



Specified Points of Interconnection – draft framework

Submission | Commerce Commission
16 September 2022

Contents

Executive Summary	1
Introduction	2
SPOIs will change over time but these changes should be minimised and only for technical purposes.....	2
The number and location of SPOIs is a “live” issue in the sector	2
Process for amending a s231 notice	3
The TCF forum should consider proposed changes	3
Product Forum / CMF	4
Evaluating proposals.....	5
Limiting services available from a specific SPOI is a change to a SPOI.....	5
An appropriate technical purpose	6
SPOI notice periods.....	6
s166 and s162 considerations and conditions	7
Part B: Draft decision to prescribe Chorus’ POIs.....	7

Executive Summary

Thank you for the opportunity to provide feedback on the Commission's draft framework for considering proposals to add or change specified points of interconnection (**SPOIs**). The location of these handovers and interconnection services is important as service providers make significant investments in networks and services to build to SPOIs, and SPOIs define the edge of the regulated fibre monopoly network.

The specification of SPOIs is a live issue in the industry. In addition to Chorus' proposal to add a further nine SPOIs, it also indicated to service providers last year that it plans to withdraw handovers at eighteen SPOIs currently located in Spark sites. This is a significant change that, if implemented, would require us to redesign the network to maintain current services and resiliency and would result in an outage for almost [] **SPKCI** customers.

We support the Commission's proposed approach which recognises the importance of SPOIs, drawing on the TCF product forum to first advise on the implications of proposals and applying the requirements of the Act. The Commission should set conditions on changes to SPOI if necessary.

We recommend that the Commission further promote consensus on how SPOIs should evolve over time by clarifying that:

- A SPOI change includes proposals to limit handover options available to service providers at a location.

For example, Chorus does not support high-capacity handovers or added resiliency at some SPOIs, and in practice this means service providers must build to an alternative SPOI to provide services to consumers. The Commission should determine SPOI changes of this nature rather than leave it to the regulated provider.

- The requirement that changes must be for an appropriate technical purpose relates to practical or physical technical issues, and that there must be a nexus between the technical purpose and regulated providers proposed change.

We agree that specific sites may no longer be suitable for SPOI handovers but this should be driven by technical concerns rather than a regulated provider's commercial strategy.

- SPOI notice periods should start from when Commission has approved a change.

We have offered to discuss with Chorus options for continuing to provide handovers from sites it proposes to withdraw service, a fair sharing of any transition costs between Chorus and service providers (if necessary), and how we might make a joint application to the Commission to make any residual necessary SPOI changes. In clarifying these key issues, Commission guidance will help build a consensus approach to how SPOIs should evolve over time.

Introduction

1. Thank you for the opportunity to provide feedback on the Commission's draft framework for considering additions and changes to specified points of interconnect (**SPOI**), and Chorus' proposed additional SPOIs.
2. The Commission is required by s231 of the Act¹ to determine SPOI locations from which service providers can access regulated UFB handovers, and this also determines the edge of the regulated monopoly fibre network.
3. The Commission specified the initial POIs in December 2019. That decision focused on developing the initial POI list and - recognising the importance of the Commission's approach to updating POIs for industry and consumers - the Commission indicated that it would provide further guidance later, regarding how it would approach its ongoing role².

SPOIs will change over time but these changes should be minimised and only for technical purposes

4. The UFB fibre networks are dynamic and Chorus and LFCs will, over time, need to add or remove SPOIs for various technical reasons. For example, we continue to add handover locations to cater for increasing data demand more efficiently and resiliently and accept that over time some exchange sites may no longer be suitable SPOI sites.
5. However, it is important to ensure that the number and location of SPOIs are stable over time. LFC wholesale customers and retail service providers (**service providers**) make significant design and investment decisions - such as where to locate interconnection equipment and how to best configure their networks for resilience – based on the location and number of POIs. As noted in the draft, SPOI changes can also have competition implications in adjacent and downstream markets.
6. Further, service providers and their customers face potentially significant costs to change POI locations, including costs associated with reconfiguring networks to maintain capacity and resiliency and migrating customers, and service outages for end-users.
7. The Commission's proposed approach and requirements of the Act seeks to balance these objectives.

