

**ANNEX to document COCOM09-11 FINAL ‘Report on the Implementation of 112’**

**TABLE 1 – AVAILABILITY of 112**

	<b>Legal requirement for VoIP PATS operators to ensure access to 112</b>	<b>Legal requirement for VoIP operators to inform subscribers about availability of 112</b>	<b>112 available over another domestic mobile network when out of coverage of the home network</b>	<b>112 available from handsets without SIM cards</b>
<b>Belgium</b>	Yes	Yes	Yes for two MNOs; the third MNO is considering the possibility to introduce this facility	No
<b>Bulgaria</b>	Yes		Yes	Yes
<b>Czech Republic</b>	Yes	Yes for all PATS operators	Yes	Yes
<b>Denmark</b>	Yes	Yes	Yes	Yes
<b>Germany</b>	Yes	No; all PATS operators must provide access to 112	Yes	Yes, until mid-2009
<b>Estonia</b>	Yes	No	Yes, but SIM card has to be removed first	Yes
<b>Ireland</b>	Yes	No	Yes	Yes
<b>Greece</b>	Yes, if technically feasible	No	Yes	Yes
<b>Spain</b>	Yes		Yes	Yes

	<b>Legal requirement for VoIP PATS operators to ensure access to 112</b>	<b>Legal requirement for VoIP operators to inform subscribers about availability of 112</b>	<b>112 available over another domestic mobile network when out of coverage of the home network</b>	<b>112 available from handsets without SIM cards</b>
<b>France</b>	Yes	No, because all VoIP operators must provide access to 112	Yes	No
<b>Italy</b>	Yes	No, but providers usually inform their subscribers	Yes	Yes
<b>Cyprus</b>	Yes	Yes	Yes	No
<b>Latvia</b>	No	No	Yes	Yes
<b>Lithuania</b>	Yes	No	Yes	Yes
<b>Luxembourg</b>	Yes	No	Yes	Yes
<b>Hungary</b>	No	No	Yes	Yes
<b>Malta</b>	Yes	Yes for all PATS operators	Yes	Yes
<b>Netherlands</b>	Yes	No	Yes	Yes
<b>Austria</b>	Yes	No	Yes	Yes
<b>Poland</b>	Yes	Yes	Yes	Yes
<b>Portugal</b>	Yes	Yes	Yes	Yes
<b>Romania</b>	Yes	Yes	Yes	No
<b>Slovenia</b>	Yes	Yes for all PATS operators	Yes	No

	<b>Legal requirement for VoIP PATS operators to ensure access to 112</b>	<b>Legal requirement for VoIP operators to inform subscribers about availability of 112</b>	<b>112 available over another domestic mobile network when out of coverage of the home network</b>	<b>112 available from handsets without SIM cards</b>
<b>Slovakia</b>	Yes	Yes	Yes	Yes
<b>Finland</b>	Yes	Yes	Yes	Yes
<b>Sweden</b>	Yes	No	Yes	Yes
<b>United Kingdom</b>	Yes	Yes	No, but discussions have been started to introduce this facility	No

