4. End Users of Spectrum

Instructions:
* Fill the yellow boxes with your reply
* Further instructions are in *italics*
* Please go through all question sheets and reply to all relevant to you questions

QUESTIONS	REPLIES
Q70 Are there any applications, operations, or equipment that currently use the 470-694 MHz band in your activities?	
Yes/No	N
If yes, quantify the bandwidth used and describe use cases of interest and specific band used	
Q71 What is your expectation for your use of the 470-694 MHz band in the coming years and in the next decade (i.e from 2030 to 2040)?	
Quantify how much bandwidth you would like to be using in the coming years (up to 2030)	None
Quantify how much bandwidth you would like to be using in the next decade (2030-2040)	All we can (224 MHz)
Q72 Are you aware of any emerging technologies or planned developments within your area of operation that might justify the future allocation of part of the band in the 470-694 MHz range?	
Yes/No	Y
If yes, describe briefly	Equipment which can use this spectrum for mobile services (IMT) is expected to be available from 2030.
Q73 How do you imagine the hypothetical coexistence of mobile (IMT, PPDR or ad hoc) and DTTB services in the 470-694 MHz band?	
Will this affect your operations?	N
Could the result be different from the previous digital dividends (e.g. in the 700 and 800 MHz bands)?	
Describe possible scenarios for improved coexistence	Harmonization is needed to provide regulatory predictability and support technical certainty for mobile network deployment in the band
Q74 If you are a user of spectrum other than a DTT network provider, operating in the DTTB white spaces, could you continue to operate if the 470-694 MHz band were assigned to mobile networks? Could you migrate to other bands or should part of the band be allocated exclusively to your systems?	
Please explain:	
Q75 If you are a **Defence End-User** of the spectrum, please answer the following questions:	
i. What are the primary challenges you face with the current spectrum allocation for Defence purposes?	
ii. How would changes in spectrum regulation affect your Defence needs (e.g. transferring the band from DTTB to IMT, allocating part of the band to other users)? What spectrum regulation changes would be favourable for the Defence?	
Q76 If you are an **IMT End-User** of the spectrum, please answer the following questions:	
i. How would the 470-694MHz band be integrated into your mobile telecommunications infrastructure?	Expectations is that the spectrum will be used to provide internet connection and voice services in rural areas.
ii. Do you see needs for additional UL/DL performance and capacity in rural areas in your country at present or in the future? Could additional spectrum in 470-694 MHz address such needs?	Yes. This low band is far reaching and could help cover rural areas, which today struggle with a sufficient internet connection.
iii. What are the significant obstacles you face in accessing and utilising this spectrum?	Equiment (sending) is not ready on the market yet and roadmap for use and receiving equipment is not known yet.
iv. How would modifications in spectrum allocation affect your service delivery and technological deployment?	The spectrum would be used to cover rural areas, but also to penetrate buildings.
v. Do you see potential synergies of 5G Broadcast and additional mobile DL resources in 470-694 MHz in your country?	Yes.
vi. What would be your views if the 470-694 MHz band was to remain solely for DTTB until 2030 and even beyond 2040?	We need as much spectrum as possible to provide mobile services. The usage is increasing by 20-30% per year and therefore more capacity is needed in the future.
Q77 If you are a **PMSE End-User** of the spectrum, please answer the following questions:	
i. What are the critical PMSE use-cases is the band 470-694 MHz? (e.g. live events, program production, presentation, conferencing etc.)	
ii. How critical is this band to your production activities? *Rate your answer from 1 (not at all) to 5 (fully), 0 (no opinion)*	
iii. What are the primary challenges you encounter with the current allocation of the 470-694 MHz band?	
iv. Are you planning to move to new technologies in order to facilitate your work as an audio PMSE user? *Rate the following technologies from 1(not preferred) to 5 (mostly preferred), 0 (not*	
a. PMSE in 5G	
b. PMSE with a wide tuning range	
c. Cognitive PMSE	
d. Audio PMSE in another frequency band	
e. Other (specify)	
v. How does the PMSE community react to possible additional services, which also wish to use this frequency range in the future?	

vi. How would changes in spectrum policy, such as the possible transfer of the band from DTTB to IMT, or allocation of part of the band to other users, affect your ability to produce high-quality content? What spectrum regulation changes would be favourable for the PMSE community?

Q78 If you are a **PPDR End-User** of the spectrum, please answer the following questions:

i. What factors or trends do you anticipate will shape the decision of a possible allocation of the 470-694 MHz band for PPDR communications?

ii. What challenges do you face with the current spectrum available for PPDR purposes?

iii. How would changes in the 470-694 MHz band spectrum availability impact your operational efficiency?

iv. Is the use of PPDR in the 470-694 MHz band the best option?

Rate your answer from 1 (not at all) to 5 (fully), 0 (no opinion)

Please explain

v. How do you plan the demand and a possible utilisation of the 470-694 MHz band by PPDR?

vi. How would changes in spectrum regulation, such as transfer the band from DTTB to IMT or allocate part of the band to other users, affect the efficiency of PPDR? What spectrum regulation changes would be favourable for the PPDR community?

Q79 If you are a **Radio Astronomy End-User** of the spectrum, please answer the following questions:

i. How important is it for radio astronomy to have certain frequencies in the 470-694 MHz band free from any other transmissions?

Rate your answer from 1 (not at all) to 5 (fully), 0 (no opinion)

ii. What are the main challenges you face with the current spectrum allocation for radio astronomy?

iii. How would changes in spectrum regulation, such as transfer the band from DTTB to IMT or allocate part of the band to other users, affect your research capabilities and outcomes? What spectrum regulation changes would be favourable for the Radio Astronomy community?

Q80 If you are a **Radiolocation End-User** of the spectrum, please answer the following questions:

i. How important is it for radio location to have certain frequencies in the 470-694 MHz band free from any other transmissions?

Rate your answer from 1 (not at all) to 5 (fully), 0 (no opinion)

ii. What are the main challenges you face with the current spectrum allocation for radio location?

iii. How would changes in spectrum regulation, such as transfer the band from DTTB to IMT or allocate part of the band to other users, will impact radio location services? What spectrum regulation changes would be favourable for the Radio Location community?

Q81 If you are an End User of Spectrum of some kind, please provide us with any other comments or information that you consider significant and not covered by this questionnaire.

(preferably no more than 500 words)