

*Explanation
Of
The NCPO Order 4/2019 on the Solution for Television and Telecommunication
Industries*

The Office of the National Broadcasting and Telecommunications Commission would like to clarify the NCPO Order 4/2019 on the Solution for Television and Telecommunication Industries dated April 11, 2019.

1. Rationales behind the NCPO order.

The telecommunication service providers have submitted the letters of request to the National Council for Peace and Order (NCPO) as follows.

1. On September 21, 2017, True Move H Universal Communication and Advanced Wireless Network submitted a letter requesting the NCPO for the extension of the last 900 MHz payment installment to be extended to seven equal installments.
2. On November 21, 2018, DTAC TriNet submitted a letter requesting the NCPO to restructure the 900 MHz payment term to be 15 equal installments.
3. On October 17, 2017, digital television service providers submitted a letter requesting the NCPO to reallocate 700 MHz spectrum reserved for digital television services and compensate the incumbent service providers.

2. The Essences of NCPO order

2.1 Solutions for Telecommunication operators.

1. According to the NCPO order, the term of payment for 900 MHz should be restructured from 4 installments to become 10 equal installments over ten years. This payment term shall start from the first year of payment in 2016 and not to be confused with the extension of the last payment to additional 10 installments. Hence, from the year 2020, the payment term extension will expand to only six years.

2. In the year 2020, all three operators shall pay back the payment deficits that they should have paid under the new payment term from 2016-2019 to the government. The amount totals 34,192 million Baht. This will result in 54,800 million baht revenue to the government in the year 2020 from 900 MHz license by three operators. From the year 2021-2025, the government will receive another 20,332 million baht per year and

4,073 million baht until 2027. The original payment scheme will generate revenue for the government to the year 2020 only.

3. In addition the payment restructuring, the NCPO order also stipulates that the mobile operators shall accept the 700 MHz reallocation term. The process will generate additional revenue for the government at least 75 billion baht. Combining the revenue from 700 MHz and 900 MHz, the government will receive 27,832 million baht per year and the additional revenue will last until 2029. On aggregate, the total revenue from telecom operators to the state will increase almost 40% as a result of the NCPO order. This amount of money still does not include the additional economic benefits from the investment by the private sector.

Unit: Million baht

Including 7% VAT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Total
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	
AIS															
Original payment scheme	8,603	0	4,301	4,301	63,744	0	0	0	0	0	0	0	0	0	80,950
New payment scheme (without 700 MHz)	8,603	0	4,301	4,301	23,269	8,095	8,095	8,095	8,095	8,095	0	0	0	0	80,950
TRUE															
Original payment scheme	8,603	0	4,301	4,301	64,433	0	0	0	0	0	0	0	0	0	81,639
New payment scheme (without 700 MHz)	8,603	0	4,301	4,301	23,614	8,164	8,164	8,164	8,164	8,164	0	0	0	0	81,639
DTAC															
Original payment scheme	0	0	4,301	0	2,151	2,151	32,126	0	0	0	0	0	0	0	40,728
New payment scheme (without 700 MHz)	0	0	4,301	0	7,917	4,073	4,073	4,073	4,073	4,073	4,073	4,073	0	0	40,728
Total three operators	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Revenue to the government prior to the NCPO order	17,206	0	12,904	8,603	130,328	2,151	32,126	0	0	0	0	0	0	0	203,317
Revenue to the government under the NCPO order (without 700 MHz)	17,206	0	12,904	8,603	54,800	20,332	20,332	20,332	20,332	20,332	4,073	4,073	0	0	203,317
The operator will be granted the 900 MHz payment restructuring term have to accept 700 MHz spectrum allocation. The current estimated price for 700 MHz should be no less than 25 Billion BAHT per one license (3 licenses in total for three mobile operators).					7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	75,000
Revenue to the government after the NCPO order	17,206	0	12,904	8,603	62,300	27,832	27,832	27,832	27,832	27,832	11,573	11,573	7,500	7,500	278,317

2.2 5G Economic Impact

1. The 900 MHz payment restructuring plan stipulates that the mobile operator has to accept the 700 MHz reallocation term. The whole process will relieve mobile operators from the cash flow constraints and enable them to invest in the future technology which will support the government’s Thailand 4.0 strategy.