**TABLE 2 – CALL HANDLING**

	<b>Unsuccessful call ratio (percentage of total calls)</b>	<b>Call set-up time (average)</b>	<b>Call response time (percentage of calls answered within 20 sec.)</b>	<b>EU foreign languages catered for by 112 PSAPs</b>
<b>Belgium</b>				
<b>Bulgaria</b>	<p><b>MEASURED:</b> 0.63% (fixed); 4.95% (mobile)</p> <p><u>Time:</u> 2.5 month (fixed); 24 hours (mobile)</p> <p><u>Calls:</u> 15 558 (fixed); 4263 (mobile)</p> <p><u>PSAPs:</u> 6 (all)</p> <p><b>ESTIMATED:</b> 0.75% (fixed); 5% (mobile)</p>	<p><b>MEASURED:</b> 0.67 sec. (fixed); 5 sec. (mobile)</p> <p><u>Time:</u> 2.5 month (fixed); 24 hours (mobile)</p> <p><u>Calls:</u> 15 558 (fixed); 4263 (mobile)</p> <p><u>PSAPs:</u> 6 (all)</p> <p><b>ESTIMATED:</b> Maximum 2.5 sec. (fixed); 5 sec (mobile)</p>	<p><b>MEASURED:</b> 99.42% (1 348 560 out of the total 1 356 455 calls)</p> <p><u>Time:</u> from 30.09 to 18.11.2008</p> <p><u>Calls:</u> 1 356 455</p> <p><u>PSAPs:</u> 6</p>	<p>English, French, German – call taker shifts at PSAPs are arranged so that to ensure support for these languages at all times. Call transfer to another PSAP possible if no appropriate call taker is available in the PSAP which receives the call</p>
<b>Czech Republic</b>	<p><b>MEASURED:</b> 0.12% (fixed); 0.04% (mobile)</p> <p><u>Time:</u> January – October 2008</p> <p><u>Calls:</u> 3 089 753</p> <p><u>PSAPs:</u> - all</p>	<p><b>MEASURED:</b> 0.70 sec. (fixed); 0.77 sec. (mobile)</p> <p><u>Time:</u> January – October 2008</p> <p><u>Calls:</u> 3 089 753</p> <p><u>PSAPs:</u> - all</p>	<p><b>MEASURED:</b> 100% (average: 4.1 sec)</p> <p><u>Time:</u> January – October 2008</p> <p><u>Calls:</u> 3 089 753</p> <p><u>PSAPs:</u> - all</p>	<p>English, German is available in all PSAPs. In addition, French and Polish can be provided by call transfer to another PSAP (information on the availability of language skills of call handlers in different PSAPs is included in the service application)</p>
<b>Denmark</b>	<p><b>ESTIMATED:</b> 0%</p>		<p><b>ESTIMATED:</b> 20-25 sec.</p>	<p>English – all PSAPs, German by call transfer to another PSAP</p>

	Unsuccessful call ratio (percentage of total calls)	Call set-up time (average)	Call response time (percentage of calls answered within 20 sec.)	EU foreign languages catered for by 112 PSAPs
<b>Germany</b>	<b>ESTIMATED:</b> Less than 1% (PSTN and GSM)	<b>ESTIMATED:</b> 2 sec (PSTN/ISDN); 6 sec. (GSM, VoIP)	<b>MEASURED:</b> 90%  <b>ESTIMATED:</b> Between 5 and 30 sec (in case of large accidents)	English (partially) and the languages of neighbouring countries in border areas
<b>Estonia</b>		<b>ESTIMATED:</b> 2.5 sec.	<b>ESTIMATED:</b> 100% , Average: 8.5 sec.	English, Finnish
<b>Ireland</b>	<b>ESTIMATED:</b>  0.05%		<b>MEASURED:</b> 95.37% answered within 5 sec.; average: 0.98 sec.  <u>Time:</u> 12 months  <u>Calls:</u> 4 million	French, German, Italian, Polish
<b>Greece</b>	<b>MEASURED:</b> 0%  <u>Time:</u> First nine month of 2008  <u>Calls:</u> 2 267 000	<b>MEASURED:</b> 9 sec.  <u>Time:</u> First nine month of 2008  <u>Calls:</u> 2 267 000	<b>MEASURED:</b> 100 %  <u>Time:</u> First nine month of 2008  <u>Calls:</u> 2 267 000	English, French
<b>Spain</b>	<b>MEASURED:</b> 0.24% (fixed) and 0.78% (mobile)  <u>Time:</u> 3 Q 2008	<b>MEASURED:</b> 1.40 sec. (fixed) and 3.35 sec. (mobile)  <u>Time:</u> 3 Q 2008	<b>MEASURED:</b> 94%  <u>Time:</u> Jan 08-Nov 08. For some 112 centres figures from 2007 were used.  <b>ESTIMATED:</b> 5.75 sec. on average.	English, French, Portuguese, German, Italian, Swedish.  The availability of languages and the method used differs from centre to centre.

