<i>2015</i>	<i>2020</i>
EU-27	6,658,000	6,818,000	6,981,000	7,795,000	8,351,000	9,504,000
Austria	139,000	141,000	143,000	161,000	170,000	185,000
Belgium	124,000	125,000	127,000	137,000	141,000	148,000
Bulgaria	73,000	77,000	85,000	112,000	133,000	182,000
Cyprus	17,000	17,000	17,000	18,000	18,000	18,000
Czech Republic	232,000	224,000	232,000	246,000	251,000	259,000
Denmark	81,000	82,000	83,000	92,000	97,000	105,000
Estonia	13,000	14,000	14,000	20,000	25,000	36,000
Finland	63,000	66,000	68,000	78,000	84,000	96,000
France	986,000	1,005,000	1,010,000	1,091,000	1,133,000	1,208,000
Germany	723,000	750,000	758,000	832,000	864,000	922,000
Greece	233,000	237,000	239,000	262,000	278,000	309,000
Hungary	152,000	149,000	147,000	143,000	139,000	133,000
Ireland	39,000	42,000	42,000	52,000	58,000	69,000
Italy	1,155,000	1,171,000	1,201,000	1,304,000	1,364,000	1,469,000
Latvia	18,000	19,000	20,000	25,000	28,000	33,000
Lithuania	30,000	34,000	34,000	44,000	51,000	66,000
Luxembourg	11,000	11,000	11,000	12,000	12,000	13,000
Malta	10,000	10,000	11,000	11,000	11,000	11,000
Netherlands	214,000	225,000	228,000	245,000	256,000	276,000
Poland	376,000	384,000	397,000	440,000	458,000	492,000
Portugal	218,000	221,000	222,000	316,000	407,000	636,000
Romania	134,000	139,000	140,000	171,000	194,000	243,000
Slovakia	29,000	31,000	30,000	39,000	45,000	58,000
Slovenia	26,000	28,000	28,000	33,000	36,000	40,000
Spain	799,000	825,000	843,000	957,000	1,034,000	1,175,000
Sweden	173,000	181,000	185,000	205,000	219,000	244,000
United Kingdom	590,000	610,000	666,000	751,000	848,000	1,077,000

Table 21: Estimated sales of shower (units) - Non-Domestic sectors (to nearest thousand)

<i>Sales of Showers</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2012</i>	<i>2015</i>	<i>2020</i>
EU-27	3,843,000	3,933,000	4,051,000	4,378,000	4,698,000	5,380,000
Austria	116,000	116,000	117,000	124,000	128,000	134,000
Belgium	64,000	63,000	63,000	63,000	62,000	61,000
Bulgaria	34,000	38,000	42,000	58,000	75,000	119,000
Cyprus	12,000	12,000	12,000	12,000	12,000	11,000
Czech Republic	87,000	86,000	88,000	92,000	94,000	97,000
Denmark	54,000	54,000	54,000	55,000	55,000	55,000
Estonia	6,000	7,000	7,000	10,000	14,000	24,000
Finland	34,000	34,000	35,000	36,000	38,000	40,000
France	744,000	757,000	753,000	786,000	804,000	835,000
Germany	481,000	488,000	490,000	501,000	518,000	548,000
Greece	119,000	121,000	122,000	133,000	142,000	158,000
Hungary	64,000	63,000	61,000	57,000	55,000	51,000
Ireland	28,000	29,000	29,000	35,000	38,000	43,000
Italy	629,000	646,000	665,000	723,000	764,000	839,000
Latvia	7,000	7,000	7,000	9,000	10,000	13,000
Lithuania	10,000	11,000	11,000	13,000	15,000	18,000
Luxembourg	8,000	8,000	8,000	9,000	9,000	9,000
Malta	6,000	6,000	6,000	6,000	6,000	6,000
Netherlands	156,000	159,000	159,000	167,000	172,000	181,000
Poland	142,000	142,000	144,000	152,000	154,000	159,000
Portugal	84,000	86,000	87,000	107,000	127,000	173,000
Romania	59,000	61,000	61,000	68,000	73,000	84,000
Slovakia	23,000	23,000	21,000	25,000	27,000	30,000
Slovenia	11,000	12,000	12,000	13,000	14,000	15,000
Spain	442,000	455,000	460,000	507,000	545,000	615,000
Sweden	100,000	107,000	110,000	117,000	123,000	133,000
United Kingdom	322,000	343,000	426,000	501,000	627,000	929,000

