



5G IMPLEMENTATION IN MONGOLIA

Dr. Chuluunbat Tsendsuren

Head of Internet Service and Network Division

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INTERNATIONAL
TELECOMMUNICATIONS
UNION



WORLD
TRADE
ORGANIZATION



OBLIGATION

OBLIGATION

To establish
independent,
regulatory organization



"Communications
Law" /2001/



"Radio Wave Law"
/1999/



"Postal Law"
/2003 он/



"Licensing Law"
/2022 он/

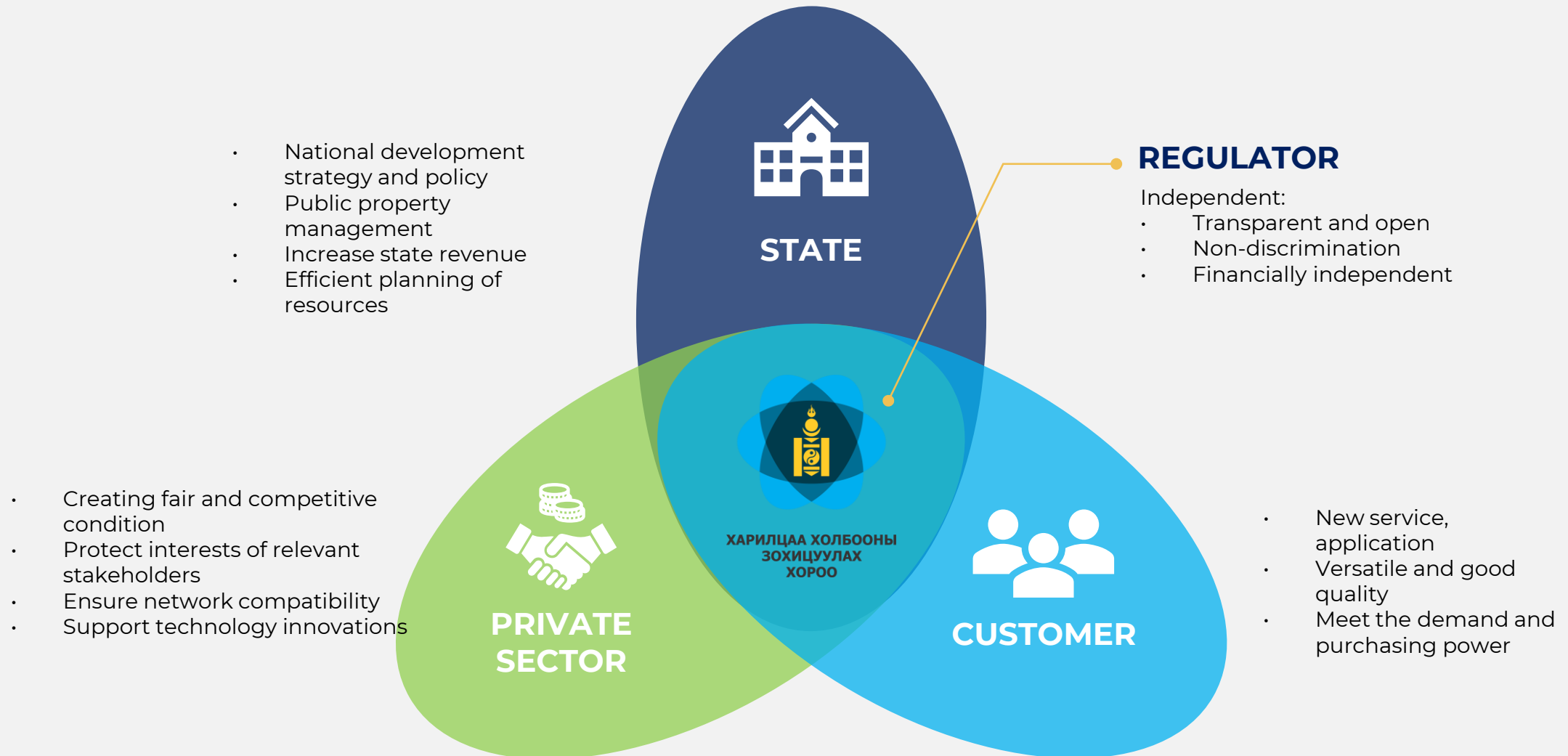


"Digital Signature
Law" /2021/



"Broadcasting Law"
/2019 он/

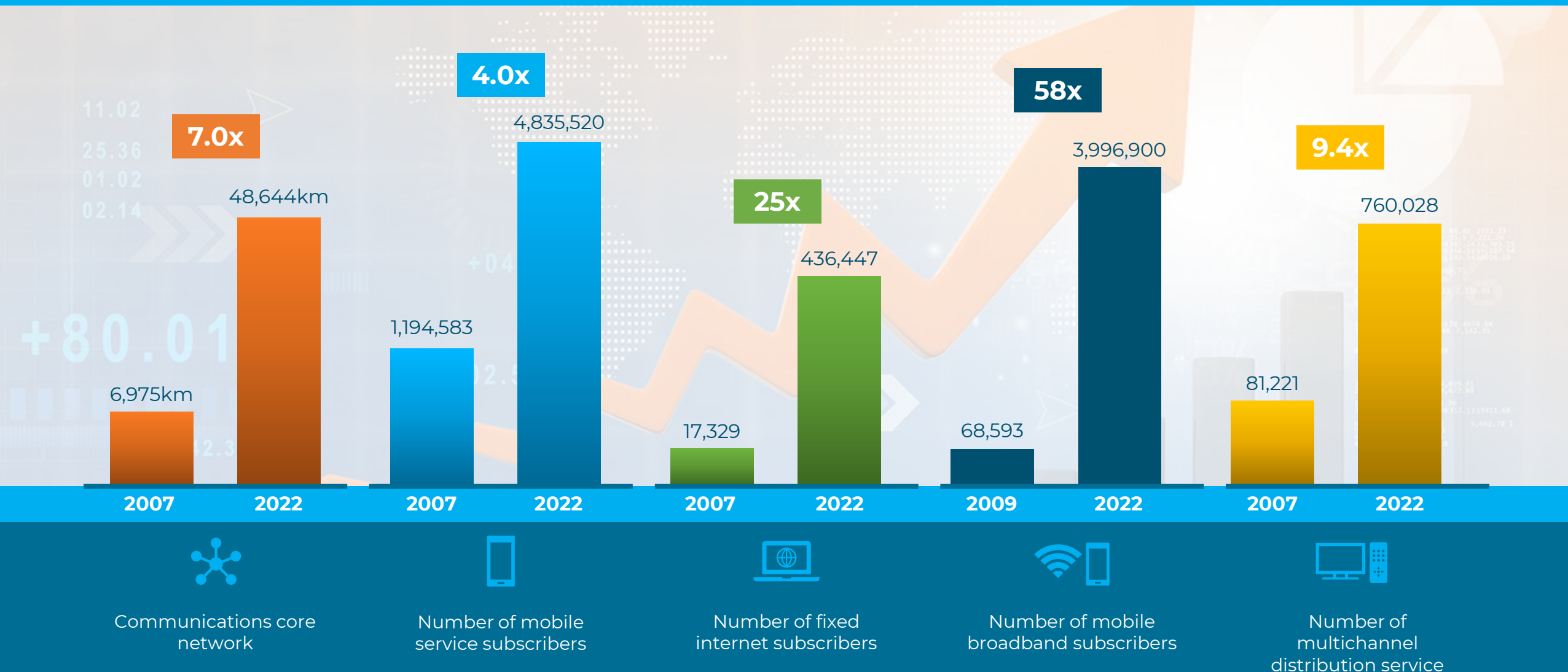
CRC functions to create efficient and fair competition in the communications market of all types of private enterprises and citizens, issuing special licenses as stated in law, making professional assessments and decisions.



COMPARISON OF INDUSTRY DEVELOPMENT INDICATORS (2007 – 2022)



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Spectrum Management

3.4.1. The service providers introducing the 5G shall resolve the issue of granting a special license to operate the service and use radio frequencies in accordance with the requirements of the Telecommunications, Radio Waves and other relevant laws, regulations, and conditions.

