



Case T-085

Defragmenting the 3.4-3.8 GHz
spectrum band

Consultation outcome and decision

Document No: JCRA 23/16

Publication date: 3 August 2023

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Contents

1	Overview and summary	1
2	Introduction, background and legal framework	3
3	Consideration of responses to consultation	7
4	Consultation outcome, our decision and next steps	16

1 Overview and summary

- 1.1 The duties of the Jersey Competition Regulatory Authority (the **Authority, we, us or our**) include protecting and furthering the short-term and long-term interests of users of telecoms services in Jersey. We are presently considering how best to ensure Islanders can access and rely on high-quality next generation mobile services in the future, which means examining and potentially reviewing the existing allocation of local radio spectrum.
- 1.2 Radio spectrum is an invisible finite resource used to wirelessly connect mobile devices to the networks of telecoms companies. International standards bodies have agreed that the 3.4-3.8 GHz spectrum band is ideal for deploying 5G services, with various recommendations for telecoms companies to ideally have access to large contiguous spectrum blocks to achieve the most efficient services.¹
- 1.3 We are presently progressing the award of spectrum licences to local telecoms companies planning to provide 5G services. However, there are limits to the amount of spectrum available because of historic licensed allocations in the 3.4-3.8 GHz band. The UK telecoms regulator Ofcom has responsibility for managing Jersey's spectrum, including issuing new spectrum licences or making changes to existing ones, on the recommendation of the Authority. We have a longstanding practice of establishing and taking account of the views of local stakeholders before making any spectrum licensing or management recommendations to Ofcom.
- 1.4 In February 2023, we issued a consultation (the **Defragmentation Consultation**) explaining our provisional view is that defragmentation should take place through historic licensees moving within the 3.4-3.8 GHz band or having their spectrum allocations removed with due notice. This document summarises the responses received by the consultation closure date of 31 March 2023, our analysis of them and conclusions drawn.
- 1.5 We found these responses are broadly supportive of our proposals on this matter while also presenting several points for further consideration. Having analysed these points we conclude that our provisional view set out in the Defragmentation Consultation is correct, although we have taken into account comments on our proposed licence revocation period in one case and revised a related element of our decision as a result. Our decision is therefore that we will recommend to Ofcom that:

(a) The licence for spectrum presently held by Clear in the local 3.4-3.8 GHz band is revoked subject to a one-year notice period;

¹ See Document JCRA 23/04 Defragmenting the 3.4-3.8 GHz spectrum band: Proposal for consultation for more information - <https://www.jcra.je/cases/2023/t-085-defragmenting-the-34-38-ghz-spectrum-band/t-085-defragmenting-the-34-38-ghz-spectrum-band-consultation/>

- (b) The licence for spectrum presently held by Newtel in the local 3.4-3.8 GHz band is revoked subject to a three-year notice period²; and
- (c) New 5G licensees are permitted to access any unused 3.4-3.8 GHz spectrum during these notice periods, following agreement with existing historic licensees over sharing arrangements necessary to avoid interference between services.

- 1.6 The next steps in this case will be for us to recommend that Ofcom revokes licences for spectrum presently held by Clear and Newtel in the local 3.4-3.8 GHz band with the respective notice periods.
- 1.7 Alongside the consultation, we engaged affected historic licensees with an offer to move from their existing spectrum allocations to alternative ‘Limited Service’ allocations within the local 3.4-3.8 GHz band.³ In view of the decision to proceed with the Authority’s provisional decision to defragment the band, we have reaffirmed this offer prior to recommending Ofcom issue any licence revocations.
- 1.8 In consideration of certain points received through the Defragmentation Consultation, we also commit to continue engaging with those affected historic licensees presently offering live commercial services during their notice period with the aim of helping them continue to meet established customer demand.

² Sure also has licensed spectrum within this band but has agreed to give-up as a condition of receiving a new allocation through the recently concluded 5G Spectrum Award: ITT.