Domestic sector estimated sales

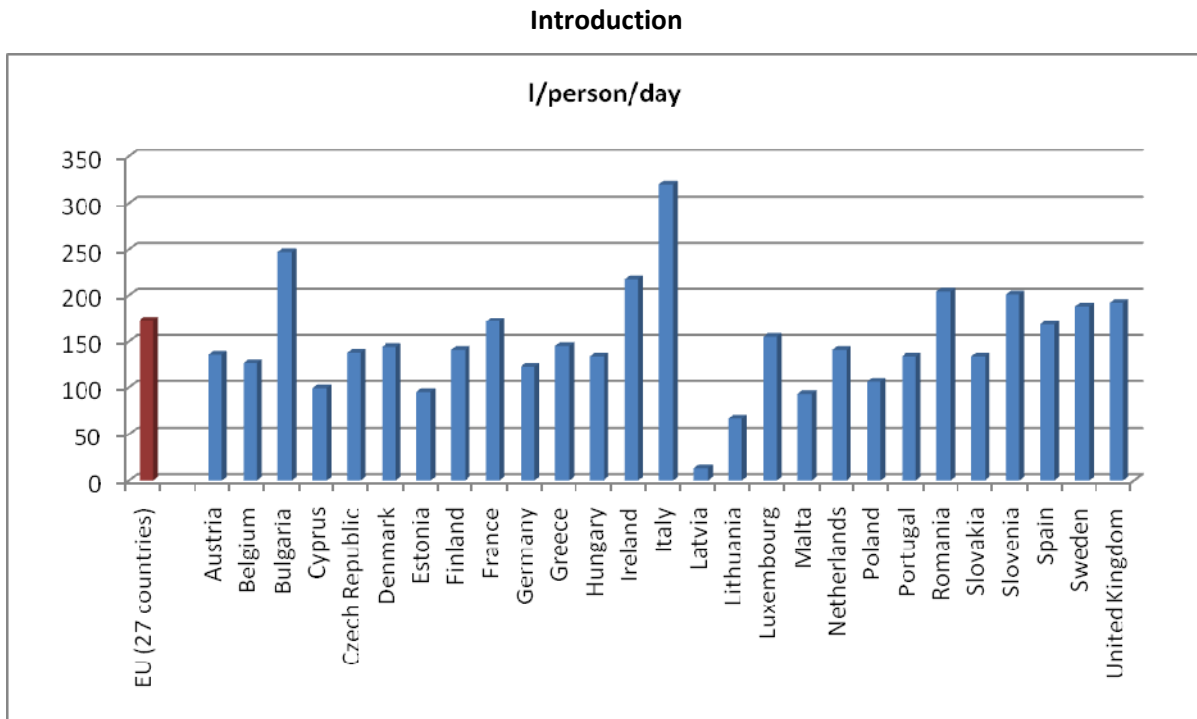
Table 22. Estimated sales of taps (units) - Domestic sectors (to nearest thousand)