	Unsuccessful call ratio (percentage of total calls)	Call set-up time (average)	Call response time (percentage of calls answered within 20 sec.)	EU foreign languages catered for by 112 PSAPs
<b>France</b>				English if linguistic resources of the PSAP allow it or by recourse to interpretation service covering more languages
<b>Italy</b>				
<b>Cyprus</b>	<p><b>MEASURED:</b> 0.019% (fixed); 0.53% (mobile)</p> <p><u>Time:</u> 4 months (fixed); 1 month (mobile)</p> <p><u>Calls:</u> 16 134 (fixed); 3063 (mobile)</p>	<p><b>MEASURED:</b> 0.79 sec. (fixed); 2.27 sec. (mobile)</p> <p>95% of fastest calls: 1.8 sec. (fixed); 3 sec. (mobile)</p> <p><u>Time:</u> 4 months (fixed); 1 month (mobile)</p> <p><u>Calls:</u> 16 134 (fixed); 3063 (mobile)</p>	<p><b>MEASURED:</b> 97.1% (fixed); 92.5% (mobile)</p> <p><u>Time:</u> 4 months (fixed); 1 month (mobile)</p> <p><u>Calls:</u> 16 134 (fixed); 3063 (mobile)</p>	English
<b>Latvia</b>			<p><b>MEASURED:</b> 88.8% (i.e. 882 373 calls out of the total 993 172)</p> <p><u>Time:</u> March- December 2008</p> <p><u>Calls:</u> 993 172</p> <p><u>PSAPs</u> – the main 112 call centre in Riga</p> <p><b>ESTIMATED:</b> <u>Average:</u> 4 sec.; <u>Min-Max:</u> 2 sec. to 1 min. 48 sec.</p>	English - by call transfer to the main 112 PSAP in Riga

	Unsuccessful call ratio (percentage of total calls)	Call set-up time (average)	Call response time (percentage of calls answered within 20 sec.)	EU foreign languages catered for by 112 PSAPs
<b>Lithuania</b>	<b>ESTIMATED:</b> From 3.2% to 6.5%	<b>ESTIMATED:</b> From 0.45 sec. to 6 sec.	<b>ESTIMATED:</b> About 90%	English, Polish
<b>Luxembourg</b>			<b>MEASURED:</b> 97.12%  <u>Time:</u> the 5 <sup>th</sup> of every month in 2008  <u>Calls:</u> 16 114  <b>ESTIMATED:</b> 3.41 sec.	English (in addition to the official languages of Luxemburgish, French and German)
<b>Hungary</b>		<b>ESTIMATED:</b> From 0.5 sec. to 1.5 sec.	<b>ESTIMATED:</b> From 5 sec. to 10 sec. (time to the start of the automatic message providing general and security information, which lasts 20-30 sec. until the human operator answers the call)	English and German as well as languages of neighbouring countries in border areas
<b>Malta</b>				English
<b>Netherlands</b>		<b>ESTIMATED:</b> Average between 1 and 4 sec.	<b>MEASURED:</b> 95.3%  <u>Time period:</u> 1/12/2007 – 30/11/2008  <u>Number of calls:</u> All calls – 5.85 million  <b>ESTIMATED:</b> Average: 5.2 sec.	English, German, French

	Unsuccessful call ratio (percentage of total calls)	Call set-up time (average)	Call response time (percentage of calls answered within 20 sec.)	EU foreign languages catered for by 112 PSAPs
<b>Austria</b>		<p><b>MEASURED:</b> 0.966 sec.</p> <p><u>Time period:</u> 1 year</p> <p><u>Number of calls:</u> all emergency calls of the incumbent operator</p>	<p><b>MEASURED:</b> 85% (50% within 5 seconds)</p> <p><u>Time period:</u> October 2008 (one month)</p> <p><u>Number of calls:</u> 109 771</p> <p><u>PSAPs covered:</u> City of Vienna</p> <p><b>ESTIMATED:</b> Average: 11 seconds</p>	English
<b>Poland</b>			<b>ESTIMATED:</b> Average: 1 min.	Some PSAPs can handle other languages
<b>Portugal</b>	<b>ESTIMATED:</b> 1.6%	<p><b>ESTIMATED:</b> 0.37 – 1.94 sec (fixed) 0.49 – 6.73 sec (mob)</p>	<b>ESTIMATED:</b> 6- 21 sec.	
<b>Romania</b>	<b>ESTIMATED:</b> at least similar as for ordinary calls	<b>ESTIMATED:</b> at least similar as for ordinary calls	<p><b>MEASURED:</b> 100% (94% within 10 seconds)</p> <p><u>Time period:</u> 01.01 – 30.11.2008</p> <p><u>Number of calls:</u> 28 502 668</p> <p><u>PSAPs covered:</u> all 41</p>	English and French by all PSAPs, Hungarian, German, Italian, Spanish – by transferring to another PSAP; each PSAP call handler can receive information about the available language skills in other PSAPs