³ Intended for potentially limited coverage networks providing either publicly available or private services for a potentially limited number of users, with each package having – see <https://www.jcra.je/cases/2022/t-064-5g-spectrum-award-2022/t-064-5g-spectrum-award-process-2022-updated-statement-of-intent/>

2 Introduction, background and legal framework

2.1 This section provides summary information on the case, consultation and associated legal framework. Its contents are:

- [Background to consultation](#)
- [Legal framework](#)
- [Process and timetable](#)

Background to consultation

2.2 Radio spectrum is an important and finite resource used to wirelessly connect mobile devices to the networks of telecoms companies. Our modern communication needs increasingly rely on wireless services for both personal and business reasons, with demand projected to grow in the future.⁴ One important duty of any telecoms regulator is managing the demand for radio spectrum with the aim of ensuring enough is made available to meet potential future requirements.

2.3 We are progressing the process of ensuring spectrum is available for next generation wireless services, both in the short-term and long-term. Fifth Generation, or 5G, which is the latest mobile standard, requires substantial allocations of spectrum to deliver higher download speeds and lower latency services along with enabling a wide range of potential new applications such as driverless cars and the Internet of Things.

2.4 In 2022, we carried out a process allowing local telecoms companies interested in providing 5G services to apply for available spectrum (the **5G ITT**)⁵ offering three x Full Service spectrum packages as defined in our 5G Spectrum Award: Updated Statement of Intent (the **5G Statement of Intent**).⁶ This recently concluded with recommendations that Ofcom issue new 5G spectrum licenses to JT and Sure.⁷ We also plan to run a second 5G ITT in 2023 for the remaining Full Service spectrum package.

⁴ Document JCRA 23/03 Defragmenting the 3.4-3.8 GHz spectrum band: proposal for consultation sets out extensive information on this subject – see <https://www.jcra.je/cases/2023/t-085-defragmenting-the-34-38-ghz-spectrum-band/t-085-defragmenting-the-34-38-ghz-spectrum-band-consultation/>

⁵ Document JCRA 22/60 Information Note 5G Spectrum Award: Expressions of interest welcome – see <https://www.jcra.je/cases/2022/t-064-5g-spectrum-award-2022/t-064-5g-spectrum-award-information-note-itt-expressions-of-interest/>

⁶ Intended for Island-wide networks providing publicly available services for the maximum number of users – see <https://www.jcra.je/cases/2022/t-064-5g-spectrum-award-2022/t-064-5g-spectrum-award-process-2022-updated-statement-of-intent/>

⁷ See <https://www.jcra.je/cases/2022/t-064-5g-spectrum-award-2022/> for more information.

- 2.5 Both successful applicants stated a requirement for 100 MHz of contiguous spectrum⁸ in the 3.4-3.8 GHz band, claiming this allocation will be needed to meet demand for mobile data services, which broadly aligns with recommendations made by international standards bodies and industry representative organisations.⁹ However, existing historic licensed allocations within Jersey's 3.4-3.8 GHz band limit available spectrum and the capacity to create large contiguous spectrum blocks. As a result, we could only offer 5G spectrum packages with limited contiguous blocks, but with a stated intention to increase allocations as and if more spectrum becomes available.¹⁰
- 2.6 Making more 5G spectrum available in contiguous blocks requires defragmentation of Jersey's 3.4-3.8 GHz band, specifically moving or removing existing historic licensed allocations. Having considered this matter carefully, in February 2023 we issued a consultation explaining our provisional view is that it is necessary to carry out this defragmentation, explain why we have reached it, and set out for consideration our proposals for doing so, which in summary were to recommend to Ofcom that:
- (a) The licences for spectrum presently held by Clear, Newtel and Sure in the local 3.4-3.8 GHz band are revoked subject to a three-year notice period;
 - (b) Subject to accepting the revocation notice stated in (a) above, existing historic licensees receive new 'Limited Service' spectrum packages, as defined in the 5G Spectrum Award: Updated Statement of Intent, containing contiguous spectrum blocks within the 3.4-3.8 GHz spectrum band; and
 - (c) New 5G licensees are permitted to access any unused 3.4-3.8 GHz spectrum during this notice period, following agreement with existing historic licensees over sharing arrangements necessary to avoid interference between services.
- 2.7 This document summarises the responses received by the consultation closure date of 31 March 2023, our analysis of information received and conclusions on next steps in this case.
- 2.8 It should be noted that Sure has agreed to give-up its existing historic spectrum allocation within the 3.4-3.8 GHz band as a condition of receiving a new allocation through the recently concluded 5G Spectrum Award: ITT.