<i>Sales of taps</i>	2005	2006	2007	2012	2015	2020
EU-27	61,907,000	62,326,000	63,454,000	66,835,000	68,832,000	72,125,000
Austria	1,055,000	1,092,000	1,109,000	1,167,000	1,204,000	1,267,000
Belgium	1,324,000	1,318,000	1,399,000	1,448,000	1,476,000	1,520,000
Bulgaria	915,000	919,000	917,000	901,000	888,000	865,000
Cyprus	74,000	76,000	80,000	89,000	95,000	105,000
Czech Republic	1,285,000	1,306,000	1,316,000	1,412,000	1,475,000	1,581,000
Denmark	743,000	743,000	751,000	772,000	783,000	801,000
Estonia	160,000	164,000	166,000	176,000	180,000	185,000
Finland	759,000	759,000	767,000	791,000	805,000	826,000
France	7,895,000	7,967,000	8,238,000	8,566,000	8,880,000	9,407,000
Germany	12,257,000	12,314,000	12,288,000	12,735,000	12,936,000	13,269,000
Greece	1,250,000	1,314,000	1,324,000	1,414,000	1,479,000	1,588,000
Hungary	1,225,000	1,219,000	1,218,000	1,228,000	1,241,000	1,263,000
Ireland	571,000	586,000	603,000	683,000	729,000	795,000
Italy	7,093,000	7,070,000	7,424,000	7,941,000	8,221,000	8,673,000
Latvia	269,000	265,000	261,000	282,000	289,000	299,000
Lithuania	377,000	380,000	379,000	430,000	455,000	499,000
Luxembourg	56,000	57,000	58,000	63,000	65,000	70,000
Malta	41,000	40,000	40,000	44,000	44,000	45,000
Netherlands	2,222,000	2,233,000	2,236,000	2,300,000	2,300,000	2,296,000
Poland	3,947,000	4,042,000	4,053,000	4,209,000	4,296,000	4,439,000
Portugal	1,172,000	1,193,000	1,208,000	1,271,000	1,316,000	1,389,000
Romania	2,464,000	2,336,000	2,348,000	2,341,000	2,337,000	2,328,000
Slovakia	517,000	531,000	533,000	556,000	571,000	596,000
Slovenia	227,000	226,000	238,000	246,000	253,000	265,000
Spain	4,574,000	4,725,000	4,890,000	5,672,000	6,127,000	6,870,000
Sweden	1,251,000	1,258,000	1,270,000	1,324,000	1,355,000	1,406,000
United Kingdom	8,184,000	8,192,000	8,339,000	8,773,000	9,031,000	9,479,000

Table 23. Estimated sales of showers (units) - Domestic sectors (to nearest thousand)

<i>Sales of showers</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2012</i>	<i>2015</i>	<i>2020</i>
EU-27	24,416,000	24,581,000	25,026,000	26,359,000	27,147,000	28,445,000
Austria	416,000	431,000	437,000	460,000	475,000	500,000
Belgium	522,000	520,000	552,000	571,000	582,000	600,000
Bulgaria	361,000	362,000	362,000	355,000	350,000	341,000
Cyprus	29,000	30,000	31,000	35,000	38,000	42,000
Czech Republic	507,000	515,000	519,000	557,000	582,000	623,000
Denmark	293,000	293,000	296,000	304,000	309,000	316,000
Estonia	63,000	65,000	65,000	70,000	71,000	73,000
Finland	299,000	299,000	302,000	312,000	317,000	326,000
France	3,114,000	3,142,000	3,249,000	3,378,000	3,502,000	3,710,000
Germany	4,834,000	4,857,000	4,846,000	5,023,000	5,102,000	5,233,000
Greece	493,000	518,000	522,000	558,000	583,000	626,000
Hungary	483,000	481,000	480,000	484,000	490,000	498,000
Ireland	225,000	231,000	238,000	269,000	288,000	314,000
Italy	2,797,000	2,788,000	2,928,000	3,132,000	3,242,000	3,420,000
Latvia	106,000	105,000	103,000	111,000	114,000	118,000
Lithuania	148,000	150,000	149,000	170,000	179,000	197,000
Luxembourg	22,000	22,000	23,000	25,000	26,000	28,000
Malta	16,000	16,000	16,000	17,000	17,000	18,000
Netherlands	876,000	881,000	882,000	907,000	907,000	906,000
Poland	1,557,000	1,594,000	1,599,000	1,660,000	1,694,000	1,751,000
Portugal	462,000	471,000	476,000	501,000	519,000	548,000
Romania	972,000	921,000	926,000	923,000	922,000	918,000
Slovakia	204,000	209,000	210,000	219,000	225,000	235,000
Slovenia	90,000	89,000	94,000	97,000	100,000	104,000
Spain	1,804,000	1,864,000	1,929,000	2,237,000	2,416,000	2,710,000
Sweden	493,000	496,000	501,000	522,000	535,000	554,000
United Kingdom	3,228,000	3,231,000	3,289,000	3,460,000	3,562,000	3,738,000

