

## ANNEX I DIPOLE QUALIFICATION FOR THE EXTENDED 3-YEAR CALIBRATION INTERVAL

### I1 Dipole 835

The information and documentation below are provided to qualify the extended 3-year calibration interval of dipole.

#### I1.1 List of Equipment

No.	Name	Type	Serial Number
01	Network analyzer	E5071C	MY46110673
02	Power meter	NRVD	102083
03	Power sensor	NRV-Z5	100542
04	Signal Generator	E4438C	MY49070393
05	Amplifier	60S1G4	0331848
06	E-field Probe	SPEAG EX3DV4	3846
07	DAE	SPEAG DAE4	771
08	Dipole Validation Kit	SPEAG D835V2	443

#### I1.2 Results of Impedance, Return-loss and System validation

##### Dipole 835 - Head

		Year		Deviation	Limit
		2012	2013		
Impedance	Real ( $\Omega$ )	50.8	53.6	2.8 $\Omega$	Deviation < 5 $\Omega$
	Imaginary ( $\Omega$ )	-6.7	-2.2	4.5 $\Omega$	Deviation < 5 $\Omega$
Return-loss (dB)		-23.5	-23.3	0.2dB	Deviate < 0.2dB
System validation	10g	1.52	1.56	2.63%	Deviation < 10%
	1g	2.33	2.38	2.15%	Deviation < 10%

##### Dipole 835 - Body

		Year		Deviation	Limit
		2012	2013		
Impedance	Real ( $\Omega$ )	46.8	49.1	2.3 $\Omega$	Deviation < 5 $\Omega$
	Imaginary ( $\Omega$ )	-7.8	-3.7	4.1 $\Omega$	Deviation < 5 $\Omega$
Return-loss (dB)		-21.2	-21.4	-0.2dB	Deviate < 0.2dB
System validation	10g	1.59	1.61	1.26%	Deviation < 10%
	1g	2.42	2.42	0.00%	Deviation < 10%

According to the above tables, it is not necessary to recalibration the dipoles in 2013.