The number and location of SPOIs is a “live” issue in the sector

8. We support the Commission providing guidance on how it would consider changes to specified POIs as this will guide current technical discussions. The process for changing UFB handover locations is a “live” issue for the sector and the Commission's proposed framework can reduce the uncertainty relating to industry discussions and how handovers should evolve over time.
9. In addition to Chorus' proposal to establish nine new SPOIs, Chorus has notified service providers that from the end of this year it would no longer accept UFB fibre handover service orders at a further eighteen³ SPOIs located on Spark sites⁴, with a view to withdrawing all handover products at these sites by 2024 with the service withdrawn 2025. Chorus has

¹ Telecommunications Act 2001

² Commerce Commission *Specified points of interconnection Reasons paper* (19 December 2019) at para 66-67. Chorus took an action to details the next steps, including working on the timeline and how to assist RSPs to make changes. It has yet to report back to the Product Forum.

³ Christchurch, Dunedin, Glenfield, Greymouth, Hamilton, Invercargill, Levin, Mayoral Drive, Napier, Nelson, New Plymouth, Palmerston North, Porirua, Rotorua, Tauranga, Timaru, Wellington, and Whangarei.

⁴ Chorus leases collocation space on Spark exchanges building to provide these handovers.

indicated that the proposal to withdrew SPOIs reflects a strategic decision to concentrate handovers to its own exchange sites⁵. Chorus already limits the provision of handover services at the eighteen impacted SPOIs.

10. The withdrawal of SPOIs at these sites is a significant change that - if implemented - would have a material impact on the Spark network and our customers:
 - a. We would need to reconfigure our network to maintain current levels of resiliency, build a number of replacement high-capacity links and migrate almost []SPKCI.
 - b. The proposal would also further undermine our ability to provide our wholesale customers competing colocation services. There are substantive cost and resiliency benefits in locating equipment close to SPOIs – i.e., by removing the need and risk associated with using fibre between sites – and withdrawing SPOIs at Spark sites undermines our competing colocation service. Spark and Spark Wholesale customers already face increased cost and risk from current Chorus handover restrictions.
11. This is an important matter for Spark and our customers, and we have offered to discuss with Chorus options for continuing to provide handovers at the impacted SPOIs with Chorus, a fair sharing of any transition costs between Chorus and RSPs (if necessary), and how we might make a joint application to the Commission to make any residual necessary POI changes.

Process for amending a s231 notice

The TCF forum should consider proposed changes

12. We support the Commission's proposed framework for considering change. We accept that LFC and service provider networks will evolve over time to better manage traffic growth, improve resiliency and reflect that some exchange sites may reach the end of their useful life, and that these drivers need to be balanced against the impact on customers and the significant investments made by service providers in building to current LFC SPOIs.
13. The TCF is well placed to consider the technical and operational implications of proposed changes. For example, Chorus' 2021 consultation to withdraw SPOIs highlighted the range of issues, including that⁶:
 - a. The sites Chorus wanted carriers to migrate to have sub-par connectivity relative to handovers at Spark exchanges sites, and do not have diverse fibre access for resiliency purposes.
 - b. The migration would result in access seekers needing to purchase additional Chorus products.
 - c. Providers did not have resources to plan and manage the migration, and that additional support would be required, and
 - d. The proposal would increase service providers costs.

⁵ Chorus paper to Product Forum *Grandfathering Fibre HO's at non Chorus sites: plan updated following consultation* December 2021

⁶ Chorus December 2021 summary of feedback submitted to the TCF Product Forum and Spark specific feedback

14. Further, the UFB wholesale service agreements (**WSA**) - to which the Paper refers - provide separately for changes to interconnect points under specific circumstances⁷ and after Change Management Forum (**CMF**) consultation⁸.
15. Therefore, it makes sense that the Commission should first refer proposals to the TCF to apply the WSA process before applying the considerations required by the Act.