	<b>Unsuccessful call ratio (percentage of total calls)</b>	<b>Call set-up time (average)</b>	<b>Call response time (percentage of calls answered within 20 sec.)</b>	<b>EU foreign languages catered for by 112 PSAPs</b>
<b>Slovenia</b>	<p><b>MEASURED:</b> 1.8%</p> <p><u>Time:</u> 01.01 - 30.11. 2008</p> <p><u>Calls:</u> All calls</p> <p><u>PSAPs</u> – all</p>	<p><b>MEASURED:</b> 4 sec.</p> <p><u>Time:</u> 01.01 - 30.11. 2008</p> <p><u>Calls:</u> All calls</p> <p><u>PSAPs</u> – all</p>	<p><b>MEASURED:</b> 96.45%</p> <p><u>Time:</u> 01.01 - 30.11. 2008</p> <p><u>Calls:</u> All calls</p> <p><u>PSAPs</u> – all</p>	English in all PSAPs; Italian and Hungarian in PSAPs of some areas
<b>Slovakia</b>			<p><b>MEASURED:</b> 96%</p> <p><u>Time period:</u> 01.07 – 31.12.2008</p> <p><u>Number of calls:</u> 1 348 076</p> <p><u>PSAPs covered:</u> all</p>	Czech in all PSAPs; Hungarian and Polish in PSAPs of certain areas. Calls in English, German and French can be handled if call handlers with appropriate linguistic resources are available.
<b>Finland</b>	<p><b>ESTIMATED:</b> Performance considered satisfactory</p>	<p><b>ESTIMATED:</b> Performance considered satisfactory</p>	<p><b>MEASURED:</b> 90% answered within 30 sec., 85% answered within 10 sec. (10 sec. is set as the target time) and 59% answered within 5 sec.</p> <p><u>Time period:</u> first half of 2008</p> <p><u>Number of calls:</u> 14 million calls</p>	English (in addition to official languages Finnish and Swedish) in all PSAPs; German and French – by involving interpretation service

	Unsuccessful call ratio (percentage of total calls)	Call set-up time (average)	Call response time (percentage of calls answered within 20 sec.)	EU foreign languages catered for by 112 PSAPs
<b>Sweden</b>			<p><b>MEASURED:</b> 87%</p> <p><u>Number of calls:</u> 2.9 million</p> <p><u>PSAPs covered:</u> All 18 PSAPs</p> <p><b>ESTIMATED:</b> Average: 9.9 seconds</p>	English in all PSAPs; recourse to interpretation service covering all major EU languages also possible and is expected to be improved in 2009
<b>United Kingdom</b>	<b>ESTIMATED:</b> to be very low since 112 and 999 calls are prioritised on the networks	<b>ESTIMATED:</b> to be very short For 112 calls, call set up time on some fixed networks is delayed by 4 seconds to avoid some of the issues associated with accidental generation of pulsed 112 on the networks.	<p><b>MEASURED:</b> 99.59% (97.84% answered within 5 sec.)</p> <p><u>Time period:</u> 01.01 – 30.11.2008</p> <p><u>Number of calls:</u> 32 295 406 calls to 112 and 999 constituting 99.5% of all calls</p> <p><u>PSAPs covered:</u> all</p>	Interpretation service available in 170 languages

**TABLE 3 - CALLER LOCATION – FIXED CALLS**

	Method of providing fixed caller location information (Push/Pull) and time needed to provide it on request (Pull)	Source of fixed caller location information	Availability of caller location in case of:		
			Subscribers not listed in directory services	Subscribers that have prevented calling line identification	Subscribers of VoIP operators providing PATS
<b>Belgium</b>	Pull	The database of the fixed incumbent, which includes also subscribers of some alternative operators. <u>Frequency of updating:</u> daily.  For subscribers of other operators caller location is obtained by contacting the relevant network operator directly	Yes	Yes	Yes
<b>Bulgaria</b>	Push	Centralised and comprehensive location information database.  <u>Frequency of updating:</u> twice a month	Yes	Yes	Yes for fixed VoIP subscribers
<b>Czech Republic</b>	Pull; average time needed to provide caller location – 0.5 sec, measured in January-October 2008	Centralised and comprehensive database administered by Telefonica O2 Czech Republic  <u>Frequency of updating:</u> daily	Yes	Yes	Yes for fixed VoIP

