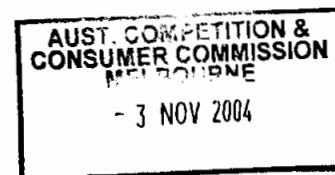


FILE No
DOC: D04 53684
MARS/PRISM

28 October 2004



Richard York
Director - Regulation
Telecommunications Group
Australian Competition & Consumer Commission
GPO Box 520J
Melbourne VIC 3001

Dear Mr York,

Globalstar Australia Pty Limited Submission in response to the Draft Report on Mobile Domestic Inter-carrier Roaming Service and the draft decision on whether domestic inter-carrier roaming service should be declared

Globalstar Australia Pty Limited (Globalstar) has made two relevant commercial-in-confidence submissions specifically in response to the Telstra-Hutchison WCDMA RAN infrastructure sharing proposal, and the proposed SingTel Optus and Vodafone 3G Network Co-Location and Sharing Agreement.

This non-confidential submission will specifically address matters relating to the Draft Report on Mobile Domestic Inter-carrier Roaming Service (the 'Draft Report') and the draft decision on whether or not the Commission should declare a mobile domestic inter-carrier roaming service (the 'Draft Decision').

Globalstar's Submission

Globalstar submits that:

- 1 the service description for the Mobile Domestic Inter-carrier Roaming Service (the 'Service Description') should be modified such that it includes domestic inter-carrier roaming to 3G networks;
- 2 the Service Description should be modified to include the short message services (SMS) origination and termination, and data services;
- 3 the Service Description should be modified such that certain metropolitan areas are not excluded from the scope of the Service Description;

- 4 the Commission should immediately declare mobile domestic inter-carrier roaming in respect of the CDMA inter-carrier roaming service for voice calls, SMS and data services;
- 5 the Commission should monitor the terms and conditions relating to the supply of the GSM inter-carrier roaming service by means of a record-keeping rule (RKR) and re-consider declaration if supply is threatened or that the terms and conditions of supply are unreasonable; and
- 6 the Commission should monitor the terms and conditions relating to the supply of 3G inter-carrier roaming services by means of a record-keeping rule (RKR) and consider declaration if supply is refused or that the terms and conditions of supply are unreasonable.

Inclusion of 3G Services in the Service Description

3G infrastructure consolidation and service layer competition

Globalstar Australia Pty Limited (Globalstar) understands the logic driving third generation (3G) network infrastructure consolidation (such as the Telstra-Hutchison proposal and the SingTel Optus-Vodafone proposal) supported by the argument that competition will be increasingly at the services layer rather than at the radio network infrastructure layer. However, it is Globalstar's view that whilst the mobile carriers intending to construct 3G mobile network infrastructure talk about competition at the services layer (including competition in content), in practice they will deny access to network infrastructure on commercially attractive terms to new market entrants without direct regulatory intervention.

True innovation and competition at the services layer will require new entrants to have national roaming access to 3G network infrastructure for voice calls, SMS and most particularly data services rather than simply resell the infrastructure owner's own suite of products and services. Effective service layer competition requires a participant to manage its retail customer base in its own service layer infrastructure, and to control the development and launch timing of its own products and services roadmap.

Consequently, access to national roaming on commercially acceptable terms is essential for a new or niche market entrant to be able to vigorously compete for customers, even if that competition is focused at the service layer rather than at the radio network infrastructure layer.

Given that at least one 3G mobile network is currently in service, the Commission should make provision now in the Service Description for the expected market demand for 3G domestic mobile inter-carrier roaming services. Making provision now for 3G inter-carrier roaming services will promote competition and efficient investment in 3G services by enabling the Commission to monitor the terms and conditions of supply, thereby giving new market entrants some expectation that if supply is refused or if the terms and conditions for supply are unreasonable the Commission will act to declare the 3G inter-carrier roaming service.

Recommendation

Globalstar recommends that the Commission include 3G mobile networks in the Service Definition.

Call Content

SMS and Data Services

In the Draft Report the Commission states that it has not included SMS services due to the "relative immaturity" of the market for such services. It is Globalstar's view that the market for SMS is both mature and substantial and that any viable mobile service dependent on domestic mobile inter-carrier roaming must include SMS origination and termination within the product offering.

Globalstar's view is that SMS has become an essential communications medium on mobile phones. In many cases SMS is a critical element of other value added services such as voicemail, by providing a means by which a customer can be notified of a new voicemail deposit. The exclusion of SMS from the Service Description could lead to mobile carriers providing basic voice roaming but either refusing to supply SMS origination or termination services, or offering to supply these services on unreasonable terms and conditions.