⁸ Contiguous spectrum is created through aligning adjacent radio channels, or carriers, to form one block of spectrum within the band into a single enlarged channel for awarding to a licensed operator.

⁹ Document JCRA 23/03 Defragmenting the 3.4-3.8 GHz spectrum band: proposal for consultation sets out extensive information on this subject – see <https://www.jcra.je/cases/2023/t-085-defragmenting-the-34-38-ghz-spectrum-band/t-085-defragmenting-the-34-38-ghz-spectrum-band-consultation/>

¹⁰ Providing additional spectrum also requires licensed operators to launch and roll-out a 5G network.

Legal framework

Powers to amend spectrum licences

2.9 Companies operating a wireless telecoms network in Jersey require two licences:

- (a) A valid telecoms licence that we have issued under the Telecommunications (Jersey) Law 2002 (the **Jersey Law**) allowing the provision of telecoms services in the Island; and
- (b) A valid spectrum licence issued by Ofcom under the Wireless Telegraphy Act 2006 (the **WTA**) allowing the use of specific spectrum bands.

2.10 Although we have no statutory powers in relation to issuing spectrum licences, under Article 22 of the Jersey Law we are able to cooperate with Ofcom, which includes recommending the issue of spectrum licences to local companies. Under this arrangement, Ofcom expects us to make recommendations after following an appropriate consultation and assessment process to underpin and justify any decisions and subsequent recommendations we make.

2.11 The WTA provides Ofcom powers for the ‘granting, revocation and variation of wireless telegraphy licences’, with the spectrum licences issued to Jersey telecoms operators containing a section stating that variation and revocation can take place:

For reasons related to the management of the radio spectrum, provided that in such case the power to revoke or vary may only be exercised after at least one year’s notice is given in writing and after Ofcom has considered any pertinent factors.¹¹

2.12 When considering the management of radio spectrum, the WTA states that:

Ofcom may not revoke or vary a wireless telegraphy licence unless the proposed revocation or variation is objectively justifiable.¹²

2.13 Under existing agreement and working arrangements with Ofcom, we have considered pertinent factors on behalf of Ofcom and are making recommendations to revoke or vary a Jersey spectrum licence based on reasons that can be demonstrated as being objectively justifiable.

The duties of the Authority

2.14 When carrying out its duties, the Authority must act in accordance with its statutory obligations which include a primary duty to ensure that telecoms services are provided within Jersey to

¹¹ Jersey Licences issued under the Wireless Telegraphy Act 2006, section 3 (f) – see <https://www.ofcom.org.uk/manage-your-licence/radiocommunication-licences/mobile-wireless-broadband/jersey-licences>

¹² Wireless Telegraphy Act 2006, schedule 1, Notification of proposed revocation, section 6 (a) – see <https://www.legislation.gov.uk/ukpga/2006/36/schedule/1/crossheading/revocation-or-variation>

satisfy all current and prospective demands for them. Part 3 of the Jersey Law includes several specific duties including:

(a) To protect the short-term and long-term interests of Islanders using telecoms services; and

(b) To further the economic interests of Jersey;

2.15 We place particular weight on points (a) and (b) in section 2.14 above in respect of this document and the proposals it contains, interpreting the former as an obligation to ensure that the maximum number of Islanders can access future mobile data services and the latter as an obligation to ensure Jersey has future mobile services that would be beneficial to customers / increase consumer welfare.

The process we follow and planned timetable

2.16 Although the subject of this consultation does not relate to a specified statutory function, we are following a structure broadly based on the process set-out in article 11 of the Jersey Law.

