

# REPORT

## Report on Carrier Pre-selection

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A report issued by the Telecommunications Regulatory  
Authority

13th June 2004

Purpose: To provide background information on the TRA's regulation of CPS, treating it as an 'access' service.



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### 1 Introduction

On 24<sup>th</sup> December 2003, the Telecommunications Regulatory Authority launched a consultation on the way in which a carrier pre-selection service in the Kingdom of Bahrain should be implemented. The process involved the publication of a consultation document MOU/CN/015. The consultation process was completed on the 21<sup>st</sup> January 2004 at which time written responses had been received from seven parties. The TRA then issued a Report summarising the responses received, document MOU/RP/027 of 10<sup>th</sup> February 2004 and a second consultation of 25<sup>th</sup> February 2004 (document MOU/CN/ 017). These were followed by a draft Regulation, document MOU/RN/003 of 28<sup>th</sup> March 2004, open for further comment.

In light of responses received on the second consultation document and draft Regulation, the TRA has made a number of changes including:

- Relaxation of the obligation on Batelco to inform all of its customers of the introduction of CPS;
- Clarification that the Consumer advisory group does not “oversee” carrier pre-selection.

In addition, the TRA has re-considered the issue of cost apportionment for CPS further and has some amendments to its position, which are reflected in the CPS Regulation, issued at the same time as this report. This report provides the rationale for the current position.

#### 1.1 Scope

As a report, this document has no status other than as a means of disseminating information.

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### 2 CPS – an access service

Following comments received from parties, the TRA is providing clarification of its view that the CPS service, as described in the earlier consultations and draft regulation, represents an access service as defined in the Telecommunications Law and in relation Section 57(e) of the Law. The CPS service itself, i.e. the provision of a facility to enable calls to be routed to another pre-selected operator, is distinct from the actual call conveyance that is undertaken by the originating and CPS operators. The origination of the call, which may be subsequently carried by a CPS operator is regarded as an interconnection service. (The definition of the relevant market for call origination services, and any issues arising from market power in that relevant market will be considered in a forthcoming consultation.)

The Telecommunications Law defines CPS as “*a facility whereby a subscriber to a telecommunications service can by default access the services of an interconnected holder of a telecommunications license*” (definitions section)

Access is described as “*the making available of telecommunications facilities and/or telecommunications services to another licensed operator for the purpose of providing telecommunications services, and including the connection of equipment by wire or wireless means, access to physical infrastructure including buildings, ducts and masts, access to mobile networks and access to number translation or networks offering equivalent functionality*”. (definitions section)

Interconnection means “*the physical and logical linking of telecommunications networks used by the same or a different organisation in order to allow the users of one organisation to communicate with users of the same or another organisation, or to access services provided by another organisation.*” (definitions section)

The TRA considered both the nature of the CPS services and the practise in other jurisdictions and concluded that CPS services constitute access services.

CPS involves the automatic routing of an individual subscriber’s calls via an alternative operator. Although CPS involves the provision of services to interconnected operators so that subscribers may use their services, this does not necessarily mean that CPS services are necessarily interconnection services. The question of whether a service is an interconnection service relates to the type of service rather than the party for whom it is provided.

From the technical point of view, the subscriber will be connected to the network of an operator (Operator A), which will recognise that the caller uses another operator (Operator B) for a particular type of call and route the call accordingly. This will involve routing through an interconnection (and thus a pre-existing interconnection is required); but the CPS service itself consists of automatic recognition using a database of callers registered with other operators.

The list of CPS services and associated costs as set out in section 8 of the Regulation does not include accepting the call onto the system, transmitting the signal to and through the interconnection onto the other operator’s network or call termination. In that sense, the CPS services do not relate to “*the physical and logical linking of telecommunications networks*” which are involved in interconnection as defined in the Telecommunications Law. Instead, they would appear to relate more closely to “*the*

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*making available of telecommunications facilities and/or telecommunications services to another licensed operator”* which is involved in access as defined in the Telecommunications Law.

The TRA has also examined the practise in other jurisdictions, such as the European Union which also support the view that CPS constitutes an access service.