Data services are currently estimated to represent between 10 and 15% of a mobile carrier's average revenue per user (ARPU), with data services expected to represent up to 50% of forecast industry revenue growth.¹ It is Globalstar's view that it is essential for any competitive mobile service that it must support both circuit switched and packet data services.

Globalstar is aware that access to SMS and circuit switched and packet data services are currently being provided for the GSM inter-carrier roaming service.

¹ *Mobile data 2004*. Credit Suisse First Boston. 15 September 2003.

For the CDMA inter-carrier roaming service, SMS and circuit switched data services are being supplied. However, the terms of supply for SMS origination and termination are not commercially acceptable and Globalstar has recently been advised that packet data services including 1xRTT services are not available for supply under the CDMA inter-carrier roaming service despite these services being supplied to carriage service providers on a wholesale resale basis.

Globalstar is concerned that due to the lack of availability of packet data services, mobile services dependent on the CDMA inter-carrier roaming service will not be competitive with Telstra's own retail CDMA mobile services or with mobile services based on CDMA wholesale resale. The unavailability of packet data services for CDMA inter-carrier roaming creates a substantial barrier to competition by blocking an increasingly significant driver of ARPU growth.

With respect to 3G mobile networks, new data services based on faster data rates such as video calling represent the primary value proposition being presented to consumers encouraging them to choose 3G network services over 2G or 2.5G services. Should the Commission decide to include 3G networks in the Service Description, then to achieve its objective of increasing competition in 3G services the Commission must also include SMS and data services.

Recommendation

Globalstar recommends that the Commission includes SMS origination and termination and data services in the Service Description. In defining data services, the Commission should include data services provided by way of circuit switched data and packet data services.

National Scope

Competitive National Coverage

It is Globalstar's view that coverage continues to be a primary factor influencing a consumer's choice of mobile network. This view is consistent with the Commission's view expressed in the Draft Report. All mobile services in the Australian market are currently offered on a national basis and therefore any consideration of domestic mobile inter-carrier roaming services must be national in scope.

Whilst Globalstar recognises that there is little differentiation between the three GSM mobile networks in the capital cities, Globalstar is concerned that by excluding metropolitan areas from the Service Definition, mobile carriers could either refuse to supply a metropolitan GSM inter-carrier roaming service, or offer to supply a GSM inter-carrier roaming service in metropolitan areas on unreasonable terms and conditions.

In relation to the CDMA roaming service, Globalstar's view is that Hutchison does not represent a competitive or viable roaming partner with its CDMA coverage limited to the Sydney and Melbourne markets only. Consequently, Globalstar believes that any carriage service provider wanting to offer a national mobile service based on CDMA inter-carrier roaming must first reach an agreement with Telstra.

Globalstar is concerned that by excluding certain metropolitan areas from the Service Definition, Telstra could either refuse to supply a CDMA inter-carrier roaming service in Sydney and Melbourne, or offer to supply the CDMA inter-carrier roaming service in Sydney and Melbourne on unreasonable terms and conditions.

Recommendation

Globalstar recommends that the Commission removes the exclusion of certain defined metropolitan areas from the Service Description.

Declaration of CDMA Mobile Domestic Inter-carrier Roaming

Telstra's CDMA Monopoly

Globalstar's view is that Hutchison, with its coverage limited to Sydney and Melbourne does not represent a viable CDMA roaming partner.

Notwithstanding Globalstar's view of the viability of Hutchison as a CDMA roaming partner, were Telstra to insist as part of its terms and conditions for the supply of a CDMA inter-carrier roaming service that it have exclusive rights to supply the CDMA inter-carrier roaming service to a roaming partner in Australia, then all competitive pressure on Telstra to offer the CDMA inter-carrier roaming service on commercially acceptable terms would be removed.

When negotiating a CDMA inter-carrier roaming agreement with Telstra, Globalstar was informed by Telstra that it priced the CDMA inter-carrier roaming service at a premium. Telstra gave no justification for this pricing principle other than it could insist on a premium for CDMA inter-carrier roaming and would in fact do so.

It would be logical to assume that when offering CDMA wholesale resale services, Telstra has set pricing for these services such that it achieves a normal commercial return. Consequently, when the premium prices Telstra is charging for CDMA inter-carrier roaming service are compared to the prices Telstra offers for the CDMA wholesale resale service it is clear that Telstra is acting to reduce competition in the market for mobile services dependent on inter-carrier roaming, rather than legitimately extracting a normal commercial return for roaming services.