	Method of providing fixed caller location information (Push/Pull) and time needed to provide it on request (Pull)	Source of fixed caller location information	Availability of caller location in case of:		
			Subscribers not listed in directory services	Subscribers that have prevented calling line identification	Subscribers of VoIP operators providing PATS
<b>Denmark</b>	Push	Centralised comprehensive database  <u>Frequency of updating:</u> daily	<b>No</b>	Yes	Yes, if technically feasible
<b>Germany</b>	Pull; estimated average 90 sec.	Centralised comprehensive database giving access to databases of individual providers  <u>Frequency of updating:</u> from daily to weekly depending on provider	Yes	Yes	Yes, the registered address can be provided which may not be the real one in case of nomadic VoIP
<b>Estonia</b>	Pull; estimated average time 23 sec.	Caller location obtained directly from the relevant operator			
<b>Ireland</b>	Pull; average time 30 sec.; location provided for 100% calls within 1 min.	Centralised comprehensive database  <u>Frequency of updating:</u> daily	Yes	Yes	
<b>Greece</b>	Pull; estimated time from 3 to 7 minutes	Caller location obtained directly from the relevant operator	Yes	Yes	

	Method of providing fixed caller location information (Push/Pull) and time needed to provide it on request (Pull)	Source of fixed caller location information	Availability of caller location in case of:		
			Subscribers not listed in directory services	Subscribers that have prevented calling line identification	Subscribers of VoIP operators providing PATS
<b>Spain</b>	13 emergency centres Push / 6 emergency centres Pull  Estimated average time: 25 sec.	Some emergency centres use CMT database, others the incumbents' database.  <u>Frequency of updating:</u> overall update every six months, partial updates every two weeks.	Yes (in some emergency centres only)	Yes (in some emergency centres only)	Yes (in some emergency centres only)
<b>France</b>	Pull; estimated time: a few seconds	Centralised database including more than 80% of numbers  <u>Frequency of updating:</u> every few days	No, but work has started to produce a comprehensive directory		
<b>Italy</b>	Push, in the province of Salerno only	Caller location obtained directly from the relevant operator	Yes	Yes	Yes
<b>Cyprus</b>	Pull; estimated time: within 1 min.		Yes	Yes	Yes, the registered subscription address is provided by nomadic VoIP service providers if they cannot provide the actual location.
<b>Latvia</b>	Pull, location information is provided immediately	Centralised comprehensive database  <u>Frequency of updating:</u> daily	Yes		

	Method of providing fixed caller location information (Push/Pull) and time needed to provide it on request (Pull)	Source of fixed caller location information	Availability of caller location in case of:		
			Subscribers not listed in directory services	Subscribers that have prevented calling line identification	Subscribers of VoIP operators providing PATS
<b>Lithuania</b>	Pull, location information is provided immediately	Caller location obtained directly from the relevant operator	Yes	Yes	Yes in case of one provider
<b>Luxembourg</b>	Pull, provided in less than 1 sec.	Caller location obtained directly from the relevant operator	Yes	Yes	
<b>Hungary</b>	Pull, time needed varies between 20-30 sec. to 2-3 min.	Caller location obtained directly from the relevant operator	Yes	Yes	Yes
<b>Malta</b>	Pull, time needed varies; approximately 1 hour during office hours	Caller location obtained directly from the relevant operator	Yes, subject to more lengthy written procedure	Yes, subject to more lengthy written procedure	Yes
<b>Netherlands</b>	Push	Centralised comprehensive database  <u>Frequency of updating:</u> daily	Yes	Yes	Yes
<b>Austria</b>	'Pull' by electronic request to the telephone directory or verbal/written request to the respective network operator regarding unlisted numbers  Estimated time needed: less than 2 sec for electronic requests and up to 30 minutes for verbal written requests	Centralised database including all subscribers of fixed PATS operators, except unlisted numbers  <u>Frequency of updating:</u> daily	Yes – by verbal/written request to the respective network operator	Yes	No