ANNEX V – User behaviour



Source IPTS Scoping Document, February 2010

Figure 1. Total domestic water use by member states

Table24. Total domestic water use according to purpose in Million m³ per year

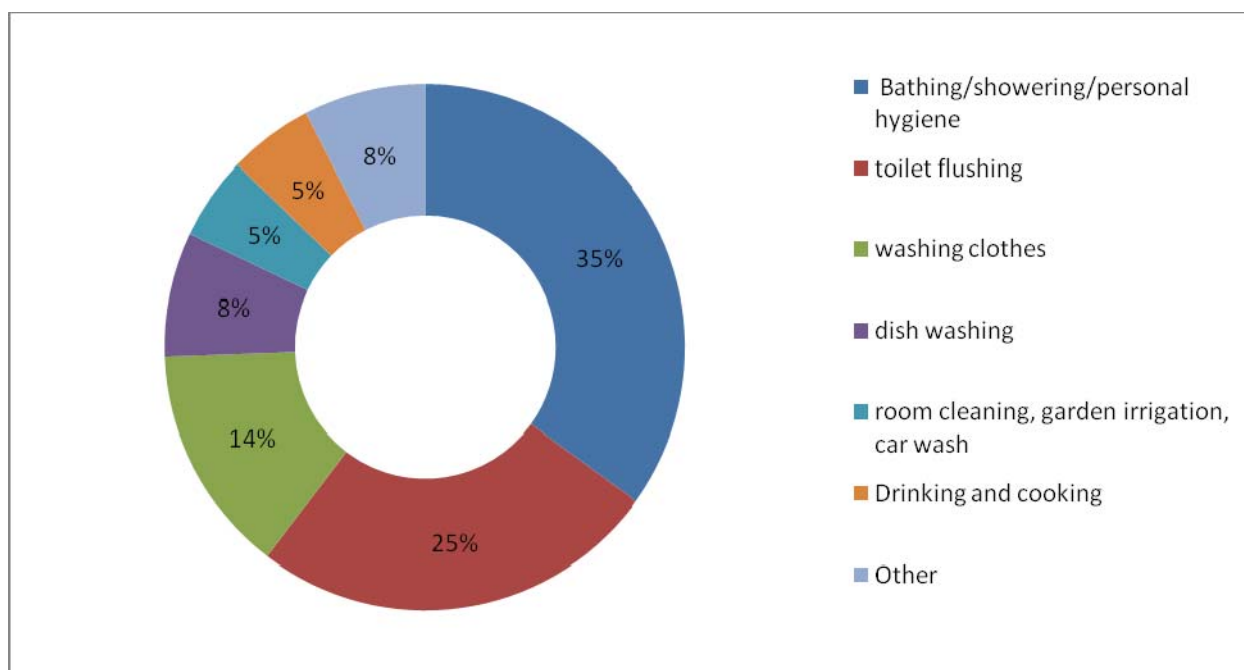
Country	Bathing/ showering/ personal toilet flushing	washing clothes	dish washing	room cleaning, garden irrigation. car Drinking and cooking	Other	TOTAL		
	(Mm ³ /y)	(Mm ³ /y)	(Mm ³ /y)	(Mm ³ /y)	(Mm ³ /y)	(Mm ³ /y)		
Austria	162	97	65	8	24	16	28	400
Belgium	158	173	67	34	38	10		480
Bulgaria	243	178	101	60	40	33	63	718
Cyprus	9	6	4	2	1	1	2	25
Czech Republic	175	128	73	44	29	24	45	518
Denmark	93	71	34	28	n/a	20	37	283
Estonia	16	12	7	4	3	2	4	48
Finland	78	38	48	33	5	11	56	269
France	1,511	775	465	388	233	271	233	3,876
Germany	1,334	1,000	445	222	222	148	333	3,704
Greece	197	144	82	49	33	27	51	583
Hungary	168	123	70	42	28	23	43	497
Ireland	106	77	44	26	18	14	27	312
Italy	2,281	1,670	948	568	377	312	589	6,745
Latvia	4	3	2	1	1	1	1	13
Lithuania	29	21	12	7	5	4	7	85
Luxembourg	9	8	3	2		1	2	25
Malta	4	3	2	1	1	1	1	13
Netherlands	345	230	148	41	n/a	8	58	830
Poland	500	366	208	125	83	68	129	1,479
Portugal	171	125	71	43	28	23	44	505
Romania	555	406	231	138	92	76	143	1,641
Slovakia	89	65	37	22	15	12	23	263
Slovenia	50	36	21	12	8	7	13	147
Spain	922	691	512		n/a	307	128	2,560
Sweden	185	123	92	123	n/a	31	62	616
United Kingdom	1,375	1,250	542	333	292	167	208	4,167
EU-27	10,769	7,821	4,330	2,356	1,575	1,617	2,330	30,798