Globalstar's strong view is that Telstra is not supplying Globalstar with CDMA inter-carrier roaming services on commercially acceptable terms and that this is severely limiting Globalstar's ability to compete in the market in relation to the cellular component of its service. Telstra's pricing to Globalstar for voice calls and SMS origination and termination well exceed the rates in the market for wholesale resale services. Further, Telstra has advised Globalstar that it does not supply packet data services including 1xRTT services as part of the CDMA inter-carrier roaming service despite the fact that it supplies those same services on a wholesale resale basis to other carriage service providers.

Globalstar as a mobile carrier has the ability to launch cellular only services based on its CDMA roaming agreement with Telstra. However, Globalstar is of the view that the premium pricing charged by Telstra for CDMA inter-carrier roaming is such that it cannot launch a viable cellular only mobile service based on CDMA inter-carrier roaming.

If the Commission were to declare CDMA inter-carrier roaming, it is likely that Globalstar would make further investments in mobile services, particularly focussed towards rural and regional areas, and launch a cellular only product in the market to compete with Telstra and Telstra's other wholesale CDMA reseller customers.

3G like services in regional and rural Australia

Telstra is the only infrastructure owner in many parts of regional and rural Australia. A considerable portion of their rural CDMA network coverage was funded by the Australian Government in order to construct CDMA base stations in areas that ordinarily would not provide an economic return. However, Telstra is under no obligation to provide national roaming access to their partially federally funded CDMA network to other aspiring service providers, or indeed to customers of other service providers travelling into these parts of Australia where only Telstra can provide coverage.

New high speed, 3G like developments such as EV-DO and EV-DV are being launched on 2G CDMA networks in the US. Globalstar believes that 2G CDMA network developments will offer real alternatives to high speed services delivered on 3G WCDMA networks.

The critical difference will be that the reach and scope of the 2G CDMA network will always exceed the coverage offered by the new WCDMA networks, and in the short to medium term the difference in the network coverage will be extensive. In many parts of regional and rural Australia, 3G like services will only ever be available through developments on the Telstra CDMA network.

Access to high speed mobile services have been identified by many communities as essential to the development of community businesses, and the improvement of service delivery in areas such as health and education. For niche market players attempting to offer 3G like services in rural or regional markets, or national services with access to the service from rural and regional areas, roaming access to the Telstra CDMA network on commercially acceptable terms will be essential.

Continued infrastructure competition will support innovation and service delivery

Whilst it is highly unlikely that there will ever be a second national CDMA mobile network built in competition to Telstra, there will be instances where infrastructure competition will be essential to support innovation and local service delivery. This infrastructure competition will be particularly relevant to support service and content delivery to niche markets, often outside the scope of national infrastructure rollouts and product and service roadmaps.

Globalstar is aware of an increasing trend for communities to want to construct community networks to ensure their local community service requirements are delivered.

A number of communities in rural and regional areas are actively building community networks based on wireless local loop technologies. In each case the community strongly believes their local communications needs are not, and will not be adequately served by Telstra as the incumbent CDMA network infrastructure provider.

This trend to limited competition in infrastructure can only be sustainable in the medium term if the rural and regional community network infrastructure owners can gain access to national roaming on commercially acceptable terms to Telstra's CDMA network infrastructure. As the size of each community is generally small, it is highly unlikely that each local community infrastructure owner by itself will be able to negotiate a competitive roaming agreement.

Thus it is Globalstar's strong view that the declaration of CDMA inter-carrier roaming will of itself promote significant competition across the market in mobile services.

Recommendation

Globalstar recommends that the Commission should immediately declare mobile domestic inter-carrier roaming in respect of the CDMA inter-carrier roaming service for voice calls, SMS and data services.

Monitoring of GSM Mobile Domestic Inter-carrier Roaming

3G services and the ongoing reliance on 2G infrastructure

All mobile carriers intending to construct 3G network infrastructure acknowledge that there will not be a ubiquitous national rollout of 3G network coverage. On an ongoing basis, 3G networks will rely on access to 2G networks in order to provide full national mobile coverage. By way of example, Hutchison's launch of 3G network services in April 2003 is, and will remain reliant on national roaming access to a 2G GSM network to maintain connectivity and coverage for its customers travelling outside the limited footprint of the '3' WCDMA network.

As 3G customers travel further into regional and rural areas, it is clear that for the foreseeable future the only mobile network infrastructure accessible on a national basis will be the existing 2G mobile networks. Consequently, the availability of competitive roaming access to existing 2G network infrastructure will be essential for the uptake of 3G services in Australia.

It is Globalstar's view that without competitive roaming access to both 3G network infrastructure and existing 2G infrastructure, new market entrants will not be able to vigorously compete at the 3G service layer.

