



Draft Decision on

Proposed Cellular Mobile Spectrum Aggregation Limits

Inviting public comment and input

February 27, 2025

INTRODUCTION

- 1 Pursuant to Section 332 of the FSM Telecommunications Act of 2014 (**the Act**), the Telecommunication Regulation Authority (**TRA** or **Authority**) has sole responsibility for licensing the use, and the allocation and assignment¹ of the radio frequency spectrum for the provision of communications services in the FSM. No person may use radio frequencies in a manner that is inconsistent with an allocation and assignment of radio frequencies by the TRA under the Act.
- 2 In performing its functions and duties and exercising its powers under Section 332, the TRA shall ensure that the radio frequency spectrum is managed and used in a manner that is:
 - a. open, non-discriminatory, competitively neutral, objective and transparent;
 - b. consistent with any applicable international treaties, commitments, recommendations or standards legally binding on the FSM; and
 - c. economically efficient and permits evolution to new technologies and services.
- 3 Pursuant to Schedule 1 of the Spectrum Licensing Rules (**the Rules**), we must issue Cellular Mobile Service Licenses in accordance with the National Table of Frequency Allocations (**the NTFA**), which was adopted on October 26, 2023.
- 4 In the event we receive an application for a license for mobile cellular spectrum, we must issue a Request for Applications to the public, in accordance with section 2(3) of Schedule 1 of the Rules.
- 5 In accordance with section 17(3) of the Rules, a Request for Applications must be published on our website and must:
 - a. identify the blocks or bands of available Radio frequency spectrum for assignment and their expected use;
 - b. set forth the applicable eligibility requirements to obtain a Spectrum License;
 - c. establish aggregation limits in accordance with section 9 [of the Rules], as applicable;
 - d. specify, where applicable, the number of Spectrum Licenses to be assigned;
 - e. establish the timeframe to present applications, which shall be at least thirty (30) days after publication;
 - f. reference the application and annual fees attached to the Spectrum License;

¹ The terms "allocation" and "assignment" are defined in Annex D of the FSM National Table of Frequency Allocations, 2023.

- g. provide a draft of the Spectrum License to be assigned; and
 - h. address such other matters as the Authority may deem appropriate.
- 6 With regard to paragraph 5.c above, we have applied spectrum aggregation limits in the past. In Requests for Applications for spectrum in the 1800MHz band published in January 2024 and for spectrum in the 2100MHz band published in April 2024, we limited the number of blocks available for assignment in the applicable band. In each case, the purpose of the aggregation limit was to “*ensure no one licensee can control more than half of the spectrum*” in the band.
- 7 Our preliminary decision is that the existing cellular mobile spectrum aggregation limit policy could be modified in order to be more effective at promoting competition and innovation in the FSM market.
- 8 The purpose of this consultation is to gather and consider public comments on the TRA’s draft decision so that we can consider stakeholder views before finalizing a policy for cellular mobile spectrum aggregation limits.

CONSULTATION FEEDBACK INFORMATION

- 9 The TRA invites written comments and feedback on this draft decision and the attached draft determination on cellular mobile spectrum aggregation limits (**Attachment 2**).
- 10 We have provided a comments form in **Attachment 1** for providing your responses.
- 11 Responses may be submitted in person at TRA’s offices in Pohnpei, or sent to consultations@tra.fm. Responses are due by **March 14, 2025**.
- 12 Submissions will be made public, unless there is a specific request for confidentiality made under Section 322 of the Act.²
- 13 After receiving feedback, we will publish our response to submissions, which will state our views and reasons for either making changes or maintaining our initial views.

PRINCIPLES FOR AGGREGATION LIMITS

- 14 Section 9 of the Rules permits but does not require the TRA to set aggregation limits on the amount of radio frequency spectrum that may be assigned to or held by a licensee, its parent corporation or other entities within its corporate group. Such limits may be established as a specific amount of radio frequency spectrum or as a percentage of available

² See the comments form (Attachment 1) for details.

spectrum in the bands covered, and may apply to one or more radio frequency spectrum bands.

- 15 Under section 9(3) of the Rules, aggregation limits must be aimed at:
- a. promoting competition and innovation in the FSM market; and
 - b. avoiding undue concentration of radio frequency spectrum resources by a licensee or its affiliates.
- 16 We consider that aggregation limits are useful to provide the conditions for effective competition among network operators in the FSM. Aggregation limits:
- a. help ensure no one licensee can secure an unfair advantage over other licensees simply by virtue of the amount of spectrum licensed to it, especially where this has the effect of limiting the amount of spectrum available to competitors;
 - b. can help ensure there is spectrum available to new entrants seeking to enter the FSM market to compete with established network operators; and
 - c. by promoting competition and new entry, help create an environment in which network operators innovate in terms of the networks and services they offer to the public.