Product Forum / CMF

1 Does this Consultation Paper reflect the process administered by the NZ Telecommunications Forum? Please describe the consultation process within the industry if it differs.

16. The Commission has asked whether the Consultation Paper reflects the process administered by the TCF and if not, how it differs.
17. The change management process set out in WSAs anticipate two separate entities dealing with changes:
 - a. **The Product Forum** considers technical and / or operational issues relating to the services and agreements, including matters referred to the Product Forum by the CMF from time to time. The Product Forum is a collaboration/consensus building entity that does not have a formal voting role.
 - b. **The Change Management Forum** is where consultation occurs on key issues – i.e., on changes to an interconnection point, service descriptions and core terms - and formal voting occurs relating to changes to the agreements or services, or on whether a matter is trivial or not⁹. While the CMF must be consulted on changes to Interconnection Points, there is no formal vote.
18. Clause 3.1 of the WSA specifically requires the LFC to submit any proposed changes to interconnection points to the CMF for consultation with service providers in accordance with clauses 24.8, 25.1 and 25.2.
19. The proposed process anticipates that the Product Forum or CMF could consider changes to SPOIs, however this doesn't reflect the WSA requirement that consultation occurs through the CMF. We therefore recommend that the Commission align with the WSA process and refer proposals to the CMF who will be required in any case to consider the proposals under clause 3.1 of the WSA.
20. Accordingly, we recommend that Figure 1.2 be amended to clarify that the regulated provider should submit a SPOI change request to the CMF. Following CMF consideration, the regulated provider would then submit the proposal and report anticipated by paragraph 80 of the Paper to the Commission.

2 How would the industry continue to ensure adequate opportunities for all interested parties to comment on any proposed change request? Who do you see as stakeholders?

21. Service providers who are directly impacted will be connected to the LFC handovers and will be notified of any proposals through the proposed process.

⁷ As per clause 3.1 of the Chorus WSA, if necessary to protect the security or integrity of that Interconnection Point in order to maintain the continuity of supply of the Wholesale Services.

⁸ See clause 3.1 of the Chorus wholesale service agreement.

22. However, service providers wholesale customers may also be impacted by changes. For example, the location of SPOIs at Spark sites means that wholesale customers have a choice of collocation services from Chorus (using Chorus space in Spark sites) or Spark. The proposals mean that Spark wholesale collocation customers will face increased risk and potentially higher costs.
23. Service providers can engage wholesale customers, however, the time to do this would need to be built into the process timetable and the Commission process should anticipate direct input from parties that are not CMF members.

Evaluating proposals

24. We support the proposed approach set out in the Paper for evaluating proposals. Discussions on how SPOIs should evolve over time are continuing and the proposed guidance in the Paper will helpfully build consensus across the sector by promoting certainty relating to how the Commission will make its decisions.
25. Nonetheless, to provide more certainties for the sector, we recommend that the Commission further clarify that change may include limiting the service available from a SPOI, an appropriate technical purpose for a change, and from where notice periods will start.

Limiting services available from a specific SPOI is a change to a SPOI

26. The draft sets out that amendments of a SPOI includes removing, moving, or amending any of the details of a SPOI.
27. However, while changing a location is a clear change, it is unclear whether removing or limiting service options at a SPOI would be considered an SPOI change. Limiting service options can undermine the practical usefulness of a POI over time. For example, Chorus does not support very-high capacity 100Gbps handovers - or geographic diversity handover options¹⁰ - at SPOIs located in Spark sites. The limitations mean that, in practice, these SPOIs cannot meet service provider capacity and resiliency requirements for the large data volumes currently carried by networks, and service providers are inevitably required to build handovers to different SPOIs.
28. Chorus service restrictions are already impacting our customers. Spark and Spark Wholesale customers, located at some of the existing Spark SPOIs sites, are now having to incur substantial additional costs for the extension of new handovers to Chorus SPOIs. Alternatively, Spark Wholesale customers are moving from some existing Spark SPOI sites to Chorus's new SPOIs to maintain business profitability, resulting in different risks and costs from physically moving equipment.
29. There may be specific technical reasons to limit services available from a POI, including a decision not to prioritise the roll out of new services to that exchange using objective criteria. For example, the roll out of high capacity 100G handovers and resiliency should be based on objective demand criteria. However, a change to a SPOI of this nature should be determined or approved by the Commission rather than the regulated provider.
30. Accordingly, the Commission should clarify that limiting handover services at a SPOI – relative to the range of handover options supported more generally – is a change that would require the s231 notice to be amended.

