



PSAP expert group

9th October 2008

Introduction / background



- **Airbiquity's intention with our involvement in eCall and the standardization is to support eCall with a cost effective technology that is quick to deploy.**
- **Airbiquity is committed to successful deployment of eCall**
 - Complexity and memory testing was therefore done on our candidate by the same test lab and in accordance with 3GPP S4 agreed requirements in order to provide the eCall stakeholders with a equal level of testing/analysis for more than one candidate technology.
 - Airbiquity has actively been supporting all eCall stakeholders in the development and deployment of eCall including CEN TC278 WG15 defining the operational requirements.
 - Supporting national eCall trial

Company Highlights



Expertise in Automotive Telematics

8.5 Million Vehicles Deployments Today

Unequaled Penetration Into Telematics Value Chain

Long-Term Extension of OnStar Contract to Use Airbiquity

Launch of GM - OnStar Program in Mainland China

Recent Selection by Ford Motor Company (Ford SYNC)

Recent Selection by BMW NA (BMW Assist)

Two Additional OEM Programs (Un-Announced)

Question 1



What is the projected cost of implementing your technological solution for the transmission of the eCall MSD to the PSAP?

- Airbiquity's inband modem solution can be implemented on different platforms giving the PSAPs maximum flexibility of integrating the eCall service
- These implementations can range from utilising a simple analogue line to a Digital E1 or a Voice over IP (VoIP) connection
- A benefit of this flexibility is to accommodate the different implementations of 112 across Europe
- Another benefit is the software solution can be easily integrated into existing PBX or CTI servers
- RAM Memory requirement is 4kB for the PSAP
- Complexity is 0.93 times CTM in AMR 12.2 error free conditions

Question 2



What would be the time-frame when your technology would be ready to be tested and deployed for the PSAPs, if selected

- Airbiquity's inband modem solution for eCall is ready for deployment TODAY
- It has been tested in both CDMA and GSM commercial live networks over AMR, EFR, FR, and HR codecs. over the past five years.
- We also have software packages, including detailed software specification, API, sample applications, implementation guidelines, and test procedures that could assist PSAP with implementation and testing TODAY
- An example of the readiness and resilience is Hurricane Gustav. OnStar utilise Airbiquity's inband modem received 3000 Calls per hour with a total of 75000 calls in one single day.

Question 3



What would happen to those PSAPs not upgraded in case they will receive an eCall with the MSD being sent with your technology

- This is an operational requirements questions: the eCall application in the vehicle will determine the timeout period before the modem switches from data mode to voice.
- CEN TC278 WG15.
- The PSAP operator in this case will not hear a 'beep', instead the operator will be in direct voice contact.

Question 4



What would be the cost of implementing your technological solution for the transmission of the eCall MSD to the in-vehicle system

As low as possible because of the following points:

- Integration with commercially available general purpose processors, such as ARM7, ARM9, PowerPC, and Renesas processors
- Works with different operating systems such as QNX, Embedded Linux, VxWorks, WinCE, MicroC, etc.
- Can be implemented on general purpose processors, DSPs or within GSM communication modules/chipsets leading to cost optimised solution for the IVS
- Our modem software already is commercially available with Siemens/Cinterion Wireless Modules, Wavecom, Continental, Denso, LGe, Motorola and Delphi
- RAM memory requirement is 3kB for the IVS
- Complexity is 0.67 times CTM in AMR 12.2 error free conditions

Question 5



What would be the time-frame when your technology would be ready to be tested and deployed within the vehicles if selected?

- Airbiquity's in-band modem software solution is available TODAY for testing by vehicle manufactures
- Can approach any of the Airbiquity's in-band modem enabled suppliers, such as Continental, Wavecom and Siemens/Cinterion Wireless Modules in Europe
- Airbiquity is working with several other suppliers including chipset manufacturers who will be enabled with Airbiquity's in-band modem by end of 2008
- Servers are operational today in Germany and Belgium, with an additional installation planned for end of October 2008 in Italy