	Method of providing fixed caller location information (Push/Pull) and time needed to provide it on request (Pull)	Source of fixed caller location information	Availability of caller location in case of:		
			Subscribers not listed in directory services	Subscribers that have prevented calling line identification	Subscribers of VoIP operators providing PATS
<b>Poland</b>	Pull; estimated average time: 16 sec.	Currently caller location obtained directly from the relevant operator; a centralised database is in preparation	Yes	Yes	Yes
<b>Portugal</b>	Push	Centralised comprehensive database  <u>Frequency of updating:</u> until the end of next working day if changes to subscriber data are made	Yes	Yes	Yes
<b>Romania</b>	Push	Centralised comprehensive location database  <u>Frequency of updating:</u> monthly	Yes	Yes	Yes
<b>Slovenia</b>	Push in case of 'Telekom Slovenije', 'T-2', 'Teleing' and 'Mobitel'; Pull in case of all other operators, estimated time (Min-Max): 1 min – 1 hour.	Caller location obtained directly from the relevant operator	Yes	Yes	Yes

	Method of providing fixed caller location information (Push/Pull) and time needed to provide it on request (Pull)	Source of fixed caller location information	Availability of caller location in case of:		
			Subscribers not listed in directory services	Subscribers that have prevented calling line identification	Subscribers of VoIP operators providing PATS
<b>Slovakia</b>	Push	Database of the incumbent operator 'Slovak Telecom' and a centralised database of alternative fixed operators updated once every 3 months	Yes	Yes	Yes
<b>Finland</b>	'Pull' by electronic request to a database; estimated time 2 sec and up to 10 sec in times of heavy traffic	Centralised comprehensive location database <u>Frequency of updating:</u> daily	Yes	Yes	Yes
<b>Sweden</b>	'Pull' by automatically retrieving caller location from a database; estimated time: max. 1-2 sec.	Centralised comprehensive location database <u>Frequency of updating:</u> daily	Yes	Yes	Yes for VoIP services provided at fixed location; subscription address for nomadic VoIP
<b>United Kingdom</b>	'Pull' by retrieving caller location from a database to which it is forwarded automatically for every call; estimated time: max. 2 sec.	Centralised comprehensive location database <u>Frequency of updating:</u> daily	Yes	Yes	Yes for VoIP services provided at fixed location

**TABLE 4 – CALLER LOCATION – MOBILE CALLS**

	<b>Method of providing mobile caller location and the time needed to provide it on request (Pull)</b>	<b>Type of caller location information</b>	<b>Availability of caller location in case of users of International roaming</b>	<b>Availability of caller location in case of users in the situation of national roaming</b>	<b>Possibility to additionally obtain the registered address of the subscription</b>
<b>Belgium</b>	Pull	Cell ID / Sector ID	Yes	No	Yes
<b>Bulgaria</b>	Push	Cell ID	Yes		No
<b>Czech Republic</b>	Push	Depending on the network operator, the caller location provided is area (consisting of one or more cells) with radius from 1 km/70% to 5 kms/70% or the Best Server Base Transceiver Station with accuracy from 700 m/70% up to 1500 m/70%	Yes	Yes	Yes
<b>Denmark</b>	Push	Cell ID	Yes	Yes	Yes
<b>Germany</b>	Pull; measured average 5 min. (in 2 Bundesländer)	Cell ID/Sector ID	Yes	Yes	Yes
<b>Estonia</b>	Pull, estimated average time: 23 sec.	Coordinates	Yes		No
<b>Ireland</b>	Pull	Cell ID	No	Yes	Yes
<b>Greece</b>	Pull; estimated time from 7 to 60 min.	Cell ID	Yes		Yes

	<b>Method of providing mobile caller location and the time needed to provide it on request (Pull)</b>	<b>Type of caller location information</b>	<b>Availability of caller location in case of users of International roaming</b>	<b>Availability of caller location in case of users in the situation of national roaming</b>	<b>Possibility to additionally obtain the registered address of the subscription</b>
<b>Spain</b>	<p>Push in 15 PSAPs (1 PSAP only receives the subscriber address, answer not available for another PSAP and a third PSAP is implementing the system.</p> <p>Pull in 3 PSAPs (1 PSAP only receives the subscriber address). Estimated average time: 30 sec.</p>	Cell ID/Sector ID	Yes, except in 5 PSAPs	Yes, except in 4 PSAPs.	Yes in general, but with some exceptions
<b>France</b>	Pull, estimated time needed: about 10 min. during working hours and less than 30 min outside working hours.	Postal code of the local community of the relevant cell Base Transceiver Station (BTS) (there are 36 000 local communities in France). This provides for accuracy of a few kilometres	Yes	Yes	No
<b>Italy</b>	Push, in the province of Salerno only	Cell ID	Yes	Yes	Yes
<b>Cyprus</b>	Push	Cell ID / Sector ID	Yes	Yes	Yes

