Investigation Report

File No.	ACMA2018/409-16
Carriage Service Provider	Symbio Networks Pty Ltd ACN 102 756 123
Type of Service	Carriage Service Provider
Relevant Legislation/Code	- *Telecommunications Act 1997* - *Industry Code (C555:2017) Integrated Public Number Database (IPND)*
Date	13 December 2018

Findings

The Australian Communications and Media Authority (the **ACMA**) finds that, on multiple occasions, Symbio Networks Pty Ltd ACN 102 756 123 (**Symbio**):

> 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 Symbio, a CSP that provides carriage services to customers using public numbers[1], failed to provide the relevant public number customer data[2] to the IPND Manager in respect of certain carriage services Symbio supplies;

- 4.2.11 – because Symbio 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 Symbio failed to supply to the IPND Manager public number customer data updates that occurred on one business day, by the end of the next business day.

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[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 Symbio 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 Symbio a notice under section 521 of the Act requiring the production of documents and information (the **Notice**).

3. Symbio responded to the Notice on 15 August 2018.

4. On 11 October 2018, the ACMA issued preliminary findings to Symbio. Symbio responded on 25 October 2018, providing updated information about the remediation steps it has taken as well as future actions it plans to undertake.

Relevant facts

5. Symbio is a CSP within the meaning of the Act[3]. Symbio supplies wholesale VoIP services to consumer, business and government markets.

6. Symbio 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 IPND[5]; 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 Users[6] 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.

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[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 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' errors[7], 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 regular 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.

Symbio's response to the Notice

12. Symbio's response to the Notice stated that it had carried out a comparison of its customer database against the IPND on 14 August 2018 which revealed that:

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[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 the 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. **6,241** public numbers associated with a Symbio 'active' service do not have a corresponding record in the IPND;

b. **1,077** IPND records for public numbers associated with a Symbio service which have an incorrect Service Status Code, made up of:

   i. 850 public numbers associated with Symbio 'active' services which have a 'disconnected' status in the corresponding IPND record;

   ii. 227 records associated with Symbio with a 'connected' status in the IPND which are shown as 'disconnected' in Symbio's customer database.

13. Symbio also stated that:

a. 5,500 of the records missing from the IPND were unable to be uploaded due to a 'bug' in Symbio's system. A solution had been implemented and all requisite customer data would be submitted to the IPND Manager by 20 August 2018.

b. Symbio has started a detailed investigation into why the remaining 741 numbers have no IPND data. An initial spot check indicated that these numbers were allocated to end-users in 2001-2002 prior to the introduction of Symbio's current automated IPND systems and had been inadvertently missed.

c. It attributed the numbers associated with a Symbio 'active' service but with a 'disconnected' status in the corresponding IPND record to porting arrangements and a reliance on the 'losing' provider (from which the customer moved) to disconnect a number in the IPND before Symbio could provide updated data as the 'gaining' provider.

d. It had initiated an internal working group to pro-actively approach its wholesale customers and improve awareness about their responsibility to submit data to the IPND for active numbers.

14. After its response to the Notice, Symbio provided further information to the ACMA to clearly distinguish between services for which Symbio is the responsible CSP and services which Symbio provided on a wholesale basis to other CSPs. Symbio revised the information contained in paragraph 12b above. Symbio stated that there were:

422 public numbers associated with a Symbio service with incorrect data, made up of:

a. 238 public numbers associated with Symbio 'active' services which had a 'disconnected' status in the corresponding IPND record;

b. 184 records associated with Symbio with a 'connected' status in the IPND which were shown as 'disconnected' in Symbio's customer database.

Symbio's response to the Preliminary Findings

15. The ACMA's preliminary findings set out that Symbio had contravened the service provider rule and the IPND Code in relation to:

a. **6,553** active services with no record in the IPND. This figure comprised 6,241 services identified by Symbio in response to the Notice, plus 312 services confirmed by Symbio as missing prior to the start of this investigation.

b. **422** IPND records with an inaccurate Service Status Code (being the total of the revised figures provided by Symbio as mentioned in paragraph 14 above).

16. In response to the preliminary finding that 6,553 services were missing IPND records, Symbio explained that 2,000 of the numbers were uploaded to the IPND within one business day of the associated services becoming active with Symbio (in accordance with obligations to provide data to the IPND Manager). Accordingly, 2,000 numbers have been excluded from the contravention totals, which are revised to **4,553**.

