

Investigation Report

File No.	ACMA2018/409-31
Carriage Service Provider	Chime Communications Pty Ltd ACN 073 119 285
Type of Service	Carriage Service Provider
Relevant Legislation/Code	- <i>Telecommunications Act 1997</i> - <i>Industry Code (C555:2017) Integrated Public Number Database (IPND)</i>
Date	20 December 2018

Findings

The Australian Communications and Media Authority (the **ACMA**) finds that, on multiple occasions, Chime Communications Pty Ltd ACN 073 119 285 (**Chime**):

- > contravened subsection 101(1) of the *Telecommunications Act 1997* (the **Act**), which requires a carriage service provider (**CSP**) to comply with the service provider rules that apply to it, by failing to give Telstra Corporation Limited (**Telstra**, or the **IPND Manager**) the information it reasonably required to provide and maintain the Integrated Public Number Database (**IPND**), thereby contravening the service provider rule in clause 10 of Schedule 2 to the Act;
- > contravened the following clauses of the *Industry Code (C555:2017) Integrated Public Number Database (IPND)* (the **IPND Code**):
 - 4.2.1 – because Chime, a CSP that provides carriage services to customers using public numbers¹, failed to provide the relevant public number customer data² to the IPND Manager in respect of certain carriage services Chime supplies;
 - 4.2.11 – because Chime failed to ensure that the public number customer data it provided to the IPND Manager was accurate, complete and up-to-date; and
 - 4.2.25 – because Chime failed to supply to the IPND Manager all public number customer data updates that occurred on one business day, by the end of the next business day.

¹ In this report, *number* and *public number* mean a number under the *Telecommunications Numbering Plan 2015*.

² As defined in the IPND Code, where it is also referred to as 'PNCD'.

Background

1. This report details findings of an investigation conducted by the ACMA under paragraphs 510(1)(a) and (c) of the Act into whether Chime contravened the Act and/or an industry code registered under Part 6 of the Act.
2. The investigation commenced on 16 July 2018. On 18 July 2018 the ACMA issued Chime a notice under section 521 of the Act requiring the production of documents and information (the **Notice**).
3. Chime responded to the Notice on 21 August 2018.
4. On 24 October 2018, the ACMA issued preliminary findings to Chime. It responded on 21 November 2018.

Relevant facts

5. Chime is a CSP within the meaning of the Act³. Chime supplies telecommunications services (largely fixed-line) to residential and business consumers in addition to wholesale services to other retail CSPs.
6. Chime is a 'Data Provider' within the meaning of clause 2.2 of the IPND Code.⁴

The IPND and its legislative framework

7. The IPND is intended to be an industry-wide database of all public telephone numbers. It was established in 1998 and is managed by Telstra as required by section 10 of the *Carrier Licence Conditions (Telstra Corporation Limited) Declaration 1997 (Telstra Licence Conditions)*. The maintenance of the IPND by the IPND Manager is supported by, among other things:
 - a. a service provider rule requiring a CSP that supplies a carriage service to an end user, and where that user has a public number, to give Telstra such information as Telstra reasonably requires in connection with Telstra's fulfilment of its obligation to provide and maintain the IPND⁵; and
 - b. the IPND Code, which is an industry code registered by the ACMA under Part 6 of the Act, and which sets out procedures relating to the storage of information in the IPND and the transfer of information to and from the IPND Manager.
8. The IPND Code, and the associated IPND Data Guideline (G619:2017), also refer to the *Integrated Public Number Database (IPND) Data Users and Data Providers Technical Requirements for IPND* (the **Technical Requirements**). The Technical Requirements, which are issued by Telstra and made with the agreement of a majority of relevant Data Users⁶ and Data Providers (see clause 7.1.8 of the IPND Code), set out the detailed operational and technical requirements for the submission of information by Data Providers to the IPND Manager.

³ See section 87 of the Act.

⁴ 'Data Provider' is defined to mean a CSP who has an obligation to provide PNCD to the IPND Manager, or an entity acting on behalf of the CSP, and who is registered with the IPND Manager.