Source: IPTS scoping document (IPTS calculated these using derived data)

Table 25. Comparison of domestic water consumption by Member States

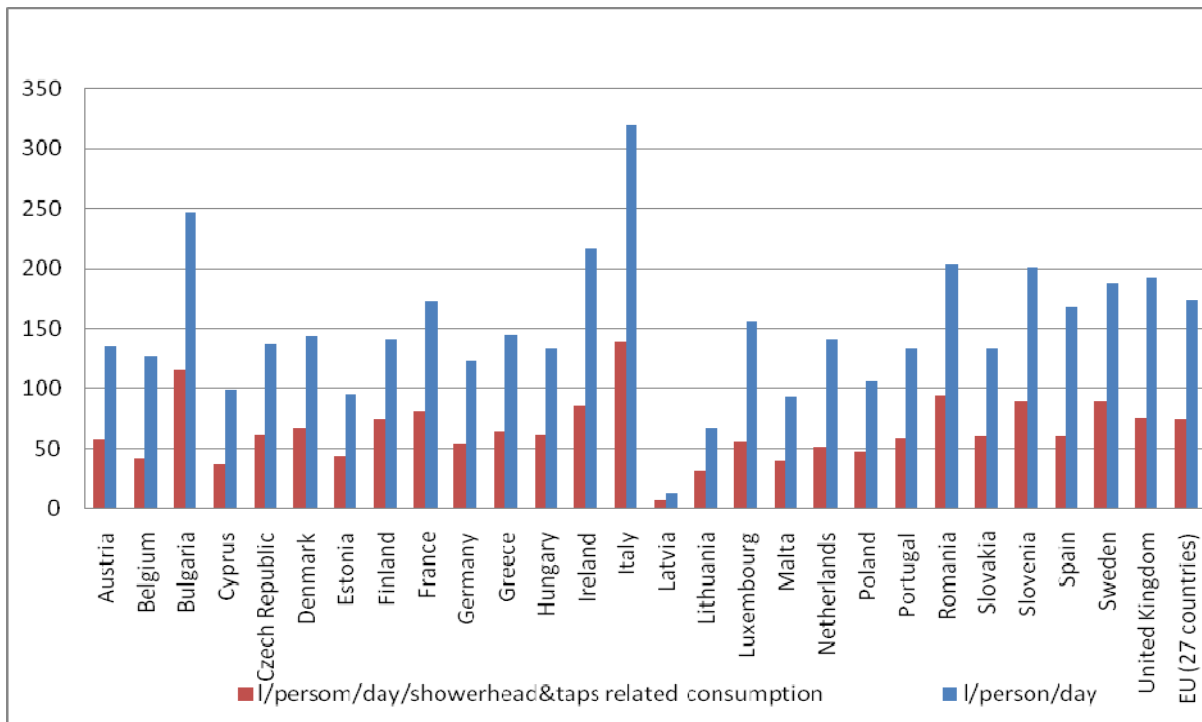
Appliance	England and Wales	Finland	France	Germany
Toilet	9.5 l/flush	6 l/flush	9 l/flush	9 l/flush
Washing Machine	80 l/cycle	74-117 l/cycle	75 l/cycle	72-90 l/cycle
Dishwater	35 l/cycle	25 l/cycle	24 l/cycle	27-47 l/cycle
Shower	35 l/shower	60 l/shower	16 l/minute	30-50 l/shower
Bath	80 l/bath	-	-	-
Water Saving Appliances	No incentive for the majority of households to conserve water, but commerce and industry have invested in flush controllers for urinals, push operation taps, low-volume shower heads and devices to limit toilet flush volume	The amount of water per flush in toilets depends mainly on the construction year of the building: Prior to 1976, 9 l/flush; 1976-93, 6 l/flush; 1993-96, 4 l/flush; Since 1996, 2-4l/flush	Domestic water saving Appliances are not widespread	Some municipalities have invested heavily in installing water-saving devices and increasing public awareness