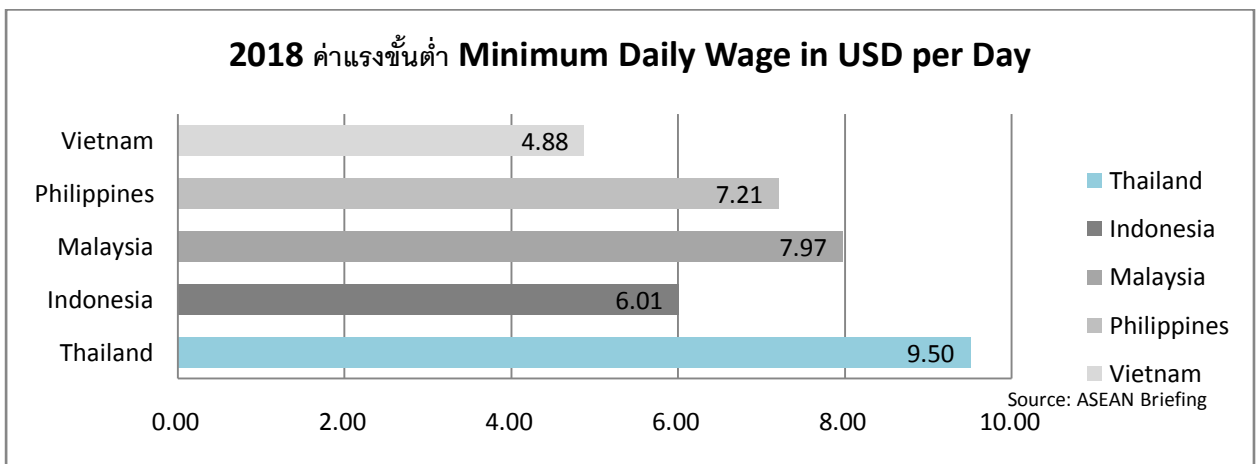
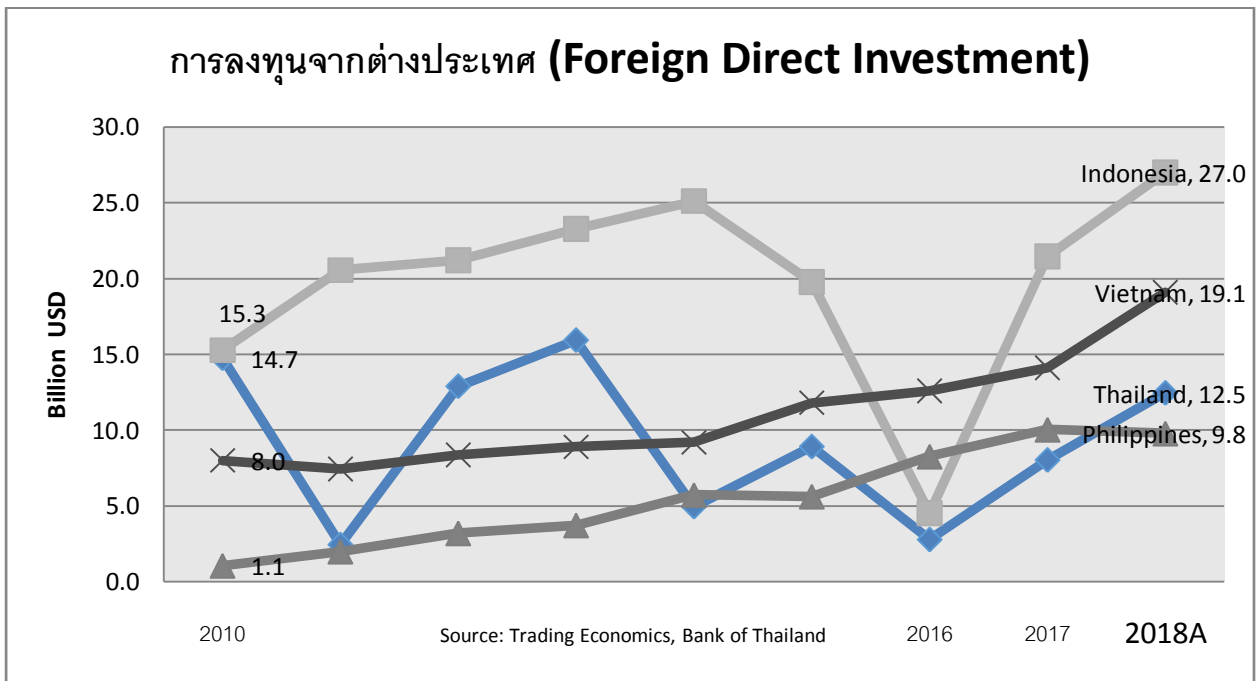
2. The Office of NBTC is aiming for the deployment of 5G in 2020-2021. From the Office of NBTC estimate, the economic impact from 5G will add up to 2.3 trillion baht by the year 2035. Of this amount, 634 billion baht will be generated by manufacturing industry, 124 billion baht by logistics and transportation and 96 billion Baht by agricultural sector. Additionally, 38 billion baht can be saved annually by 5G to help facilitate the healthcare services, which will become very beneficial to the country when Thailand fully enters the aged society in the next few years. Therefore, this new payment scheme will not only generate additional revenue to the government but it will provide a wide range of benefits to the Thai economy and society for the next ten years.



