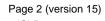




ETSI Rules of Procedure, 3 April 2019

## IPR INFORMATION STATEMENT AND LICENSING DECLARATION

IPR HOLDER / ORGAI	NISATION ("Declarant")	
Legal Name: ZTE	Corporation	
CONTACT DETAILS F	FOR LICENSING INFORMATION:	
Name and Title:	Dr. Mang Zhu , Chief IP Strategy Officer	
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Email:	zhu.mang@ztetx.com	URL:
IPR INFORMATION ST	TATEMENT	
In accordance with Clar AFFILIATES' present b to at least the ETSI Wo	use 4.1 of the ETSI IPR Policy the Declarant and/o pelief that the IPR(s) disclosed in the attached <i>IPR</i> ork Item(s), STANDARD(S) and/or TECHNICAL SP	or its AFFILIATES hereby informs ETSI that it is the Declarant's and/or its Information Statement Annex may be or may become ESSENTIAL in relation ECIFICATION(S) identified in the attached IPR Information Statement Annex.
The Declarant and/or it	s AFFILIATES (check one box only):	
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are not the proprie	etor of the IPR(s) disclosed in the attached IPR Info	ormation Statement Annex.
		or its AFFILIATES hereby irrevocably declares the following (check one box
To the extent of the ETSI Work Item, and/or its AFFILIATES Clause 6.1 of the ETSI	t that the IPR(s) disclosed in the attached <i>IPR Info</i> STANDARD and/or TECHNICAL SPECIFICATION are (1) prepared to grant irrevocable licences unde IPR Policy; and (2) will comply with Clause 6.1 bis	rmation Statement Annex are or become, and remain ESSENTIAL in respect N identified in the attached IPR Information Statement Annex, the Declarant or this/these IPR(s) on terms and conditions which are in accordance with of the ETSI IPR Policy.
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The Declarant a attached IPR Licensing	nd/or its AFFILIATES are not prepared to make the poctaration Annex).	e above IPR Licensing Declaration (reasons may be explained in writing in the
The construction, validi Terms in ALL CAPS on	ity and performance of this IPR information statement this form have the meaning provided in Clause 15	ent and licensing declaration shall be governed by the laws of France. of the ETSI IPR Policy.
	ormation Statement and Licensing Declaration form resentations and commitments provided in this form	i, you represent that you have the authority to bind the Declarant and/or its n.
Name of authorized per	rson: Dr. Mang Zhu	7~/
Title of authorized pers	· ·	er er
Place, Date:	Shen Zhen, 30/10/201	
		signed to: ETSI Director-General
	ETST - 650, route des Lucioles - F-06921 Sophia	Antipolis Cedex – France / Fax. +33 (0) 4 93 65 47 16





IPR Declaration reference: ISLD-201910-058

## ETSI Rules of Procedure, 3 April 2019

## **IPR Information Statement Annex**

	STANDARD,	TECHNICAL SPEC ETSI Work Item	IFICATION or		Proprietor	Application No.		Patent/ApplicationTitle	Country of registration	FUI	RTHER INFORMATI	ON
Disclos	Project or	Work Item or	Illustrative	Version					registration	Other members of this PATENT FAMILY,		AMILY, if any *
ure Number	Standard name	Standard No.	Specific part of the standard (e.g. Section)	(V.X.X.X						Application No.	Publication No.	Country of registration
1	5G	TS 36.213			ZTE Corporation	CN20131019608	CN103944855 B	Modulation processing	CHINA			
		TS 36.331						method and device				
		TS 38.331										
		TS 38.212										
		TS 38.213										
2	5G	TS 23.501			ZTE CORP [CN]	CN200710182241	CN101141412 B	Method for establishing	CHINA	WO2007CN03923	WO2009046598	Patent
		TS 23.502						dedicated bearing for subscriber terminal			A1	Cooperation Treaty
		TS 23.503										
		TS 24.501										
		TS 24.502										
3	5G	TS 24.647			ZTE CORP [CN]	CN20081091055	CN101448283 B	Method for triggering session termination and	CHINA	EP20080873814	EP2268094 A4	European Patent Office
		TS 23.501						realizing method and		11620000027242	US2011026466 A1	UNITED STATES
		TS 23.502						system thereof		US20080937212 WO2008CN73513	WO2009124441	Patent
		TS 23.503								WO2006CN73513	A1	Cooperation Treaty
		TS 24.501										Treaty
4	5G	TS 23.228			ZTE CORP	CN20091083288		Method and system for realizing safe bifurcation	CHINA			
		TS 23.237						call session in IP				
		TS 23.501						multimedia subsystem				
		TS 23.502										
		TS 33.501										
5	5G	TS 23.228			ZTE CORP	CN200910142257		Method and system for transmitting delay media	CHINA			
		TS 23.237						information of IP				
		TS 23.501						multimedia subsystem				
		TS 23.502										
		TS 33.501										
6	5G	TS 23.228			ZTE CORP	CN200910151034		Method and system for transmitting delayed media	CHINA	EP20100788631	EP2451133 B1	European Patent Office
		TS 23.237						information of IP		US201013260100	EP2451133 B1	UNITED STATES
		TS 23.501						multimedia subsystem		WO2010CN71185	EP2451133 B1	Patent
		TS 23.502								WO2010CN71103	LF2431133 B1	Cooperation
		TS 33.501										Treaty
7	5G	TS 36.213			ZTE CORP	CN201010111052		Measuring and reporting CHINA method of power climbing	CHINA	US201013259486	US8711722 B2	UNITED STATES
		TS 36.321						space and terminal				
		TS 38.211										
		TS 38.321										
		TS 38.213										