Source: http://ec.europa.eu/environment/water/quantity/pdf/water_saving_1.pdf



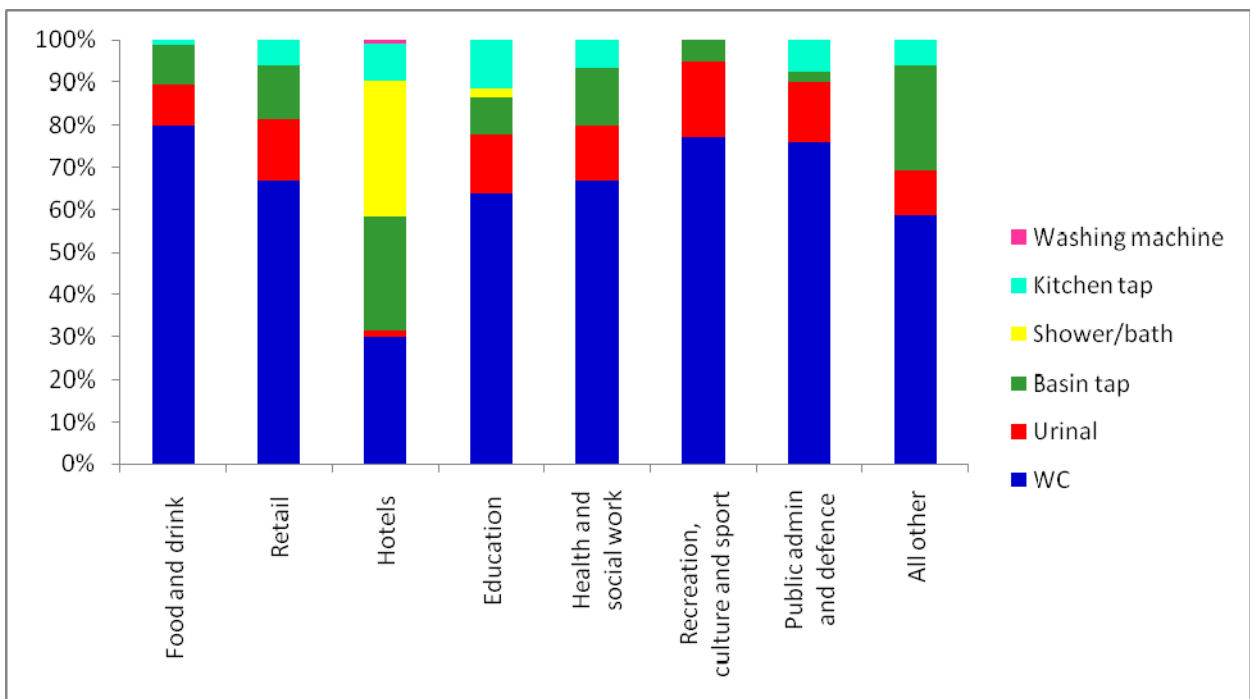
Source: Derived using data from IPTS Scoping Document, February 2010

Figure 2. Domestic water use in the EU-27 according to purpose



Source: Derived using data from IPTS Scoping Document, February 2010

Figure 3. Water consumption per person per day overall vs. water consumption from activities using taps % showers



Source : MTP, Domestic water consumption in domestic and non-domestic properties, DEFRA/AEA 2008

Figure 4. Water consumption in non-domestic premises in the UK

Table 26. Water consumption and potential saving in public building in Loire Bretagne (France)

	Consumption of reference	Savings potential	Source
Primary school	3m ³ / child/year	20%	Lorient, Pontivy, Brest, Douarnenez, Lannion, Perros, Guirrec
College	General : 3,6 m ³ /student/year	18%	Conseil régional de Bretagne
	Professional: 6,1m ³ /student/year		
Student housing	46,7 m ³ / bed/year	30%	CROUS Aquitaine, Eco-Campus
Stadium (normal size)	1000m ³ /year for equipment use	20%	Surveys CNFPT Midi Pyrénées 2002, AIRES 1998, Report L. Cathala
	2000m ³ /year for irrigation		
Gymnasium (normal size)	800 m ³ /an	15%	
Public swimming-pools	0,33 to 0,42 m ³ / visitor	no data	
Hospitals	100 m ³ / bed/year	0%	Water agency data, experts
Administrative buildings	14,3 m ³ / position/year	20%	Water agency data

Source http://ec.europa.eu/environment/water/quantity/pdf/water_saving_1.pdf

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