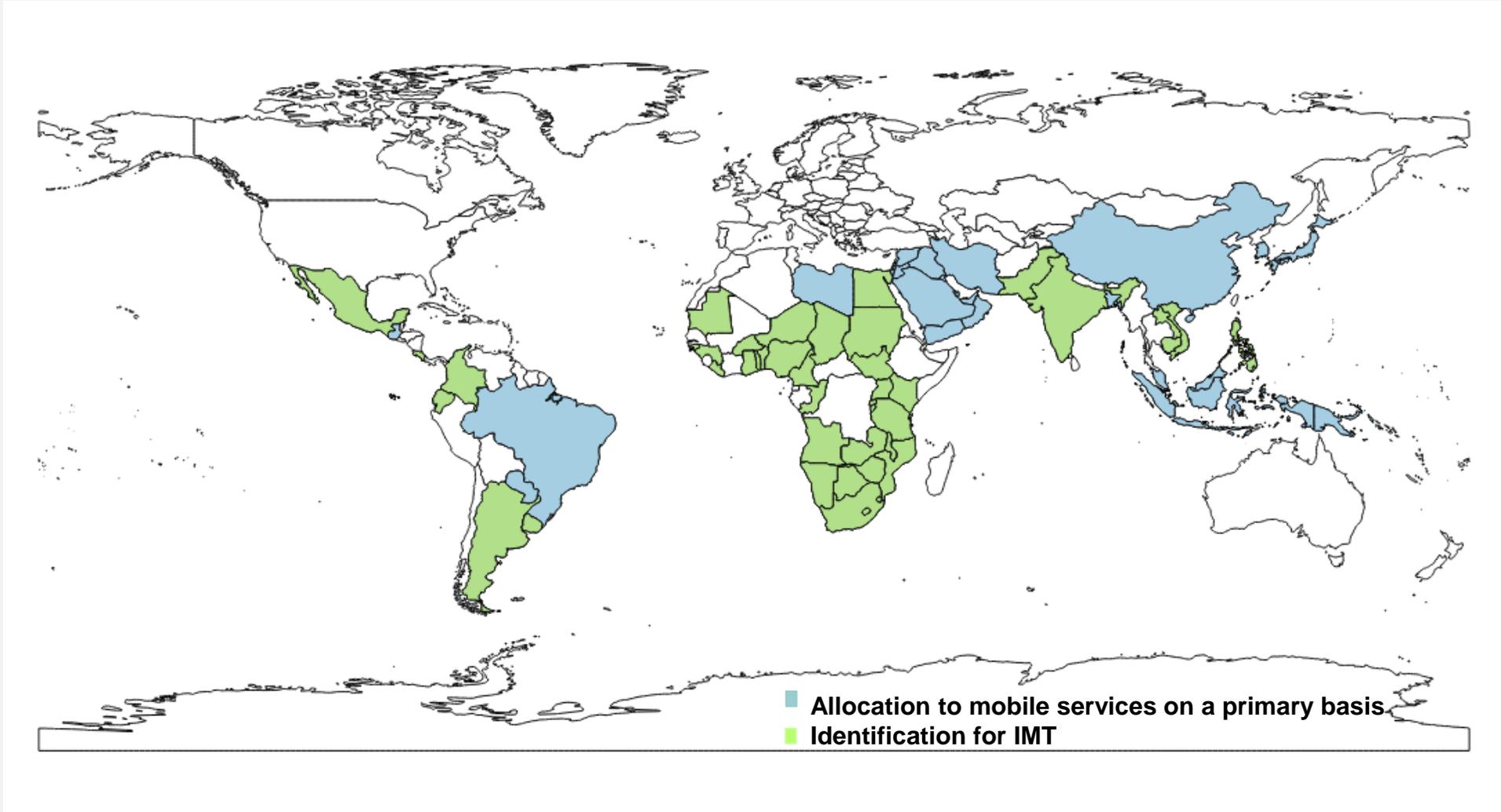


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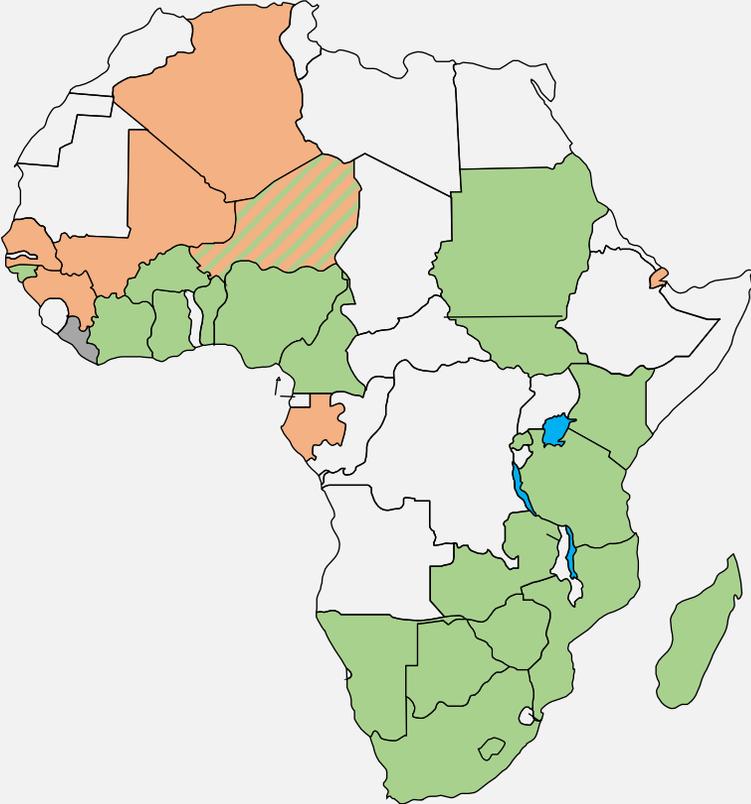
Motivation for new work item on new LTE band for 3.3-3.4 GHz for Africa Huawei, HiSilicon

WRC15 outcome for 3300 – 3400 MHz