3. Apart from stimulating economic activities, 5G will be needed to increase competitiveness to the country. From 2010-2018 Thailand FDI has slightly declined from 14.7 billion USD to 12.5 billion USD. Over the same period, the neighboring countries have attracted more investment from overseas. Indonesia has almost doubled to 27

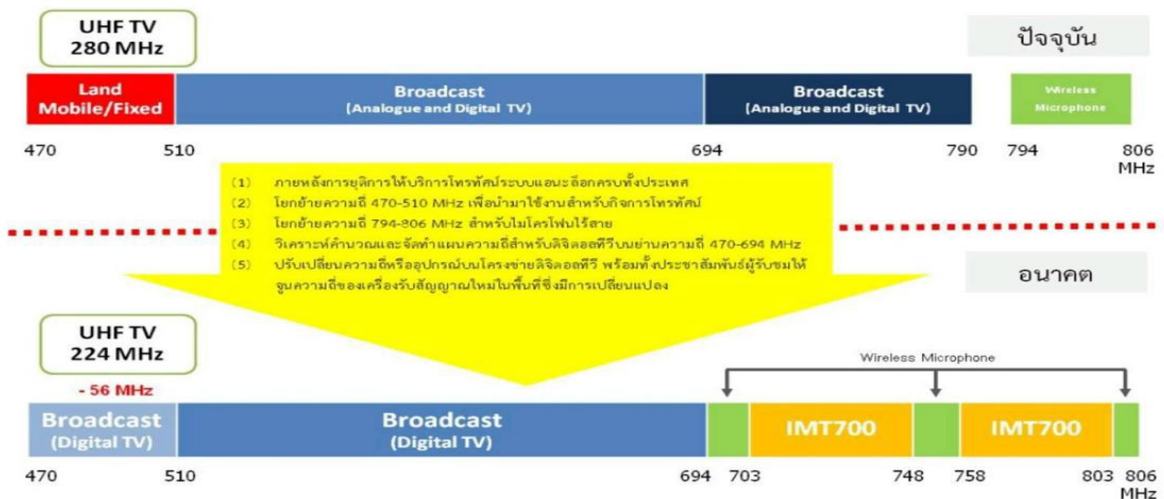
billion USD while Vietnam has more than doubled its FDI in 2010 to 19.1 Billion USD surpassing Thailand’s last year. Philippines also experienced a huge jump of 8 folds increase in FDI to reach 9.8 billion USD last year.

These countries all have lower cost of labor than Thailand – at least 20% lower - as can be seen from their daily minimum wages. Consequently, Thailand can no longer compete on a cheap labor cost advantage with our neighbors. It is of a paramount importance for Thailand to upgrade its infrastructures, technologies and our human capitals to be able to compete in the future. 5G will be one of those key enablers since 5G can be viewed as digital infrastructures for other technologies such as IoT, automation and AI to fully realize their potentials.



2.3 Solutions for Digital Television Operators.

1. Digital TV licensees were granted the rights to use spectrum from 510-790 MHz for 15 years from April 25, 2014 to April 24, 2019. During this period, the 700 MHz spectrum cannot be reallocated to 5G services by the legal constraints.



2. The NCPO order will enable the digital TV operator to forego its 700 MHz licenses to be reallocated for 5G before the license expiration date. The process will generate additional revenue to the government of at least 75 billion baht.

3. Comparing to the compensation costs for digital television spectrum license costs of 13,622.4 million baht and network rental costs (MUX) of 18,604.8 million baht to the additional revenue from 5G, the government will make a minimum gain of approximately 42,772.8 million baht.

Under the digital television licensing conditions, if the NBTC is willing to move digital television services to another spectrum band, the NBTC has to compensate the licensees, the network providers and Thai users. However, from the feasibility studies, although the current digital television service providers can technically move its operation from 700 MHz to 470 MHz, the cost of compensation will be enormous. The NBTC will have to facilitate the Thai citizens to change their television devices which will incur the cost of at least 100 billion baht from the current estimate. This plan is not only impossible financially, but it will also cause a great deal of inconveniences for Thai

people. Hence, NBTC believes that the majority of the digital television service providers can still retain their rights to use the 700 MHz spectrum band until the year 2029, and the available spectrum part can be reallocated for 5G to maximize the social and economic benefits. Under this plan, there will be no impact on the Thai people.

The Office of NBTC would like to thank all the comments and suggestions from various parties. If there is any suggestion that the Office of NBTC can adopt for the sake of the country and Thai people, the Office of NBTC is willing listen. The Office of NBTC also promises that we will implement the process in a fair and transparent manner and maximize the benefits to the country and society.