2.17 The timetable, which may be subject to change, for this case is:

Feb 2023	Issue defragmenting the 3.4-3.8 GHz spectrum band proposals for consultation
Mar 2023	Close consultation and consider responses
Jun 2023	Engage affected historic licensees to determine their final position
Aug 2023	Issue outcome of consultation and confirm plans for defragmenting the 3.4-3.8 GHz spectrum band
Aug 2023	Make spectrum management recommendations to Ofcom

3 Consideration of responses to consultation

3.1 This section contains details on responses received to the consultation, information on how the Authority has analysed them and the conclusions we have drawn. Its contents are:

- Consultation approach and responses received
- Consideration of responses to consultation questions

Consultation approach and responses received

3.2 On 14 February 2023, the Authority issued the Defragmentation Consultation with respondents asked to consider five questions:

Question 1: Do you support our view that 5G spectrum is ideally provided in large contiguous spectrum blocks? If not, please explain why.

Question 2: Do you support our view that the best method for defragmenting 5G spectrum is to potentially move existing historic licensees within the 3.4-3.8 GHz band or remove them? If not, please explain why.

Question 3: Do you agree with our approach to the legal framework relating to spectrum defragmentation and timetable for completion? If not, please explain why.

Question 4: Do you have any comments on our assessment of the need to defragment Jersey's 3.4-3.8 GHz spectrum band?

Question 5: Do you have any comments about our proposed approach to defragmenting Jersey's 3.4-3.8 GHz spectrum band?

3.3 The consultation closed on 31 March 2023, with responses received by that date from the following organisations:¹³

- Clear Mobitel (Jersey) Limited (**Clear**)
- Jersey Airtel Limited (**Airtel**)
- JT (Jersey) Limited (**JT**)
- Newtel Limited (**Newtel**)
- Sure (Jersey) Limited (**Sure**)

3.4 We are grateful to all respondents for the time and care taken to provide comments and views on this important subject. Having carefully considered them, this document contains a summary

¹³ Non-confidential versions of responses are published on the Authority's website alongside this document.

of responses received, our analysis of the information provided and the conclusions we have arrived at.

Consideration of responses to consultation questions

Question 1: Do you support our view that 5G spectrum is ideally provided in large contiguous spectrum blocks? If not, please explain why.

Summary of responses

3.5 All respondents agree with our view, with Clear also drawing attention to the difficulties in predicting future spectrum needs.

Our analysis

3.6 We welcome the support shown.

Our conclusion(s)

3.7 We confirm our view that 5G spectrum is ideally provided in large contiguous spectrum blocks.

Question 2: Do you support our view that the best method for defragmenting 5G spectrum is to potentially move existing historic licensees within the 3.4-3.8 GHz band or remove them? If not, please explain why.

Summary of responses

3.8 Airtel, Clear, JT and Sure support our view, with Airtel noting defragmentation should be subject to there being no commercial deployment in the spectrum and both JT and Sure believing changes to existing historic licences should happen in a shorter timescale than the proposed three-year notice period.

3.9 Sure further strongly questions the proposal to offer Clear an alternative spectrum package, given that Clear is not using its existing historic allocation, and also proposes that we attach a 'use it or lose it' clause to Limited Service spectrum packages.

3.10 Newtel explains that technical limitations prevent a straightforward move of its present live services to a different part of the 3.4-3.8 GHz spectrum band, with significant commercial consequences arising if this takes place. Newtel therefore requests a 100 MHz allocation in the 3.4-3.8 GHz band as compensation.

Our analysis

3.11 We welcome broad support that the best method for defragmenting 5G spectrum is to potentially move existing historic licensees within the 3.4-3.8 GHz band or remove them.