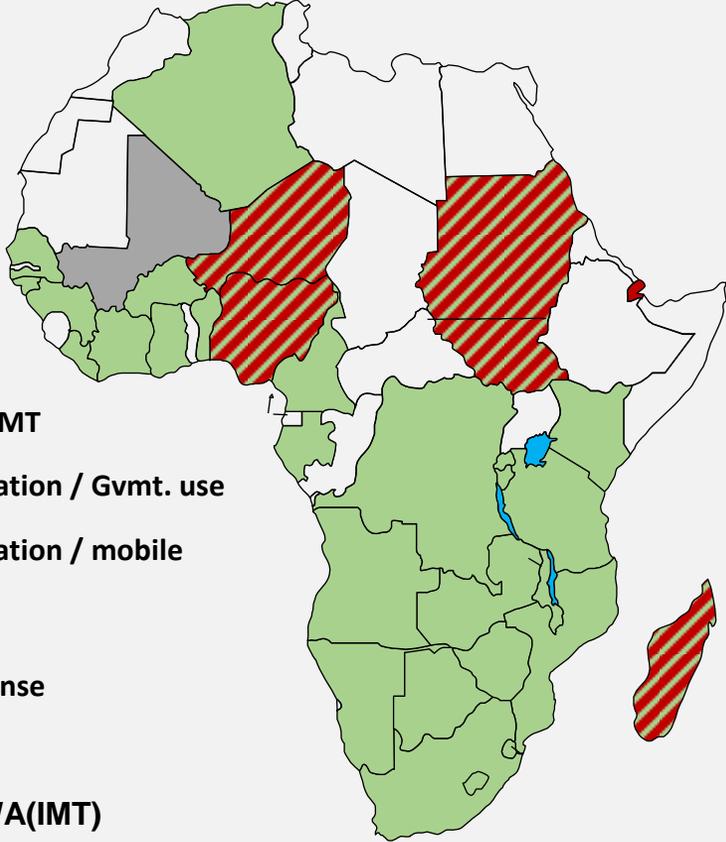


C band in Africa

3300 – 3400 MHz: plans for future use



3400 – 3600 MHz: current national identification and use



- BWA or IMT
- Radiolocation / Gvmt. use
- Radiolocation / mobile
- No use
- No response
- FSS
- FSS/BWA(IMT)