Mobile carriers participating in GSM inter-carrier roaming

It is Globalstar's understanding that only Vodafone and Telstra currently provide a GSM inter-carrier roaming service. Currently, SingTel Optus does not provide a GSM inter-carrier roaming service.

With two national GSM inter-carrier roaming access providers and the threat of entry of a third access provider, Globalstar's view is that it is currently possible to negotiate a GSM inter-carrier roaming agreement on commercially acceptable terms and conditions.

However, Globalstar is concerned that the market for GSM inter-carrier roaming services is fragile, the barriers to entry are still high, and that this situation may deteriorate such that supply could be withdrawn or only made available on a commercially unacceptable basis. Consequently, Globalstar supports the Commission's view that it should monitor on an ongoing basis the terms and conditions of supply for the GSM inter-carrier roaming service.

Recommendation

Globalstar recommends that the Commission should monitor the terms and conditions relating to the supply of the GSM inter-carrier roaming service by means of a record-keeping rule (RKR) and re-consider declaration if supply is threatened or that the terms and conditions of supply are unreasonable.

Monitoring of 3G Mobile Domestic Inter-carrier Roaming

Barriers to Entry and Current National Roaming Agreements

Companies who wish to serve smaller niche markets, require the technical and commercial capability to launch targeted new services in line with market driven timeframes. By definition, these niche market products and services are often outside an access provider's standard product and service roadmaps.

Given this operating environment, a reseller model with the niche player totally reliant on the technical capabilities and responsiveness of the access provider ensures that innovation and new product and service development must be stifled. Unfortunately, the same operating environment also ensures that the niche market player as access seeker is unlikely to ever achieve sufficient size or commercial power to negotiate competitive access outcomes without regulatory support.

It is Globalstar's view that the incumbent infrastructure owners impose substantial barriers to entry upon companies seeking to negotiate a competitive national roaming agreement to 2G infrastructure due to the unregulated nature of the market for national roaming.

Many of these barriers to entry are open to manipulation and selective application by infrastructure owners with the intent to retard a new entrant's progress. These barriers to entry include:

- the lack of responsiveness of access providers;
- the cost of access provider network developments borne by the access seeker;
- the commercial airtime rates for access offered by the access provider; and

- the time scales involved in negotiating and delivering a national roaming solution.

With 3G infrastructure consolidation a likely outcome in the market, Globalstar is concerned that the mobile carriers intending to construct third generation (3G) mobile network infrastructure may deny access to network infrastructure on commercially attractive terms to new market entrants without direct regulatory intervention.

Given the ease with which the 3G network access providers could impose barriers to entry, it is Globalstar's view that the Commission should monitor terms and conditions for the supply of 3G inter-carrier roaming services in order to promote efficient investment and increased competition.

Recommendation

Globalstar recommends that the Commission should monitor the terms and conditions relating to the supply of the 3G inter-carrier roaming service by means of a record-keeping rule (RKR) and re-consider declaration if supply is threatened or that the terms and conditions of supply are unreasonable.

Conclusion

It is Globalstar's view that the Commission can significantly increase competition in the mobile services market through the immediate declaration of the CDMA inter-carrier roaming service and through ongoing monitoring of GSM and 3G inter-carrier roaming services. Globalstar recommends that the inter-carrier roaming service description is widened to include SMS and data services, and that the proposed exclusion of metropolitan areas is removed.

Should you wish to discuss this matter further, I can be contacted on 0414 207 050 or by email to robert.sakker@globalstar.com.au.

Yours sincerely

Globalstar Australia Pty Limited ABN 81 099 917 398



Robert Sakker
Executive Director

Attachment 1

Globalstar Australia Background

General description

Globalstar Australia Pty Limited (Globalstar) is a carriage service provider offering single subscription, dual-mode satellite and cellular mobile communications services to Australians who live, work or travel in rural and regional Australia. Globalstar currently markets its dual-mode products and services in Australia under the **Mobile everywhere™** banner.

Globalstar is a wholly owned subsidiary of Pivotel Group Pty Limited (Pivotel), which holds an Australian carrier licence and acts as Globalstar's nominated carrier. Pivotel is one of only five mobile carriers owning infrastructure in Australia along with Telstra, Optus, Vodafone and Hutchison.

Globalstar owns and operates substantial telecommunications infrastructure, with satellite gateway sites located at Dubbo NSW, Mt Isa QLD and Meekatharra WA, in addition to a switching centre based in Strathfield NSW (the "Ground Network").