3.12 In response to the view expressed by JT and Sure that the three-year licence revocation period should be reduced, we have taken the following points into account:

- (a) Local existing historic licences held in the 3.4–3.8 GHz band only require one year’s notice to revoke or vary. However, we note that Ofcom provides a longer notice period when varying or revoking licenced spectrum allocations in the UK – typically up-to-five years. In view of this and following discussions with Ofcom, we believe it may be prudent and reasonable to provide a longer than one-year notice in certain circumstances.
- (b) We further note that Newtel is presently using its historic spectrum allocation to provide live commercial services meaning that varying or revoking its licence will invariably lead to some impact on Newtel, which may need to invest in new network infrastructure, and on the users of those services who may require new customer premises equipment (CPE). We believe that a three-year notice period reflects the potential planning, reinvestment and management needed to offset this impact.
- (c) We also note that Clear is not presently using its historic spectrum allocation and therefore will not have the same commercial or customer service constraints as Newtel. We therefore believe there is no compelling reason to provide Clear with a longer notice period than one-year.

3.13 Considering Sure’s views on offering a ‘Limited Service’ spectrum package to Clear, we are satisfied it is reasonable to offer all affected historic licensees the same alternative spectrum package. Clear has been issued a spectrum licence without any end date or termination clauses covering non-use – they are likely to have a reasonable expectation that this allocation will remain available for commercial use at some point in the future. Our plans to potentially defragment the 3.4-3.8 GHz band interrupts this situation and therefore deserves a reasonable consideration. In response to the suggested inclusion of a ‘use it or lose it’ clause, we remind that Ofcom has legal responsibility for issuing local spectrum licences and establishing associated terms and conditions.

3.14 In response to Newtel’s request for a new 100 MHz spectrum allocation rather than the Limited Service package offered, we have taken the following points into account:

(a) In the issued 5G Statement of Intent we created:

- I. Three x ‘Full Service’ spectrum packages, intended for Island-wide networks providing publicly available services for the maximum number of users, with each package containing a block of up-to-100 MHz contiguous spectrum in the local 3.4-3.8 GHz band; and*
- II. Multiple ‘Limited Service’ spectrum packages, intended for potentially limited coverage networks providing either publicly available or private services for a*

potentially limited number of users, with each package having a block of up-to-30 MHz contiguous spectrum in the 3.4-3.8 GHz band.

As stated in our Defragmentation Consultation document, we have awarded two Full Service packages and are planning to invite applications for the remaining one in 2023 (which we remind Newtel could choose to apply for). This leaves a remaining 90 MHz of spectrum in the 3.4-3.8 GHz band for Limited Service spectrum packages¹⁴, which does not permit us to meet Newtel's request for 100 MHz of spectrum. Further, meeting Newtel's request would prevent us from offering any spectrum to other historic licensees or potential new entrants.

- (b) Offering additional spectrum beyond Newtel's existing holding would not comply with Ofcom's statutory duties and best practices, which through agreement require the Authority to assess interest and demand in any available spectrum before making recommendations to Ofcom for licensed allocations.
- (c) Notwithstanding point (a) above, we have carefully considered whether our offer of a 30 MHz Limited Service package in the 3.4-3.8 GHz band represents a reasonable alternative allocation to Newtel's existing historic allocation of 40 MHz. Our determination is that the two allocations are broadly comparable and therefore our offer is reasonable. This is because Newtel's existing allocation is provided in an FDD configuration of two x 20 MHz blocks separated by a guard band, with one designated for uplink transmissions and one for downlink¹⁵. The offered allocation is for a contiguous spectrum block allowing a TDD configuration¹⁶, which provides a more efficient data transmission arrangement, especially when carrying modern internet-based services requiring a higher download capability - streaming movies or music, for example.

Our conclusion(s)

- 3.15 We confirm our view that the best method for defragmenting 5G spectrum is to move existing historic licensees within the 3.4-3.8 GHz band or remove them.
- 3.16 We believe that existing historic licensees should receive the same offer if they choose to move within the band, which we confirm is to receive a Limited Service spectrum package as defined in our 5G Statement of Intent.

¹⁴ Subject to defragmentation, there is 390 MHz of spectrum between 3.41 and 3.80 GHz potentially available for allocation.

¹⁵ Frequency Division Duplex (FDD) is a communication technique where uplink (device to network) and downlink (network to device) transmissions are sent on separate frequency bands. A guard band separates uplink and downlink frequency bands to avoid interference.