⁵ Subsection 101(1) of the Act requires CSPs to comply with the service provider rules, and paragraph 98(1)(a) of the Act provides that the service provider rules include the rules set out in Schedule 2 to the Act. Clause 10 of Schedule 2 to the Act deals with the information that CSPs must give to Telstra in association with its IPND Manager responsibilities.

⁶ As defined in clause 2.2 of the IPND Code.

9. The information in an IPND record includes customer name and address, phone number, the type of service, whether the service is listed or unlisted and details about the service provider. The Technical Requirements (at clause 6.1.2) specify the information that is included, or which can be included, in an IPND entry. An IPND record includes a mandatory field, called the 'Service Status Code', which is used to indicate whether a service is connected or disconnected.
10. Under Part 13 of the Act and the Telstra Licence Conditions, the information in the IPND can only be used for specific purposes. Critical users of the IPND include the emergency call service, the emergency warning system and national security and law enforcement agencies. These bodies use IPND information to protect life and property and to investigate serious crime. Failure to provide accurate, timely and current information to critical users can have serious consequences. For example, failure to provide location information associated with a call to the Triple Zero emergency call service could place a caller's life at risk. Non-critical users of IPND data include publishers of public number directories and researchers conducting permitted research.
11. There are several ways in which a Data Provider can identify potential errors occurring when uploading data to the IPND, and any discrepancies between its own customer data and that stored in the IPND, including:
 - > by reference to clause 4.2.28 of the IPND Code, which allows a Data Provider, at its discretion, to obtain an extract of its public number customer data as a full set of records or a subset of records based on criteria agreed between the Data Provider and the IPND Manager for reconciliation purposes.
 - > by reference to clauses 6.1.6 and 6.1.7 of the IPND Code, which require a Data Provider to download the information the IPND Manager produces about hard and soft errors⁷, and take reasonable steps to resolve the matter and supply the corrected public number customer data to the IPND Manager within one business day for hard errors and two business days for soft errors.
 - > additionally, the IPND Manager sends reminders via email (at least twice a year) to the approved contact(s) of all Data Providers about the importance of checking the corresponding error file after each IPND upload to ensure the file has been processed successfully.
 - > by reference to clause 6.1.10, which encourages Data Providers to check a monthly 'changed data provider' report produced by the IPND Manager, which informs the Data Provider of all numbers gained and lost in the last month.

Chime's response to the Notice

12. Chime's response to the Notice stated that it had carried out a comparison of its customer database against its records in the IPND which revealed that:

⁷ 'Hard' and 'soft' errors are identified during the IPND's validation process when a Data Provider attempts to upload a file of IPND records (a file may contain one or more records). A hard error, such as mandatory field in the IPND record being blank, prevents the upload of the file and/or the record containing the hard error to the IPND. A soft error is a possible error in an individual field of a record. In this case, the file is still uploaded to the IPND but is tagged as having a 'soft' error. A soft error can signify potential name and/or address inaccuracies, or missing information within an IPND record. The IPND Manager makes reports about hard and soft errors available to Data Providers.

- a. **6,421** public numbers associated with a Chime 'active' service do not have a corresponding record in the IPND (missing records);
 - b. **23,271** public numbers associated with a Chime service have an incorrect Service Status Code in the corresponding IPND Record (inaccurate records), comprised of:
 - i. 1,426 public numbers associated with a Chime 'active' service which have a 'disconnected' status in the corresponding IPND record;
 - ii. 20,177 records associated with Chime with a 'connected' status in the IPND which are shown as 'disconnected' in Chime's customer database; and
 - iii. 1,668 records associated with Chime with a 'connected' status in the IPND which are not present in Chime's customer database.
13. Chime identified a range of reasons for why the errors occurred, including:
- a. human error and oversight;
 - b. process and system issues;
 - c. issues with one-off migrations of services from another CSP.
14. Chime indicated in response to the identified errors, it would:
- a. establish a new process to review the IPND Manager's monthly Changed Data Provider report;
 - b. provide tools and training to operational teams to allow them to apply corrections in bulk to services that have IPND issues; and
 - c. implement a regular process of automated 'continuous' audit of the IPND for record quality, expected to be in place by the end of 2018.
15. When Chime responded to the Notice, Chime stated that it had excluded 220,511 active services (the Excluded Services) from its response. Chime excluded these services due to a misunderstanding of its obligations in relation to these services. This matter was raised with Chime by the ACMA and Chime revised the number of excluded services to 175,450 in its response to the ACMA's preliminary findings.