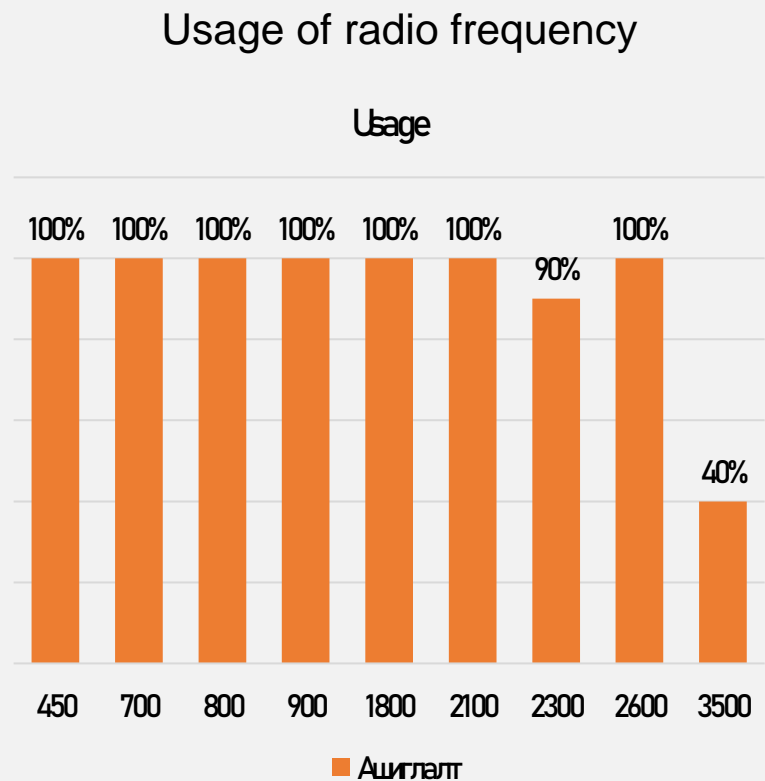
3.4.3. The necessary radio frequency band resources for the introduction of the ITU shall be formed within 4 years after the decision of the World Radio Conference.

3.4.4. A special license for the 5G mobile network operating services and the use of radio frequencies will be issued starting from 2023.

Use of next-generation mobile communication networks

4.5. A mobile network operators can operate in parallel with existing mobile communication systems when deploying a mobile communication service.

4.8. Starting from 2023, the possibility of using the radio frequencies currently used by service providers for 5G services will be opened.



No	MNOs	Frequency usage MHz
1	Mobicom LLC	175
2	Unitel LLC	214.4
3	Sjytel LLC	154
4	GMobile LLC	74

Spectrum usage for the 2G, 3G, 4G, 5G systems in Mongolia



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No	Band #	Downlink (MHz)	Uplink (MHz)	Total MHz	Usage
1	31	452.5 - 457.5	462.5 - 467.5	5 MHz x 2	2G
2	28	703 - 748	758 - 803	45 MHz x 2	4G
3	5	824 - 834	869 - 879	10 MHz x 2	2G
4	20	847 - 862	806 - 821	15 MHz x 2	4G
5	8	880 - 915	925 - 960	35 MHz x 2	2G/4G
6	3	1710 - 1785	1805 - 1880	75 MHz x 2	4G
7	1	1920 - 1980	2110 - 2170	60 MHz x 2	3G
8	7	2500 - 2570	2620 - 2690	70 MHz x 2	4G
9	40	2300 - 2390		90 MHz	4G
	TOTAL			710 MHz	2G/3G/4G
1	n78	3300 – 3400		100 MHz	5G
2	n77	3400 – 4200		800 MHz	5G
3	n79	4500 - 4800		300 MHz	5G
4	n258	24250 – 27500		3250 MHz	5G
	TOTAL			4,450 MHz	



- Investment and costs
- The user's mobile phones and devices
- Business and customer availability and usage
- Multiple sites
- Installation of 5G antennas on the roofs of offices and apartments
- Installing 5G antennas in current towers
- Electricity



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THANK YOU