Question 6



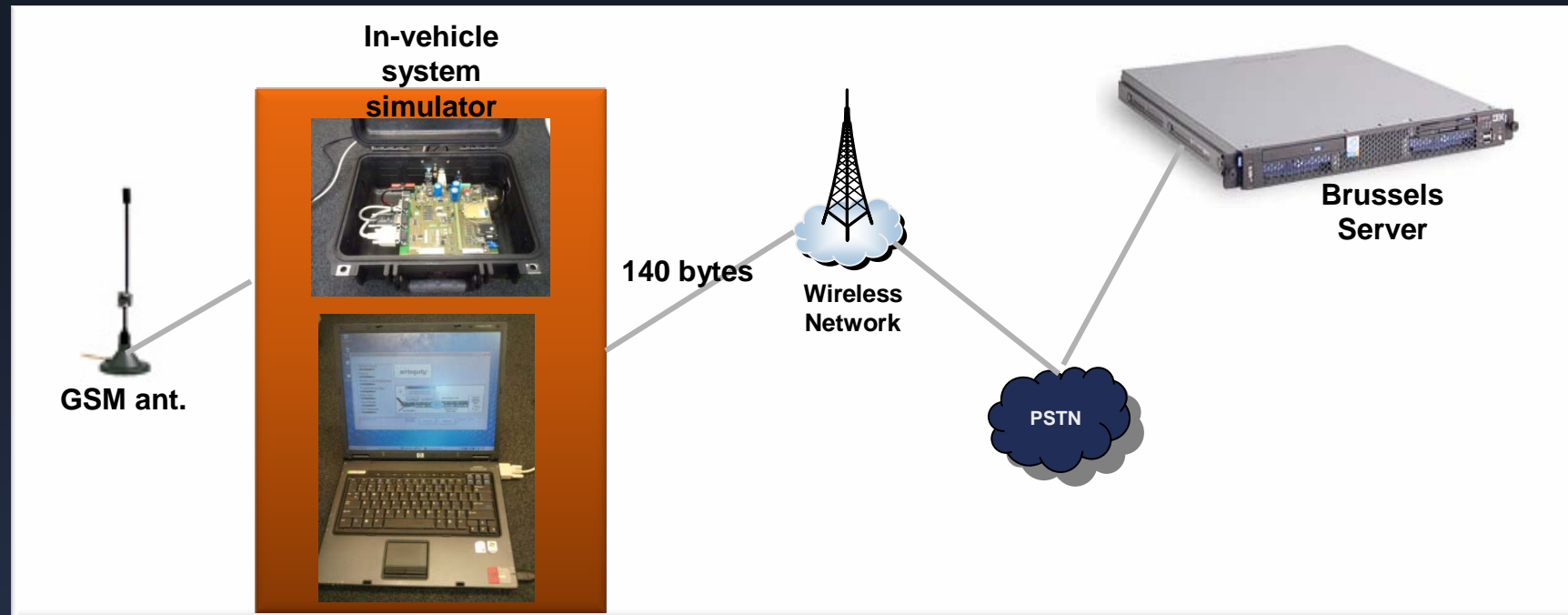
Please describe your licensing policy

- The licensing fee for the use of Airbiquity's in-band modem IPR for equipment installed within PSAPs or service providers operating under the control of the public authorities for eCall in Europe, enabling Pan European Public eCall using the emergency call number 112 is free of charge.
- The licensing fee for use of Airbiquity's in-band modem IPR for equipment installed within the vehicle to enable Pan European Public eCall using the emergency call number 112 will be a onetime nominal payment per installed equipment (IVS).



Thank you

eCall Demo



- Utilizes private number (not 112)
- Standard Pre-paid SIM
- No GSM network modification

PSAP end of Demo



ECalltaker Demo - Windows Internet Explorer

https://se1.airbiquity.com/ECalltaker/Calltaker?SK=0YGVlVeMmzBx18ZUEBKY

ECalltaker Demo

Call Data Display

Call received on trunk 0 line 0. MSD retrieved:

Automatic activation?	Yes
Manual activation?	No
Test call?	Yes
No confidence GPS Position?	No
VIN:	SCCFE33C9VHF66358
Timestamp:	2007-04-11 2:11:39
Latitude:	47.6039
Longitude:	-122.3379
Direction:	40 degrees
Service Provider IP:	10.20.30.40
Optional Data:	Airbag=1,Pitch=7,Roll=0,Collision=5302 (38 characters)

No operator was available to take call.

Wait for New Call End Demo



Back up

MSD Tx time



MSD Tx Time

