

Annex 1

Key

In use/available for WBB

Potential for WBB (near term)

Medium term potential (>2015)

Possibly in very long timeframe

| Spectrum Band | Amount of Spectrum | Common Allocation | Current Use | Constraints | Potential for Wireless BB | Remarks |
|-----------------|--------------------|--|---|--|---------------------------|---|
| 1375-1400 MHz | 25,00 | FIXED, MOBILE, RADIOLOCATION | Defence systems, low capacity fixed links -FS with 1427-1452 MHz, Radio astronomy | | No | Refarming of FS/Radar use to other bands required. Wireless cameras in some countries |
| 1427 - 1452 MHz | 25,00 | FIXED,MOBILE except aeronautical mobile, SPACE OPERATION (E/S) | Defence systems, low capacity fixed links - FS with 1375 - 1400 MHz | Its use would require to reform military use to other bands, e.g. in region of 2 GHz. Existing fixed links and ENG/OB would mitigate against use for WBB | Yes | Refarming of FS use to other bands required. Wireless cameras in some countries |
| 2300 - 2400 MHz | 100,00 | FIXED, MOBILE, Amateur, Radiolocation | Aeronautical telemetry, Amateur, Mobile applications, SAP/SAB | Parts of the band are used for aeronautical telemetry on a national basis. Wireless cameras | Yes on a shared basis | CEPT studies underway. Some countries already assigned to wireless broadband (including |

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|------------------------|--------|--|--|--|---|---|
| | | | | | | outside Europe) |
| 5350 - 5470 MHz | 120,00 | AERONAUTICAL RADIONAVIGATION, EARTH EXPLORATION-SATELLITE(active), RADIOLOCATION, SPACE RESEARCH | Active Sensors, Defence Systems, Position fixing, Radiodetermination applications, Shipborne & VTS radar, Weather radar | | Yes (based on studies) | sharing studies underway in JTG 4-5-6-7 WRC-15 (potential for WiFi) |
| 5725-5875 MHz | 150,00 | FIXED, FIXED-SATELLITE, RADIOLOCATION, MOBILE, Amateur, Amateur-satellite | Amateur, BFWA, Defence systems, ISM, SRDs, Radio determination applications, RTTT, Weather radars, Fixed links, FSS, UWB | | Yes (limited to applications according to ECC/REC(06)04; only in 5755 – 5850 MHz) | Band identified for BFWA: ECC/REC(06)04: (150 MHz) |
| 5875-5925 MHz | 50,00 | FIXED, FIXED-SATELLITE, RADIOLOCATION, MOBILE, Amateur, Amateur-satellite | Amateur, SRDs, Radio determination applications, RTTT, Fixed links, FSS, UWB, Defence systems | RTTT (Intelligent Transport Systems), FSS Earth stations | Yes | sharing studies underway in JTG 4-5-6-7 (potential for Wi-Fi); 2008/671/EC on the harmonised use of radio spectrum in the 5875 - 5905 MHz frequency band for safety related applications of Intelligent Transport |

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| | | | | | | | Systems |
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Annex 2

| Frequency band [MHz] | Size [MHz] | Current Use | Pros of WBB in band | Cons of WBB in band | Potential for WBB [timeframe] | Action to make band available for WBB |
|----------------------|------------|---|---|--|-------------------------------|--|
| 1375 – 1400 | 25 | <ul style="list-style-type: none"> • Military services, primarily radiolocation and tactical radio. | <ul style="list-style-type: none"> • Already allocated on a co-primary basis to the fixed and mobile services. | Its use would require to refarm civil and military use to other bands,. Existing fixed links and ENG/OB would mitigate against use for WBB in some countries | Medium. [Post-2015] | Re-allocation of bands 1375 – 1400 MHz / 1427 – 1452 MHz to WBB may be best option for sharing with other services. |
| 1427 – 1452 | 25 | <p>wireless cameras (ENG/OB) in some countries (e.g. NL)</p> <ul style="list-style-type: none"> • In bands 1375 – 1400 MHz / 1427 – 1452 MHz (CEPT harmonisation for Fixed Service), low numbers of P-MP applications and some new development for low capacity, long range private links, in particular for public utilities. | <ul style="list-style-type: none"> • The bands around 1500 MHz are covered by the 3GPP standards, which provide an opportunity for LTE and LTE-A equipment to become available in the bands. • in some countries very limited actual use of the band. | | | <p>Designation of bands 1375 – 1400 MHz paired with 1427 – 1452 MHz for WBB would require:</p> <ul style="list-style-type: none"> • allocation of alternative frequencies for tactical radio applications, e.g. in the frequency bands 2025-2070 MHz and 2200-2245 MHz (in line with NATO Joint Civil / Military Frequency Agreement). • identification of higher frequency bands adapted for fixed links. • Protection of adjacent band services, in particular of the passive band (1400-1427 MHz) for both radioastronomy and Earth Exploration Satellite Service. |

| Frequency band [MHz] | Size [MHz] | Current Use | Pros of WBB in band | Cons of WBB in band | Potential for WBB [timeframe] | Action to make band available for WBB |
|----------------------|------------|---|--|--|---------------------------------|---|
| 2300-2400 | 100 | Aeronautical telemetry and SAB/SAP. | <ul style="list-style-type: none"> • After identification for IMT at WRC-07, this band has started to be used in other parts of the world for broadband mobile applications. • Equipment is available. | <p>Strategic governmental usages in this band such as aeronautical telemetry or CCTV for security purposes need to be considered.</p> <p>Use of band by ENG/OB needs to be considered.</p> <p>Band may not be available in all Member States for WBB</p> | Long. [post 2020] | For the band 2300-2400 MHz, noting that CEPT has established a project to develop harmonised implementation measures for MFCN in the band, the EC should consider adopting complementary measures to further promote shared and flexible use of the band between wireless broadband applications and other services, based on LSA regulatory provisions facilitating the long term incumbent use of the band in the territory of those Member States that wish to maintain such use |
| 5350-5470 | 120 | Active Sensors, Defence Systems, Position fixing, Radiodetermination applications, Shipborne & VTS radar, Weather radar | <p>Potential band for Wi-Fi Applications</p> <p>Allocating the band for Wi-Fi could be useful to mobile networks in providing data offload and indoor wireless connectivity</p> | <p>New routers would be required to utilise this additional spectrum for Wi-Fi. Existing harmonised Wi-Fi standards need to be developed further</p> | Medium. [post – 2015] | Sharing studies underway in JTG 4-5-6-7. Studies should be undertaken to see if band could be utilised for WiFi |

| Frequency band [MHz] | Size [MHz] | Current Use | Pros of WBB in band | Cons of WBB in band | Potential for WBB [timeframe] | Action to make band available for WBB |
|----------------------|------------|--|--|---|-------------------------------|---|
| 5725-5875 | 150 | Amateur, BFWA, Defence systems, ISM, SRDs, Radio determination applications, RTTT, Weather radars, Fixed links, FSS, UWB | Band identified by CEPT for Broadband Fixed Wireless Access (ECC/REC/(06)04) | May not be available in most Member States. | Medium. [post-2015] | Studies could be undertaken to see if this band could be more widely available for wireless fixed broadband including WiFi, taking into account the studies relating to the upper adjacent band and its out-of-band emissions |