¹⁶ Time Division Duplex (TDD) is a communication technique where uplink (device to network) and downlink (network to device) transmissions are sent on the same frequency band at different time slots. Uplink and downlink transmissions are separated by guard times to avoid overlaps.

- 3.17 In view of Newtel’s present use of its historic spectrum allocation to offer live commercial services, we believe a three-year notice licence revocation period is prudent and reasonable. In view of these services and live customers, we also believe it reasonable to continue engaging with Newtel during the three-year notice period to explore options for them continuing to meet customer demand, subject to any discussions and outcomes remaining consistent with Ofcom’s statutory duties and the Authority’s appropriate role and best practices.
- 3.18 In view of Clear’s present non-use of its historic spectrum allocation in the 3.4-3.8 GHz band, we believe a one-year notice licence revocation period is prudent and reasonable.

Question 3: Do you agree with our approach to the legal framework relating to spectrum defragmentation and timetable for completion? If not, please explain why.

Summary of responses

- 3.19 Airtel, Clear and Sure agree with our approach to the legal framework associated with the proposed defragmentation process.
- 3.20 Airtel disagrees with the timetable for completion, believing it should be less than three years in view of investments required to develop a 5G network.
- 3.21 Clear notes its understanding of the JCRA mandate and legal relationship with Ofcom, and that the WTA and Ofcom’s duties should dictate the timetable.
- 3.22 Newtel notes that a shorter timetable than three years is possible.

Our analysis

- 3.23 We welcome support for our approach to the legal framework.
- 3.24 In response to Airtel’s comments on shortening the timetable, we refer to section 3.12 above, which considers the same point.
- 3.25 We note Clear’s points on the WTA and Ofcom’s duties and welcome Newtel’s comments that a shorter timetable is possible.

Our conclusion(s)

- 3.26 We will continue working within our legal approach and timetable for completion.

Question 4: Do you have any comments on our assessment of the need to defragment Jersey’s 3.4-3.8 GHz spectrum band?

Summary of responses

- 3.27 JT and Sure concur with our assessment of the need to defragment Jersey’s 3.4-3.8 GHz spectrum band, with Sure also providing extensive information on its views on future mobile

data demand, highlighting what it believes are risks associated with not defragmenting the band and stating challenges it believes are involved in providing services using a non-defragmented band.

- 3.28 Airtel provides comments on the approach to addressing historic spectrum holders within the band and notes support for our intention to seek to award three x Full Service spectrum packages.
- 3.29 Clear agrees with our assessment that defragmentation is necessary, while noting the challenges associated with creating 100 MHz spectrum blocks and suggesting that 60 MHz blocks would be suitable instead. Clear further notes that potential merging of two existing operators affects the likelihood of a new entrant entering the market, commenting that small private 5G networks using shared spectrum are another option.

Our analysis

- 3.30 We welcome the broad support for our assessment and note general and specific comments and information provided on this subject.
- 3.31 We recognise the challenges noted by Clear associated with creating 100 MHz spectrum blocks, and that creating even their suggested 60 MHz contiguous blocks is problematic without defragmentation. Considering Clear's views specifically, as explained in the Defragmentation Consultation we expect the demand for mobile data services to continue growing locally, although at a rate that is difficult to accurately predict. We remind that it is therefore important for us to ensure sufficient spectrum is available to meet prospective future demand. Global recommendations and trends are towards ensuring 5G operators have access to 80-100 MHz of contiguous spectrum. On balance we remain committed to creating 100 MHz contiguous spectrum blocks in the 3.4-3.8 GHz band, which will help ensure that Jersey is not disadvantaged in the future compared with other relevant jurisdictions, and that Islanders are able to enjoy access to the highest quality mobile data services.
- 3.32 Considering Clear's comments on the potential merging of two existing operators, we remain committed to ensuring Islanders enjoy continued access to a competitive mobile market and have created three x Full Service spectrum packages to accommodate three Island-wide operators, which may be existing licensees or potential new entrants.
- 3.33 Considering Clear's further comments on small private 5G networks, we may consider opportunities for further spectrum licensing to allow the creation of localised services.