	<b>Method of providing mobile caller location and the time needed to provide it on request (Pull)</b>	<b>Type of caller location information</b>	<b>Availability of caller location in case of users of International roaming</b>	<b>Availability of caller location in case of users in the situation of national roaming</b>	<b>Possibility to additionally obtain the registered address of the subscription</b>
<b>Latvia</b>	Pull, average measured time for 7361 requests: 10.3 sec.; caller location provided within 1 min. for 98.17% requests, min. 0.765 sec, max: 2 min. 57 sec.	Cell ID/ Sector ID	Yes	No	No
<b>Lithuania</b>	Pull (only in Vilnius PSAP), provided within 1.5 to 10 sec. and within one minute in all cases	Cell ID	Yes		Possible in one of three mobile networks
<b>Luxembourg</b>	Push	Cell ID	Yes		
<b>Hungary</b>	Pull, time needed varies between 20-30 sec. to 2-3 min.	Cell ID	Yes	Yes	No
<b>Malta</b>	Pull, time needed varies - approximately 1 hour during office hours	Cell ID	Yes		Yes if mobile subscription is registered
<b>Netherlands</b>	Pull (from KPN mobile network), provided in less than 1 sec.	Cell ID  'My SOS' devices used by speech disabled persons who can push a button to make the 112 call. It uses GPS technology and provides location data with accuracy of up to 5 meters	It is planned to make it possible	It is planned to make it possible	Yes (except for pre-paid card users who are not required to register)

	<b>Method of providing mobile caller location and the time needed to provide it on request (Pull)</b>	<b>Type of caller location information</b>	<b>Availability of caller location in case of users of International roaming</b>	<b>Availability of caller location in case of users in the situation of national roaming</b>	<b>Possibility to additionally obtain the registered address of the subscription</b>
<b>Austria</b>	Pull – verbal/written request to the respective network operator  Time needed: up to 30 minutes	Cell ID/ Sector ID	Yes	Yes	Yes, except users of pre-paid cards
<b>Poland</b>	Pull; Estimated average time: 13 sec.	Cell ID/ Sector ID  Timing advance technology with accuracy of 100 m to 1 km	Yes	Yes	Yes
<b>Portugal</b>	Push	Cell ID and radius  Accuracy from 100 m in urban areas to 30 km in rural areas	Yes		No
<b>Romania</b>	Push	Cell ID/ Sector ID	Yes	Yes	Yes
<b>Slovenia</b>	Push in case of ‘Mobitel’, ‘T-2’ and ‘IZI mobil’; Pull in case of all other operators; estimated (Min-Max) time: 15 min – 1 hour.	Sector ID	Yes	Yes	No

	<b>Method of providing mobile caller location and the time needed to provide it on request (Pull)</b>	<b>Type of caller location information</b>	<b>Availability of caller location in case of users of International roaming</b>	<b>Availability of caller location in case of users in the situation of national roaming</b>	<b>Possibility to additionally obtain the registered address of the subscription</b>
<b>Slovakia</b>	<p>Push in case of one operator (Telefonica O2);</p> <p>Pull in case of the other two operators (Orange and T-Mobile), caller location provided within 1 min. in case of 94.5% of requests; average time from 2-3 sec. to 20 sec. max.</p>	Cell ID/ Sector ID	Yes	Yes	Will be required as from 1 September 2009
<b>Finland</b>	Pull – by electronic request to a centralised mobile positioning database; estimated average time: 6 sec. or 3 to 30 seconds depending on operator and traffic	Cell ID/ Sector ID and also more accurate information based on the best available calculation method depending on the operator	Yes – by separate manual request to the operator	No	Yes
<b>Sweden</b>	‘Pull’ from a database; estimated time: max. 3-5 sec.	Cell ID, with or without timing advance	No, discussions started on implementing this facility	No, discussions started on implementing this facility	Yes
<b>United Kingdom</b>	‘Pull’ by retrieving caller location from a database to which it is forwarded automatically for every call; estimated time: max. 2 sec.	Cell ID, with or without timing advance	No	N/A	Yes, but not for all pre-paid customers of all service providers