¹⁰ While these services are not available at all POIs. Chorus has not applied an objective criteria – i.e., demand for the capability – in deciding not to make these services available at SPOIs located in Spark sites.

An appropriate technical purpose

3 What would you consider to be an appropriate technical purpose for adding or amending a SPOI?

31. We agree that existing SPOI can only be amended for an appropriate technical reason and that this includes the withdrawal of a SPOI. The limitation recognises the significant investment required by service providers in network and services to build to handovers, and that these should be changed for appropriate reasons.
32. We believe that an appropriate technical purpose would be where there is a practical or physical reason for the change, and that there would need to be a nexus between the technical reason and the proposed change. We accept that some exchange sites may - over time - no longer be suitable for handovers due to space limitations or the age of the building.
33. However, a SPOI change for technical purposes would not extend to, for example, regulated provider claims that a technical purpose includes commercial strategy, a decision not to invest in capacity or lifecycle replacement of equipment or a planning failure. There must also be a link between the technical purpose and the proposed change, i.e., a physical space constraint at an exchange would not justify the withdrawal of already built handovers or the withdrawal of services at a different SPOIs.
34. In our response to Chorus' 2021 consultation we indicated that, on the face of it, we were not aware of any technical reason why Chorus would need to withdraw handover services from all Spark sites and offered to discuss with Chorus options for continuing to provide handovers from the impacted sites.
35. It remained unclear to us why the now largely settled process for Chorus to request capacity at Spark exchanges could not be applied in this case. We have facilitated and enabled several capacity upgrades at Spark sites over the years for Chorus driven demand. For example, we responded to several requests in 2018/19 to add additional handover link capacity for Chorus driven by the industry demand for anticipated RWC data demand. [] **SPKCI**.
36. We do not believe a technical purpose would extend, for example, to commercial decisions not to pay the reasonable costs to add power capacity at a site or the lifecycle replacement of aging equipment.

SPOI notice periods

37. Chorus has further given notice that it will not accept UFB handover orders at several SPOIs from the end of this year, with a view to withdrawing services at these sites by 2024.
38. Chorus' notice puts service providers in a difficult position in that significant lead times are required to re-architect networks and migrate customers, yet a proposal has yet to be put to the Commission to make the changes to which the Chorus notice refers. The Commission also risks being asked to consider proposals that service providers are already incurring costs to implement.
39. We recommend that the Commission clarify that reasonable notice periods will apply from the date that the Commission approves a SPOI change request.

s166 and s162 considerations and conditions

4 What principles or factors do you consider to be relevant in considering s 166 and s 162?

40. We agree with the Commission's proposed criteria and considerations for changing or adding SPOIs.
41. The Commission provides examples of how a proposal might have an impact on competition in the wholesale or retail telecommunications markets, including downstream (retail) markets. The Commission could add to the list that proposals may have an impact on downstream and adjacent wholesale markets, for example, the provision of collocation services to wholesale customers.

5 Do you agree that the Commission can impose conditions as part of its decision to amend the s 231 notice? Why/why not?

42. We agree that the Commission can impose conditions, and that this is a practical way forward.

Part B: Draft decision to prescribe Chorus' POIs

43. We support the addition of new SPOIs to better manage data growth and improve resilience. For these reasons we have also asked that Chorus also consider adding a handover on the south-east side of Auckland for better traffic management (this seems to be a gap in the proposed SPOIs put to the Commission).
44. Although Chorus is considering our request, it is unclear what the process would be if agreement cannot be reached on a new SPOI. Service providers should be permitted to propose new SPOI locations and we recommend this should follow the same process as the regulated provider set out in figure 1.2.

[End]