EXISTING AGGREGATION LIMIT POLICY

- 17 There are two types of spectrum aggregation limits, "*in-band*" and "*cross-band*."
- 18 In-band aggregation limits apply to individual radio frequency spectrum bands, such that a licensee who has reached the limit applicable to one band cannot be assigned additional spectrum in that band. However, the licensee can still request spectrum in another band, subject to any limits applicable to that second band.
- 19 Cross-band aggregation limits apply to multiple radio frequency spectrum bands at the same time, such that a licensee's overall spectrum holdings are taken into account in assessing whether that licensee has a fair and equitable amount of spectrum.
- 20 Section 9(2)(d) of the Rules expressly permits the TRA to establish both in-band and cross-band aggregation limits.
- 21 Our existing spectrum aggregation limit policy is an in-band limit. In Requests for Applications for spectrum in the 1800MHz band published in January 2024 and for spectrum in the 2100MHz band published in April 2024, we limited the number of blocks available for assignment to any one licensee in the applicable band. In each case, the purpose of the aggregation limit was to "*ensure no one licensee can control more than half of the spectrum*" in the band. This aggregation limit policy promotes competition and innovation in the FSM market and avoids the undue concentration of radio frequency spectrum resources by a

licensee or its affiliates, by ensuring that part of any band is available for another licensee and that licensees can obtain an appropriate mix of spectrum below 1 GHz (to provide broad geographic coverage) and above 1 GHz (to provide sufficient capacity and higher speeds).

- 22 We understand that, when rolling out a 5G network, cellular mobile network operators generally seek 100 MHz of bandwidth in order to maximize the benefits and features of 5G technology. Whenever possible, they seek 100 MHz of contiguous spectrum as this allows for more efficient use of the spectrum, but it is also possible to use “carrier aggregation” to combine spectrum in two or more bands in order to achieve 100 MHz of bandwidth. Under our existing in-band spectrum aggregation limit policy, a licensee would be required to use carrier aggregation in order to achieve 100 MHz of bandwidth, as no available cellular mobile spectrum band in the FSM contains 200 MHz or more.
- 23 Further, we consider that different cellular mobile spectrum aggregation limits might be more effective at achieving the objectives of the Act.

PROPOSED NEW AGGREGATION LIMITS

- 24 Our goals in setting new spectrum aggregation limits for cellular mobile spectrum are to:
- a. Create the conditions for effective competition among up to three cellular mobile operators;
 - b. Ensure existing operators have enough spectrum to effectively serve their customers;
 - c. Ensure at least one other national operator has access to the same amount of spectrum as the incumbent cellular mobile operator (i.e. FSMTC);
 - d. Prevent any one operator from monopolizing the most valuable cellular mobile spectrum bands; and
 - e. Maximize the flexibility of operators to choose the spectrum that best serves their commercial needs.
- 25 Having considered these goals, as well as the spectrum bands and available bandwidth for cellular mobile services in FSM, and consistent with our objectives under Section 303 of the Act to encourage market entry of new licensees to FSM, to provide conditions for effective competition between providers, to extend access to communications services, and to promote the overall development of communications in FSM, we are of the view that different spectrum aggregation limits might provide licensees with greater access to spectrum while achieving the objectives of section 9(3) of the Rules. Specifically, we are of the preliminary view, subject to consultation, that:
- a. we should **continue to establish aggregation limits** on the amount of cellular mobile spectrum that may be assigned to or held by a licensee, its parent corporation or other entities within its corporate group;

- b. **different limits ought to apply to cellular mobile spectrum bands above 1 GHz than to those below 1 GHz;**
- c. it would be most appropriate in the FSM context to **maintain individual in-band aggregation limits for each of the two existing cellular mobile spectrum bands below 1 GHz** (the 700 APT and the 900 E GSM bands), and that the spectrum aggregation limit for **the 700 APT band should be set at 40 MHz (2 x 20 MHz)** and for **the 900 E GSM band should be set at 30 MHz (2 x 15 MHz);**
- d. it would be most appropriate in the FSM context to establish an overall cross-band aggregation limit for the cellular mobile spectrum bands above 1 GHz, which should be set at **190 MHz of bandwidth across the four bands** currently available for assignment to licensees.
- e. it would be most appropriate in the FSM context to **maintain an in-band aggregation limit for the 1800MHz and 2100MHz bands,** and that the spectrum aggregation limit for **the 1800MHz band should be set at 60 MHz (2 x 30 MHz)** and for **the 2100MHz band should be set at 50 MHz (2 x 25 MHz);**
- f. in-band spectrum aggregation limits for **the TD 2300 band and for the TD 2600+ band should be set at 100 MHz;** and
- g. **each of the spectrum aggregation limits discussed above should apply separately to spectrum in each State.**