Our conclusion(s)

3.34 We remain committed to our assessment that defragmenting Jersey’s 3.4-3.8 GHz spectrum band is necessary, and will aim to do so within a timetable that is reasonable for all involved licensees and taking an approach that allows for up-to three x Island-wide operators.

Question 5: Do you have any comments about our proposed approach to defragmenting Jersey’s 3.4-3.8 GHz spectrum band?

Summary of responses

- 3.35 Airtel requests that we consider the investment challenges it believes our proposed approach to making 3.4-3.8 GHz spectrum available causes, providing several points in support. They further ask for clarification on how unused spectrum (including existing historic allocations) within the 3.4-3.8 GHz band will be used and what can be done to shorten the time taken to defragment the band.
- 3.36 Clear sees no other viable approach, but does not want to see any existing historic licensee disadvantaged through not at least replicating existing bandwidth allocations.
- 3.37 JT agrees with our proposed approach, suggesting expected approaches to existing historic licensees.
- 3.38 Newtel reiterates the potential commercial and customer services consequences of losing its existing spectrum allocation without receiving a larger spectrum allocation.
- 3.39 Sure reiterates its request to reduce the proposed licence revocation period and further that we only offer the proposed ‘Limited Service’ spectrum package to existing historic licensees that will use them in a timely way for the benefit of Jersey residents and the economy. Sure also points to the risk of existing historic licence holders not engaging in the proposed process for allowing new 5G licence holders access to unused historic licensed spectrum during the licence revocation notice period, requesting that we make it mandatory for historic licensees to cooperate in the process.

Our analysis

3.40 We welcome Airtel’s information on the investment challenges involved if new 5G licence holders only receive an initial allocation of 40 MHz within the 3.4-3.8 GHz band, and appreciate the points being made. However, we remind that our 5G Statement of Intent clearly explained the spectrum packages being made available for potential applicants. The Draft 5G Spectrum Award: ITT issued at the same time further stated our approach to new 5G spectrum packages and plans to increase the spectrum available.¹⁷ In response to Airtel’s question on what can be

¹⁷ Document JCRA 22/41 5G Spectrum Award Invitation to Tender (ITT): proposals for consultation – see <https://www.jcra.je/cases/2022/t-064-5g-spectrum-award-2022/t-064-5g-spectrum-award-consultation-on-draft-invitation-to-tender/>

done to shorten the time taken to defragment the band, we refer to the information provided in section 3.12 of this document.

3.41 In response to Clear's view on not disadvantaging existing historic licensees, we have taken the following points into account:

- (a) We refer to section 3.14 of this document for our offer in respect of Newtel's existing allocation, and remind that both Clear and Newtel will have the opportunity to apply for the remaining Full Service spectrum package containing up-to-100 MHz in the 3.4-3.8 GHz band.
- (b) Considering the question of disadvantaging historic licensees by only offering a Limited Service package, we believe this is reasonable for Clear because:
 - I. As previously and consistently stated, spectrum is an important and finite resource on which we increasingly rely for providing required personal and business services. While predicting how much spectrum will be required in the future to meet Islanders' expectations is challenging, it is our duty to ensure sufficient is available to satisfy prospective future demand.
 - II. Clear's existing historic licenced spectrum is 60 MHz in the 3.4-3.8 GHz band, provided in an FDD configuration of two x 30 MHz blocks, with one used for uplink and one for downlink. While Clear is potentially disadvantaged through accepting the 30 MHz Limited Service package, we refer first to the point made in section 3.14(c) about the efficiency of FDD v TDD spectrum allocations, and benefits of latter over former for modern internet-based services. Second, we refer to section 3.14(a) which reminds that we have made and communicated decisions about allocations in the 3.4-3.8 GHz band, allowing for multiple Limited Service packages alongside the three Full Service packages. Our offers to Clear and Newtel leaves 30 MHz spectrum remaining for one or potentially more future market entrants, perhaps offering innovative new wireless services to Islanders. Providing Clear (or Newtel) with more spectrum than has been offered at this point will limit or preclude this opportunity.
 - III. We have also taken Clear's use of its presently allocated spectrum into account when determining what represents a reasonable offer if they agree to move within the 3.4-3.8 GHz band. We remind that although Clear received a licence from Ofcom for spectrum in the 2100 MHz band and a second licence for spectrum in the 3.4-3.8 GHz band in 2015, it has not used its allocations to provide any wireless telecoms services in Jersey. We further have no firm reason to believe Clear plans to launch any services in the foreseeable future. While the impact of Clear holding this unused spectrum may have previously been considered as having low or minimal implications, the