**TABLE 5 – PROMOTION OF 112**

	Measures by the Authorities/NGOs				Measures by the operators				Specific measures for travellers in the EU
	Dedicated programs/campaigns in mass media	Display on posters, leaflets, websites etc.	Promotion in kindergartens / schools	Display on emergency vehicles	Publication on operator's websites, invoices etc	Inclusion in SIM address books	Display in telephone directories	Display in pay telephone booths	
<b>Belgium</b>		X		X		X (some operators)	Yes	Yes	Leaflets in international airports and train stations
<b>Bulgaria</b>	X	X	Planned	Planned	X	X	X	X	Welcome SMS to visiting mobile roaming users informing them about 112
<b>Czech Republic</b>	X	X	X	X	X		X	X	Information in hotels and in transport facilities
<b>Denmark</b>									
<b>Germany</b>	X	X	X	X			X	X	112 included in ADACS (German automobile club) publications
<b>Estonia</b>	X	X	X	X	X		X	X	Posters in airports and city transport
<b>Ireland</b>	X	X		X	X	X	X	X	Information in airports

	Measures by the Authorities/NGOs				Measures by the operators				Specific measures for travellers in the EU
	Dedicated programs/campaigns in mass media	Display on posters, leaflets, websites etc.	Promotion in kindergartens / schools	Display on emergency vehicles	Publication on operator's websites, invoices etc	Inclusion in SIM address books	Display in telephone directories	Display in pay telephone booths	
<b>Greece</b>		X							112 displayed on highway toll points of the Attica highway in Athens region, leaflets available at the airport
<b>Spain</b>	X	X	X	X	X (1 mobile operator)		X	X	Multilingual leaflets distributed in highway toll points and information sessions for foreign residents.
<b>France</b>								X	112 included in tourist publications
<b>Italy</b>					X	X	X	X	
<b>Cyprus</b>	X	X	X	X	X		X	X	Poster addressed to travellers planned in the 2009 nationwide campaign as well as dissemination of information in co-operation with travel agents and hotels.

	Measures by the Authorities/NGOs				Measures by the operators				Specific measures for travellers in the EU
	Dedicated programs/campaigns in mass media	Display on posters, leaflets, websites etc.	Promotion in kindergartens / schools	Display on emergency vehicles	Publication on operator's websites, invoices etc	Inclusion in SIM address books	Display in telephone directories	Display in pay telephone booths	
<b>Latvia</b>		X	X						
<b>Lithuania</b>	X	X	X	X	X	X (one operator)		X	
<b>Luxembourg</b>	X	X	X	X			X		Promotion by travel companies through brochures and other publicity material, including on tourism transport
<b>Hungary</b>		X		X		X	X	X	112 included in tourist brochures, information provided at airports and major railway stations; welcome SMS to visiting mobile roaming users informing them about 112
<b>Malta</b>		X		X	X	X	X	X	
<b>Netherlands</b>	X	X		X				X	112 displayed on pay telephone booths in airports. Campaign planned in 2009

	Measures by the Authorities/NGOs				Measures by the operators				Specific measures for travellers in the EU
	Dedicated programs/campaigns in mass media	Display on posters, leaflets, websites etc.	Promotion in kindergartens / schools	Display on emergency vehicles	Publication on operator's websites, invoices etc	Inclusion in SIM address books	Display in telephone directories	Display in pay telephone booths	
<b>Austria</b>		X	X		X	X (some operators)	X	X	112 signs on main traffic routes (highways)
<b>Poland</b>	X	X	X	X		X	X	X	
<b>Portugal</b>	X			X			X	X	
<b>Romania</b>	X	X	X	X	X		X		
<b>Slovenia</b>	X	X	X	X	X		X	X	
<b>Slovakia</b>	X (a new media campaign planned as from 11/2 2009)	X	X	X	X	X	X	X	
<b>Finland</b>	X (112 day on 11/2 yearly)		X	X			X	X	

	Measures by the Authorities/NGOs				Measures by the operators				Specific measures for travellers in the EU
	Dedicated programs/campaigns in mass media	Display on posters, leaflets, websites etc.	Promotion in kindergartens / schools	Display on emergency vehicles	Publication on operator's websites, invoices etc	Inclusion in SIM address books	Display in telephone directories	Display in pay telephone booths	
<b>Sweden</b>	X	X	X	X			X	X	Media campaign before vacations with information about 112 as the EU emergency number
<b>United Kingdom</b>					X	X	X	X	