Notes:
Current use of the 3300 – 3400 MHz is very low
The majority of countries using 3400 – 3600 MHz for BWA will transition to IMT in the short term
Sources: ATU and SADC questionnaires, SADC frequency allocation table, discussion with administrations

C-Band globally – National & Regional preferences

- 3300 – 3400 MHz
 - Broad multi-country IMT identification (1st time): **45 countries from 3 regions** (33 in Africa, 6 in LATAM, 6 in APAC)
 - Region 1 (Africa): Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Congo (Rep. of the), Côte d'Ivoire, Egypt, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Malawi, Mauritania, Mozambique, Namibia, Niger, Nigeria, Uganda, the Dem. Rep. of the Congo, Rwanda, Sudan, South Sudan, South Africa, Swaziland, Tanzania, Chad, Togo, Zambia and Zimbabwe
 - Region 2: Argentina, Colombia, Costa Rica, Ecuador, Mexico, Uruguay
 - Region 3: Cambodia, India, Lao P.D.R., Pakistan, Philippines, Vietnam
- 3400 – 3600 MHz
 - Nearly global IMT identification: **165 countries**
 - Region 1: whole Region (new countries: 6 in ASMG + 19 in ATU + 4 in common between ASMG and ATU) + 2 in CEPT + 5 in RCC + 3 in common between CEPT and RCC
 - Region 2: whole Region, all new identifications
 - Region 3: 2 new countries, 11 countries in total: Australia (new), Bangladesh, China, India, Iran, Japan, Korea, New Zealand, Pakistan, Philippines (new) Singapore
- 3600 – 3700 MHz
 - Limited multi-country IMT identification: **4 countries in Region 2**
 - Region 2: Canada, Colombia, Costa Rica, **USA**
- 3600 – 3800 MHz
 - Harmonised for terrestrial electronic communication services in the European Community

Justification

- The frequency band 3300 – 3400 MHz has been allocated at WRC15 to mobile systems in several countries in the three ITU regions according to footnotes 5.429, 5.429A, 5.429C and 5.429E. It has also been identified for IMT, in accordance to footnotes 5.429B, 5.429D and 5.429F, in many other countries. The countries that are on the footnotes cut across the three regions of the ITU with 33 countries in Africa (R1), 6 countries in Americas (R2) and 6 countries in Asia (R3)
- In Africa, several administrations are in the process of updating their Frequency Allocation Tables to identify 3300 – 3400 MHz for IMT. For instance SADC (Southern Africa Development Community) has already done so, and the SADC member countries will soon follow. The 3400-3600 MHz block is broadly identified already for mobile use in Africa.
- Considering the interest across all the three regions for the 3300-3400 MHz band to be used for IMT, and in particular in Africa, there is a need for a new TDD E-UTRA band that covers the frequency range 3300-3400MHz to allow LTE deployments of this band. Following discussion with stakeholders, the supporters of this work item believe that a new 3GPP band should be defined for LTE TDD in the 3300-3400 MHz frequency block, with support for Carrier Aggregation with Band 42 and Band 43.
- This will allow African countries to release the 3300-3400 MHz block for IMT, and for those countries also interested in migrating the 3400-3600 MHz from BWA to IMT, to support both bands through carrier aggregation. Beyond Africa, a new 3300 – 3400 MHz band with carrier aggregation with Band 42 could also be deployed in countries from other regions – such as India or the countries in the Middle East – that are also listed in the ITU RR footnotes mentioned above, and that had also previously identified 3400 – 3600 MHz for IMT. Carrier aggregation with Band 43 would be beneficial for Colombia.

Objective

- The objectives of core part in this work item are as follows:
 - Specify a new LTE TDD band 3300-3400MHz to include band numbering and supported bandwidths
 - Specify necessary RF core requirements
 - Specify two UE power classes: 23 dBm and 26 dBm
 - Add the newly specified band to RRM specifications and other related RAN4 specifications
- The objective of performance part in this work item is as follows:
 - Add the new band into the performance requirements