Chime's Response to the Preliminary Findings

16. The ACMA's preliminary findings set out the view that Chime had contravened the service provider rule and the IPND Code in relation to:
- a. **6,528** active services with no record in the IPND. This figure comprised the 6,421 numbers reported by Chime in response to the Notice, plus 107 numbers confirmed by Chime as missing records prior to the commencement of the investigation; and
 - b. **23,271** IPND records for Chime services with an incorrect Service Status Code (being the total of the figures provided by Chime in response to the Notice).
17. In its response, Chime provided further information to support its view that 4,410 missing records should be excluded from the contraventions because they were uploaded to the IPND before commencement of the investigation but subsequently overwritten by another CSP. The ACMA has accepted this explanation and has excluded these services from the

contravention totals for missing IPND records (number of missing records revised from 6,528 to **2,118**).

18. The ACMA's preliminary findings noted that the figures in paragraph 16 may be revised in any final findings once Chime performed a reconciliation of the Excluded Services. Chime undertook a limited reconciliation of the 175,450 Excluded Services, and from the information provided by Chime, the ACMA concluded that an additional 5,801 public numbers associated with a Chime service have, at a minimum, an inaccurate connection status (number of inaccurate records revised from 23,271 to **29,072**).
19. In its response, Chime stated that the number of records associated with Chime with a 'connected' status in the IPND that were not present in Chime's customer database (see paragraph 12(b)(iii)) has been revised from 1,668 to 1,585. This is because 83 services have since been located in its systems. The ACMA has excluded these services from the contravention totals for inaccurate IPND records (number of inaccurate records further revised to **28,989**).
20. Chime advised it will take the following remediation steps to prevent similar discrepancies in the future:
 - a. a continuous audit process to ensure that all connected numbers appear in an outgoing file to IPND Manager. This process has commenced and is expected to be fully implemented before the end of 2018; and
 - b. a new process for reconciling the contents of Changed Data Provider reports. The first phase of this will be in place by end of 2018, with full adoption by 1 March 2019.

Findings and reasons

Compliance with the Telecommunications Act

21. Subsection 101(1) of the Act requires that service providers, including CSPs, comply with the service provider rules that apply to them. Subsection 98(1) of the Act provides that the service provider rules include those set out in Schedule 2 to the Act.
22. Clause 1 of Schedule 2 to the Act provides that service providers must comply with the Act. Clause 10 of Schedule 2 requires that where a CSP supplies a carriage service to an end-user, and the end-user has a public number, the CSP must give the IPND Manager such information as it reasonably requires to fulfil its obligation to provide and maintain an IPND.

Clause 10 of Schedule 2

23. In determining what information the IPND Manager reasonably requires in order to fulfil its obligation to provide and maintain an IPND, the ACMA has regard to the Act, the Telstra Licence Conditions, the IPND Code and the Technical Requirements.
24. Subclause 10(4) of the Telstra Licence Conditions requires that the IPND must include, among other things, the public number, and the name and address of the customer. It is reasonable for the IPND Manager to require that information which the Telstra Licence Conditions require it to obtain, and which are essential to the maintenance of the IPND.
25. Further, the IPND Manager may reasonably require other information that will assist in delivering the objectives of the IPND. Having regard to the critical functions described in

paragraph 10 above, the ACMA considers that the service status of a number (that is, 'connected' or 'disconnected') is important to the proper functioning of the IPND, given that an incorrect status could adversely impact Data Users' services (noting that researchers and public number directory publishers only receive connected records). It could also cause severe detriment in some cases (if, for example, a service did not receive an emergency warning because it was listed as 'disconnected').