Page 3 (version 15)

IPR Declaration reference: ISLD-201910-058

8	5G	TS 36.213 TS 38.331		ZTE CORP	CN201010259088	CN101908951 B	Method for reporting channel state information	CHINA	BR20121125917	BR112012025917 A2	BRAZIL
		TS 38.212					(CSI) and base station		EP20150155423	EP2890175 A3	European Patent Office
		TS 38.213 TS 38.214							RU20120143746	RU2012143746 A	RUSSIAN FEDERATION
									EP20100856094	BR112012025917 A2	European Patent Office
									JP20130504099	BR112012025917 A2	JAPAN
									KR20127026617	BR112012025917 A2	KOREA (REPUBLIC OF)
									US201013640223	BR112012025917 A2	UNITED STATES
									WO2010CN80019	BR112012025917 A2	Patent Cooperation Treaty
9	5G	TS 29.213 TS 29.215		ZTE CORP	CN200910212378		Policy and charging control method and system based on time interval	CHINA	EP20100791363	EP2487943 B1	European Patent Office
		TS 23.501							US201013258288	EP2487943 B1	UNITED STATES
		TS 23.502									
		TS 29.513									
10	5G	TS 23.228		ZTE CORP	CN200910212359		Method for acquiring key management server information, and monitoring method, system and equipment	CHINA			
		TS 23.237									
		TS 23.501									
		TS 23.502									
		TS 33.501									
11	5G	TS 36.213 TS 38.211		ZTE CORP	CN201010114494		Method and device for pre- encoding based on hybrid	ethod and device for pre- coding based on hybrid nultiplex demodulation reference symbols	EP20100845593	EP2536231 A4	European Patent Office
		TS 38.212							JP20120552236	EP2536231 A4	JAPAN
		TS 38.213					rololollo dyllibolo		KR20127023613	EP2536231 A4	KOREA
		TS 38.214						MYOOAOOOOFF	EDOFOCOOA A A	(REPUBLIC OF)	
		10001211							MX20120009255 RU20120136144	EP2536231 A4 EP2536231 A4	MEXICO RUSSIAN
									RU20120136144	EP2536231 A4	FEDERATION
									US201013257662	EP2536231 A4	UNITED STATES
12	5G	TS 36.213 TS 38.211	ZTE CORP	CN201010116411		Transmission power configuration method and	CHINA	EP20100845564	EP2515448 B1	European Patent Office	
		TS 38.212					device for demodulation reference signals		JP20120552232	EP2515448 B1	JAPAN
		TS 38.213	TS 38.213				reference signals		KR20127020714	EP2515448 B1	KOREA (REPUBLIC OF)
		TS 38.214							MX20120009107	EP2515448 B1	MEXICO
								RU20120130037	EP2515448 B1	RUSSIAN FEDERATION	
								<u> </u>	US201013258310	EP2515448 B1	UNITED STATES



Page 4 (version 15)