The Ground Network infrastructure communicates with the Globalstar™ constellation of low earth orbit (LEO) satellites owned and operated by Globalstar LLC in the US (the "Satellite Network"). The Ground Network operating in conjunction with the Satellite network allows Globalstar customers to make and receive calls throughout Australia and its territorial waters.²

Globalstar is the only company in Australia which provides single subscription, dual-mode Satellite/Cellular mobile communications services. These services provide access to all the benefits of mobile communications technology to Australians living, working or travelling through areas not covered by conventional cellular networks. In contrast to other mobile satellite services, Globalstar's **Mobile everywhere™** service uses domestic mobile numbers to uniquely provide rural and regional consumers access to:

- the ability to make and receive mobile calls with one dual-mode handset throughout Australia using either Satellite, or cellular technologies, or both;
- single subscription services using one domestic mobile number for both Satellite and cellular calls, one voicemail service, and one bill;

² Reception limitations and some exclusion zones apply. A clear view of the sky is required for operation in Satellite mode. Australian external territories excluded. Service not available beyond 200 nautical miles territorial waters limit.

- least cost calling by enabling Globalstar customers to use conventional cellular networks when cellular coverage is available;
- all calls to Globalstar customers (whether received by the Globalstar customer in Satellite mode or cellular mode) charged to the calling party at the normal 'calls to mobile' rates rather than expensive 'calls to mobile satellite service rates'; and
- the full benefits of Mobile Number Portability (MNP).

The Ground Network was originally constructed and operated by Vodafone Australia Limited (Vodafone), with dual-mode Satellite/GSM cellular services first launched by Vodafone in April 2000. On 3 January 2003, a Business Sale Agreement between the current owners and Vodafone completed. Since that date, Globalstar has been operating as a completely independent business under the new ownership structure.

Globalstar uses the Vodafone Network for the GSM cellular component of its service. Vodafone also provides Globalstar with essential interconnect, transit and call delivery services.

In Australia, it is clear that CDMA rural and regional coverage is more extensive than GSM coverage, and Globalstar received strong early feedback from rural and regional communities that a Globalstar™ dual-mode Satellite/CDMA service would provide much greater utility benefit to rural and regional consumers. In response to market demand, Globalstar embarked on a multi-million dollar upgrade of its Ground Network to enable CDMA based satellite services. Concurrently, Globalstar negotiated and executed a national roaming agreement with Telstra to enable its customers to roam onto the CDMA cellular network using dual-mode Satellite/CDMA cellular handsets. Globalstar subsequently launched dual-mode Satellite/CDMA services in May 2004.

Globalstar's major competitor in Australia is Telstra. Telstra resells the Iridium mobile satellite service using the Telstra Mobile Satellite (TMS) brand, and sold through the Telstra Country Wide division.

Currently, Iridium is the only other mobile satellite service accessible in Australia using a handheld device. Iridium also uses low earth orbit (LEO) satellite technology, but does not require ground network infrastructure located in Australia. The TMS service only operates in Satellite mode and has no cellular component. It is provided using a distinct 01471xx xxx mobile satellite number range. Consequently, the service does not support Mobile Number Portability, and calls to a TMS service from a Telstra fixed or mobile service cost 80c per 30 sec with a 40c flagfall.

Iridium has some direct resellers in the Australian market competing with Telstra (e.g. Applied Satellite Technology and TR Telecom) however it is Globalstar's understanding that following the market entry of Telstra as an Iridium reseller in June 2002, Telstra has dominated sales of Iridium services in Australia.

In addition to handheld mobile satellite services, there are a range of geostationary mobile satellite solutions including Optus MobileSat and various Inmarsat solutions. In most market segments, Globalstar does not consider that these services directly compete with its **Mobile everywhere™** suite of products and services.

Globalstar resells the Vodafone GSM network to its customers as the cellular component of its dual-mode Satellite/GSM services.

Globalstar's Satellite/GSM network customer details are managed in Vodafone's GSM Home Location Register (HLR), and Globalstar's customer care system interfaces to Vodafone network provisioning and MNP administration systems. Vodafone supplies Globalstar with interconnect, transit and call delivery services and Globalstar's Satellite/GSM customers use Vodafone's voicemail platform.

Globalstar supplies and Vodafone offers the Satellite service to its retail customers and reseller partners.

Telstra supplies Globalstar with national roaming access to its CDMA network. Globalstar offers access to the CDMA cellular network to its customers as the cellular component of its dual-mode Satellite/CDMA services. Globalstar's Satellite/CDMA network customer details are managed in Globalstar's CDMA Home Location Register (HLR), and Globalstar's customer care system do not interface to Telstra's network provisioning or MNP administration systems. Globalstar's Satellite/CDMA customers use Telstra's voicemail platform.

Globalstar's does not provide the Satellite service to Telstra.