development of 5G services with associated high mobile data transmission requires us to ensure that all current and prospective demands for local telecommunications services are satisfied. In section 3.14 of this document we have already stated our belief that taking a consistent approach to all historic licensees is important, objective and fair, and on this basis Clear should be offered a Limited Service spectrum package. However, in view of its non-use of presently allocated spectrum, we believe that offering a spectrum block of more than 30 MHz would be unreasonable given the need to ensure sufficient spectrum is available to ensure prospective demands for local telecoms services are satisfied.

3.40 In response to Sure's concerns over risk of existing historic licence holders not engaging in our proposed allowing access to new 5G licence holder to unused spectrum during the licence revocation notice period, we remind that it will be Ofcom that makes the necessary sharing arrangements, in line with similar steps taken in the UK. We also remind new 5G licensees that access to additional spectrum is subject to them meeting commitments included in the 5G ITT and stated within the 5G spectrum Letters of Recommendation sent to Ofcom.¹⁸

Our conclusion(s)

3.42 We will proceed with our proposed approach to defragmenting Jersey's 3.4-3.8 GHz spectrum band, although with a modification to reduce Clear's revocation notice period from three-years to one year as a result of responses received to our consultation.

¹⁸ See <https://www.jcra.je/cases/2022/t-064-5g-spectrum-award-2022/t-064-5g-spectrum-award-information-note-letters-of-recommendation-to-ofcom/>

4 Consultation outcome, our decision and next steps

4.1 This document summarises the responses received by consultation closure date of 31 March 2023 which we found broadly supportive of our proposals on this matter while offering several points for further consideration. Having analysed these points we conclude that our provisional view set out in the Defragmentation Consultation is correct, although we have taken into account comments on our proposed licence revocation period in one case and revised a related element of our decision as a result. Our decision is therefore that we will recommend to Ofcom that:

- (a) The licence for spectrum presently held by Clear in the local 3.4-3.8 GHz band is revoked subject to a one-year notice period; and
- (b) The licence for spectrum presently held by Newtel in the local 3.4-3.8 GHz band is revoked subject to a three-year notice period¹⁹; and
- (c) New 5G licensees are permitted to access any unused 3.4-3.8 GHz spectrum during these notice periods, following agreement with existing historic licensees over sharing arrangements necessary to avoid interference between services.

- 4.2 The next steps in this case will be for us to recommend that Ofcom revokes licences for spectrum presently held by Clear and Newtel in the local 3.4-3.8 GHz band with respective notice periods.
- 4.3 Prior to doing this, the Authority has reaffirmed its offer that Clear and Newtel receive new ‘Limited Service’ spectrum packages, as defined in the 5G Spectrum Award: Updated Statement of Intent, containing contiguous spectrum blocks in the 3.4-3.8 GHz spectrum band for a further limited period.²⁰
- 4.4 In consideration of certain points received through the Defragmentation Consultation, we also commit to continue engaging those affected historic licensees presently offering live commercial services during their notice period with the aim of helping them continue to meet established customer demand.

¹⁹ Sure also has licensed spectrum within this band but has agreed to give-up as a condition of receiving a new allocation through the recently concluded 5G Spectrum Award: ITT.

²⁰ Intended for potentially limited coverage networks providing either publicly available or private services for a potentially limited number of users, with each package having – see <https://www.jcra.je/cases/2022/t-064-5g-spectrum-award-2022/t-064-5g-spectrum-award-process-2022-updated-statement-of-intent/>