17. The ACMA has also excluded 9 numbers used with 13,1300,1800 services identified prior to the commencement of this investigation. The ACMA considers it is arguable that some of these services are subject to the service provider rule at clause 10(2) of Part 4 of Schedule 2 to Act, and the requirements of clause 4.2.1 of the IPND Code. However, a note at clause 4.2.1 of the IPND Code which states *Where number only services are used that only permit indial calling, such as 1800, 13/1300 or equivalent numbers, Data Providers may exclude the PNCD for these services from the IPND*, gives rise to an ambiguity about these services. Although the note is a guide to interpretation only and not binding as a Code rule (clause 1.17 of the IPND Code), the ACMA has excluded these services from its contravention total which is revised to **4,544** missing IPND records.

18. Symbio also provided detailed information about the actions Symbio has taken or is proposing to take to ensure contraventions do not occur in the future, including:

    > *Improved compliance governance*. Symbio has established an internal IPND working group to remediate non-compliance, identify root causes and formulate actions required to ensure they do not occur in the future.

    > *Process review and improvements*. Symbio is reviewing its templates and processes and has identified a number of improvements, such as:

        o updating its existing template for inputting customer data to match the IPND Data Provider specifications;

        o updating the process for inputting customer data related to new sales;

        o updating the process for inputting customer data where numbers port in to the network;

        o developing a manual workaround process for submitting disconnect/connected status to the IPND Manager in respect of reconnected numbers.

    > *System improvements.* Symbio is reviewing its systems and has identified improvements including:

        o automated submissions of disconnected/connected statuses to the IPND Manager for ported out and reconnected numbers; and

        o alerts to identify when inputted data has not been submitted to help identify ad hoc system issues as they occur.

        These improvements will require software development which is being scoped and scheduled. In the meantime, manual workarounds are being developed and implemented.

    > *Training and awareness*. Symbio will provide specific training to employees on the processes and system improvements, together with more regular refresher training which will include an understanding of the importance of IPND compliance.

> *Periodic reviews, updates and reporting.* Symbio has introduced weekly data reviews to check Symbio's customer systems against its submissions to the IPND to identify any discrepancies. Symbio also intends to introduce monthly checks of 'changed data provider' reports produced by the IPND Manager.

Findings and reasons

Compliance with the Act

19. 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.

20. 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 Telstra (as the IPND Manager) such information as Telstra reasonably requires to fulfil its obligation to provide and maintain an IPND.

Clause 10 of Schedule 2

21. 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.

22. 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 clearly reasonable for the IPND Manager to require that information which the Telstra Licence Conditions require it to obtain, and which are obviously essential to the maintenance of the IPND.

23. 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, 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').

24. 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.

25. 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', Symbio did not give the IPND Manager the information it reasonably required to fulfil its obligation to maintain the IPND.

26. Based on information provided by Symbio, it did not upload public number customer data to the IPND for **4,544** public numbers, and Symbio customer data for **422** public numbers had, at a minimum, an incorrect connection status[8]. Symbio has advised that the errors have occurred due to a range of technical and/or systems issues. This does not excuse or detract from Symbio's responsibility to ensure that it gives the IPND Manager the information it reasonably required to fulfil its obligation to maintain the IPND.

27. The ACMA therefore finds that Symbio contravened clause 10 of Schedule 2 to the Act.

28. Accordingly, the ACMA finds that Symbio 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

29. The IPND Code is an industry code registered under Part 6 of the Act[9] which applies to CSPs (among others).[10]

Clause 4.2.1

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

31. 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.

32. Based on information provided by Symbio, it did not upload public number customer data to the IPND for **4,544** public numbers associated with an active, or previously active Symbio service.

33. The ACMA therefore finds that Symbio contravened clause 4.2.1 of the IPND Code.

Clause 4.2.11

34. 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.

35. Based on information provided by Symbio, it did not upload customer data to the IPND for **4,544** public numbers, and **422** public numbers had an incorrect Service Status Code.

36. The ACMA therefore finds that Symbio 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.

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[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.

37. 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.

38. 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.

39. Based on information provided by Symbio, no public number customer data for **4,544** public numbers was uploaded to the IPND by Symbio and there was incorrect information in the IPND for a further **422** public numbers. Symbio 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.

40. The ACMA therefore finds that Symbio contravened clause 4.2.25 of the IPND Code by failing to supply public number customer data updates that occur on one business day, by the end of the next business day.