IPR Declaration reference: ISLD-201910-058

13	5G	TS 36.331 TS 37.320		CN201010208734	CN102281568 B		CHINA	EP20110795028	EP2536196 B1	European Patent Office
		TS 38.331						JP20130513525	JP2013528334 A	JAPAN
		TS 38.423						KR20127026299	KR20120131207 A	KOREA (REPUBLIC OF)
		TS 38.473						MX20120012070	MX2012012070 A	MEXICO
								US201113583008	US2012329402 A1	UNITED STATES
								WO2011CN70060	WO2011157062 A1	Patent Cooperation Treaty
14	5 <b>G</b>	TS 36.213 TS 36.321	ZHONGX TELECOM	EQUIP		PHR (power headroom report) reporting method	CHINA	EP20110800100	EP2472942 B1	European Patent Office
		TS 38.321	COR	P		and system used in carrier aggregation scene		US201113499111	EP2472942 B1	UNITED STATES
		TS 38.331				aggrogation come		WO2011CN74607	EP2472942 B1	Patent
		TS 38.213								Cooperation Treaty
15	5G	TS 36.213	ZTE CO	ORP CN201010513116		Method and device for	CHINA	US201113574680	US8996055 B2	UNITED STATES
	00	TS 36.321		ONZO TO TO		reporting power head room under carrier collection conditions	OTHINA	00201110014000	0000000000000	Olin 25 Olivi 20
		TS 38.321								
		TS 38.331								
		TS 38.213								
16	5G	5G TS 23.501	ZTE CO	ORP CN20121004672		Method and system for accessing core network through non-third generation partnership project (non-3GPP)	CHINA	EP20120865052	EP2804420 A4	European Patent
		TS 23.502								Office
		TS 23.503						WO2012CN87205	WO2013104247 A1	Patent Cooperation
		TS 24.501								Treaty
		TS 24.502								
17	5G	TS 36.321	ZTE CO	ORP CN201110226077	Processing method and device of time alignment timer (TAT) in multi-carrier communication system	device of time alignment timer (TAT) in multi-carrier	CHINA	WO2012CN79819	WO2013020506	Patent
		TS 36.331							A1	Cooperation Treaty
		TS 38.321								,
		TS 38.331								
		TS 38.213								
18	5G	TS 23.501	ZTE CO	ORP CN201110285554		Trusted non-3GPP (3rd- Generation Partnership Project) access network element, method for accessing mobile network and detaching method	CHINA	EP20120834168	US9467962 B2	European Patent Office
		TS 23.502						US201214345437	US9467962 B2	UNITED STATES
		TS 23.503						WO2012CN81716	US9467962 B2	Patent
		TS 24.501						11020120101710	003407302 B2	Cooperation
		TS 24.502								Treaty
19	5G	TS 36.213	ZTE CO	ORP CN20121018906		Sending method for uplink signal and user equipment	CHINA	EP20120865980	US2018124712 A1	European Patent Office
		TS 36.321				signal and user equipment		US201214372993	US2018124712 A1	UNITED STATES
		TS 38.321						US201615139264	US2018124712 A1	UNITED STATES
		TS 38.331							US2018124712 A1	UNITED STATES
		TS 38.213							US2018124712 A1	Patent Cooperation Treaty



Page 5 (version 15)

IPR Declaration reference: ISLD-201910-058

20	5G	TS 36.213 TS 36.331		ZTE CORP	CN20111040570		Method and system for supplying service for	CHINA	EP20120746806	US9949134 B2	European Patent Office
		TS 38.211					terminal through TDD (Time Division Duplex) cell		US201214000175	US9949134 B2	UNITED STATES
		TS 38.331							WO2012CN71292	US9949134 B2	Patent
		TS 38.214									Cooperation Treaty
21	5G	TS 36.213		ZTE CORP	CN201310733202		Interference processing method and device,	CHINA	AU20190203705	AU2019203705 A1	AUSTRALIA
		TS 36.331 TS 38.331				network control unit and terminal		AU20140261928	AU2019203705 A1	AUSTRALIA	
		TS 38.212 TS 38.213							EP20140792107	AU2019203705 A1	European Patent Office
				JP20160542966	AU2019203705 A1	JAPAN					
									KR20167020424	AU2019203705 A1	KOREA (REPUBLIC OF)
									US201615213900	AU2019203705 A1	UNITED STATES
									WO2014CN78181	AU2019203705 A1	Patent Cooperation Treaty
22	5G	TS 36.213 TS 36.331 TS 38.331 TS 38.212 TS 38.214		ZTE CORP	CN201310198968		feedback method and	CHINA	AU20140271098	US9800312 B2	AUSTRALIA
									BR20151118475	US9800312 B2	BRAZIL
				CA20142899660	US9800312 B2	CANADA					
									EP20140800589	US9800312 B2	European Patent Office
		13 30.214							JP20150555562	US9800312 B2	JAPAN
									KR20157020844	US9800312 B2	KOREA (REPUBLIC OF)
									MX20150009961	US9800312 B2	MEXICO
									RU20150130505	US9800312 B2	RUSSIAN FEDERATION
									US201414764584	US9800312 B2	UNITED STATES
23	5G	5G TS 36.213 ZTE CORP TS 36.331 TS 38.331	S 36.213	ZTE CORP	CN201410197177	CN104202115 B	Higher-order coded	CHINA	AU20140393144	RU2645295 C1	AUSTRALIA
					modulation processing method, device, base station and terminal		EP20140891460	RU2645295 C1	European Patent Office		
		TS 38.212							JP20160567204	RU2645295 C1	JAPAN
		TS 38.212	1 1					KR20167034401	RU2645295 C1	KOREA (REPUBLIC OF)	
									RU20160144661	RU2645295 C1	RUSSIAN FEDERATION
									US201415309804	RU2645295 C1	UNITED STATES
									WO2014CN85689	RU2645295 C1	Patent Cooperation Treaty
24	5G	TS 36.213 TS 36.331 TS 38.211 TS 38.331		ZTE CORP	CN201410228839		Discover signal process method and base station	CHINA	US201415313880	US10327198 B2	UNITED STATES
		TS 38.213									

<sup>\*</sup> Information on other members of a PATENT FAMILY is provided voluntarily (Clause 4.3 of the ETSI IPR Policy).





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