26. The IPND Manager has explicitly sought the service status information from Data Providers in respect of each IPND entry, via the Technical Requirements. As noted above, the Service Status Code is a mandatory IPND field (others are optional), and the Technical Requirements have been made in consultation with, and with the agreement of, Data Providers. Further, clause 4.2.10 of the IPND Code provides that Data Providers must ensure that all public number customer data transferred to the IPND Manager is in the format specified in the Technical Requirements; and clause 4.2.11 provides that the Data Provider must ensure that the information provided to the IPND Manager is accurate, complete, and up-to-date.
27. Considering the above, the ACMA is satisfied that the IPND Manager reasonably requires CSPs to provide correct information about whether a telephone number is connected or disconnected to fulfil its obligations as IPND Manager. By uploading information that incorrectly identified connected telephone numbers as 'disconnected', and disconnected telephone numbers as 'connected', Chime did not give the IPND Manager the information it reasonably required to fulfil its obligation to maintain the IPND.
28. Based on information provided by Chime, it did not upload public number customer data to the IPND for 2,118 public numbers, Chime customer data for 28,989 other public numbers had an incorrect connection status⁸.
29. Chime has advised that the errors have occurred due to a range of technical and/or systems issues. This does not excuse or detract from Chime's responsibility to ensure that it gives the IPND Manager the information it reasonably required to fulfil its obligation to maintain the IPND.
30. The ACMA therefore finds that Chime contravened clause 10 of Schedule 2 to the Act.
31. Accordingly, the ACMA finds that Chime contravened subsection 101(1) of the Act as it failed to comply with the service provider rule in clause 10 of Schedule 2 to the Act.

Compliance with the IPND Code

32. The IPND Code is an industry code registered under Part 6 of the Act⁹ which applies to CSPs (among others).¹⁰

Clause 4.2.1

33. Section 4.2 of the IPND Code sets out rules in relation to the provision of data to the IPND Manager. As noted above, clause 4.2.1 of the IPND Code obliges a CSP to supply relevant public number customer data (also referred to as PNCD) to the IPND Manager

⁸ This investigation has not considered whether other fields in the relevant IPND records contain inaccuracies.

⁹ The IPND Code is registered under section 117 of the Act.

¹⁰ See cl. 1.3.1(b) of the IPND Code.

for each public number it uses to supply a carriage service. Chime is a CSP within the meaning of the IPND Code.

34. Public number customer data includes, among other things, the public number, and the name and address of the customer, as referenced in the Telstra Licence Conditions and the definition in clause 2.2 of the IPND Code.
35. Based on information provided by Chime, it did not upload public number customer data to the IPND for 2,118 public numbers used in connection with active, or previously active, Chime services.
36. The ACMA therefore finds that Chime contravened clause 4.2.1 of the IPND Code.

Clause 4.2.11

37. Clause 4.2.11 of the IPND Code requires a CSP to ensure that the public number customer data provided to the IPND Manager is accurate, complete and up-to-date.
38. Based on information provided by Chime, it did not upload public number customer data to the IPND for 2,118 public numbers, and 28,989 other public numbers had an incorrect Service Status Code.
39. The ACMA therefore finds that Chime contravened clause 4.2.11 of the IPND Code as it failed to ensure that the information it provided to the IPND Manager in those instances was accurate, complete and up-to-date.

Clause 4.2.25

40. Clause 4.2.25 of the IPND Code requires a CSP to supply to the IPND Manager all public number customer data updates that occur on one business day, by the end of the next business day.
41. Public number customer data updates can include a change to the customer data for an existing number, or any new or ported numbers for which customer data has not previously been provided by the CSP.
42. Based on information provided by Chime, it did not upload public number customer data for 2,118 public numbers to the IPND and there was incorrect information in the IPND for a further 28,989 public numbers. Chime made no claim that these numbers were for services that were newly connected, ported or disconnected and that the time limit for uploading or updating IPND customer data had not expired. Consequently, updates for these services were not supplied to the IPND within the requisite timeframe.
43. The ACMA therefore finds that Chime contravened clause 4.2.25 of the IPND Code by failing to supply public number customer data updates that occurred on one business day, by the end of the next business day.