CONSULTATION PROCESS

- 26 On December 27, 2024, we published a consultation paper inviting public comment on Proposed Cellular Mobile Spectrum Aggregation Limits (**the Consultation Paper**). In that paper, we presented the proposed new spectrum aggregation limits described in paragraph 25 above and the reasons for the new limits. Only one party, Kacific Broadband Satellites International Inc. (**Kacific**), responded.
- 27 On February 6, 2025, we published a redacted version of Kacific's comments. No party provided cross-comments.
- 28 Kacific was largely supportive of the proposals, and recommended that the TRA periodically review the aggregation limits to adapt them to technological and market developments and evolving spectrum demands. Kacific recommended, in particular, that the aggregation limits be reviewed biennially instead of the 5 years proposed in the Consultation Paper.
- 29 We agree that it is important to review policies from time to time in order to ensure that they continue to help achieve the objectives of the Act. However, we also consider that a policy involving spectrum needs to be in place for a sufficiently long period of time to have an effect in the market, particularly in light of the lead times involved in procuring and

deploying equipment that uses the spectrum in question. We are concerned that 2 years might be too short and that a longer period will typically be required. We therefore propose that the proposed spectrum aggregation limits remain in place for **no less than 2 years and be reviewed within 5 years of being adopted**, subject to any exceptional circumstances which might warrant an earlier review.

- 30 In the confidential portion of its comments, Kacific also recommended that the policy [Commercial in Confidence].³
- 31 We note that, consistent with section 9(3) of the Rules, the proposed spectrum aggregation limit policy is aimed at (a) promoting competition and innovation in the FSM market; and (b) avoiding undue concentration of radio frequency spectrum resources by a licensee or its affiliates. Therefore, we consider that it already balances promoting competition with promoting innovation.
- 32 We also note that [Commercial in Confidence]. We therefore decline to modify the policy as requested.

DRAFT DECISION

- 33 In light of the comments received, we consider that no changes are required to the proposed cellular mobile spectrum aggregation limits policy, except that it will remain in place for no less than 2 years and be reviewed within 5 years of being adopted, subject to any exceptional circumstances which might warrant an earlier review.
- 34 We propose, therefore, to adopt the cellular mobile spectrum aggregation limits policy as described in **Attachment 2** to this Draft Decision.

ANNEX

- 1 Attachment 1: Comments Form
- 2 Attachment 2: Draft Determination

³ Commercial in confidence, or c-i-c, refers to confidential business information disclosed to the TRA for a specific purpose. In the public Draft Decision, this information will be redacted and represented with blacked out blocks of text.

Attachment 1 - Comments Form



Feedback on Draft Decision: Proposed Cellular Mobile Spectrum Aggregation Limits Policy

Information of the commenting party

Full name	
Organization	
Phone number	
Email	
Is confidential information being submitted?	Y/N (Specify below)

Comments

	Comment	Proposed changes	Confidentiality ⁴
<i>Paragraph Number or Section of Consultation Document, or Consultation Question, that Comment Pertains To</i>	<i>Please describe comments on specific section or question. Please be as detailed as possible and explain why you hold your views and what the potential impact of the Authority's proposals would be</i>	<i>Please suggest an alternative to the proposal(s) (if applicable)</i>	<i>If confidential, please explain the reasons for the confidentiality request</i>
<i>(Insert rows as needed)</i>			

Please complete this form in full and submit to consultations@tra.fm or in person before **March 14, 2025** to:

Takuro Akinaga
Chief Executive
FSM Telecommunication Regulatory Authority
KSP Building, 2nd Floor
Main Street, Kolonia
Pohnpei FM 96941, Federated States of Micronesia

⁴ Confidentiality requests are managed under the rules set out in Section 322 of the Telecommunications Act. Respondents should clearly mark which information is claimed as being confidential and should provide reasons of what commercial harm will result should the information be published. Respondents who make a request for confidentiality should also provide a redacted copy of their submission, with all confidential information removed, that the TRA may publish.

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Attachment 2 – Draft Determination

The Authority has made, and hereby publishes, the following [draft] determination on cellular mobile spectrum aggregation limits:

Subject to the Spectrum Licensing Rules,

- 1 A licensee, its parent corporation or other entities within its corporate group may apply for a license to use cellular mobile spectrum up to the following limits for each of the following spectrum bands:

Spectrum Band		Aggregation Limit
700 APT	maximum of	40 MHz (2 x 20 MHz)
900 E GSM	maximum of	30 MHz (2 x 15 MHz)
1800 DCS	maximum of	60 MHz (2 x 30 MHz)
IMT 2100	maximum of	50 MHz (2 x 25 MHz)
TD 2300	maximum of	100 MHz
TD 2600+	maximum of	100 MHz

- 2 A licensee, its parent corporation or other entities within its corporate group may apply for a license to use cellular mobile spectrum *above* 1 GHz up to a maximum of 190 MHz across all applicable bands (the 1800MHz, 2100MHz, TD 2300 and TD 2600+ bands), subject to the applicable in-band aggregation limits.
- 3 These aggregation limits apply separately in each State.