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### 3 Cost apportionment for CPS services

The introduction of CPS will involve Batelco providing services and incurring a number of costs, which are listed in section 8 of the Regulation and are summarised below:

- General system capital costs: up-front routing, billing, customer support and database software costs.
- General system recurring costs: maintenance of the general system.
- Operator specific set up costs: commercial negotiation and setting up account and billing relationships.
- Operator-specific recurring costs: account management and billing.
- Line enabling set up costs: database administration and billing set up costs.
- Line enabling recurring costs: customer fault resolution services, billing and database management services.

The TRA is providing two clarifications in relation to the charges that recover the costs incurred by the CPS provider.

#### 3.1 Basis of costs

As CPS constitutes an access service, the charges for the CPS service should be 'fair and reasonable' as per section 57(e) of the Telecommunications Law. In addition, the general requirements of Section 58(b) of Law, that all tariffs for telecommunications services shall be fair and equitable, non discriminatory and based on anticipated, or forward looking, costs, also applies to CPS service charges.

The regulation further states that in calculating the charges for CPS:

8.2 The costs eligible for recovery pursuant to these regulations are those actual incremental costs that:

8.2.1 would not have been incurred by the Providing Carrier but for the implementation of Carrier Pre-selection; and

8.2.2 were incurred exclusively for the purposes for the provision of Carrier Pre-selection.

CPS relies on systems and processes, some of which are new and required specifically for CPS and some of which are incremental to Batelco's existing systems (e.g. processes using Batelco's Customer Service System). The TRA considers that the correct basis for charges is the actually and reasonably incurred incremental costs to deliver the necessary additional functionality, correctly apportioned between CPS and other products and services sharing the facilities.

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This approach provides a method for the calculation of costs that balances the needs of the stakeholders as defined by the six guiding principles relating to CPS cost apportionment as set out in the first consultation, namely: cost causation, distribution of benefits, effective competition, cost minimisation, reciprocity and practicability. It allows the providing operator to recover those additional or incremental costs it has incurred as a result of the requirements to provide CPS under the principles of allocation of benefits and cost causation.

National Regulatory Authorities (NRA) around the world differ in the extent to which they prescribe how the costs of CPS should be determined. The principle that charges should be cost oriented is widely accepted, but in many cases it is for the CPS Provider and the NRA to agree which costs are relevant and how they should be treated. In its Report "Developments in Carrier Selection and Pre selection" (15 Nov 2001), the OECD suggests that the appropriate costs for recovery are "incremental costs". Other jurisdictions are more prescriptive in specifying approaches, for example, the United Kingdom specifies long run incremental costs (LRIC) and Malta specifies that costs must be based on an efficient technical solution supplied by an efficient operator.

In light of the conditions in Bahrain and the TRA's objective of encouraging competition in telecommunications services, the TRA considers that it would be generally beneficial that the cost method be prescribed to ensure objectivity and transparency in the determination of charges. Given the nature of the costs that are incremental in the provision of CPS services, the TRA put forward the view that the application of long-run incremental costs (LRIC) should enable the CPS provider to recover all costs that are incremental, defined '*as those costs of network elements or services that would not be incurred if it were not for the need to provide the CPS service*'. However, in the light of comments received, the TRA has modified its position and, at this stage, has chosen not to specify the details of the costing methodology to be employed.

The TRA will, however, evaluate the charges proposed by Batelco to assess whether or not they conform to the principles set out in the sections of the Law mentioned above. The TRA retains the option to prescribe the costing methodology that will underpin these prices, including the potential to require Batelco to employ a LRIC approach, in circumstances where the TRA is not satisfied that the resulting charges are fair and reasonable and based on forward looking costs.

The calculation of the cost of providing the CPS service is distinct from the costs of the underlying originating call. As stated above, the underlying originating call is currently viewed by the TRA as an interconnect service, and therefore, under Section 57(b) of the Telecommunication Law, should be tariffed on the basis of forward looking incremental costs. The TRA plans to issue a consultation on the relevant market for call origination and an assessment of Batelco's market power in this market in the near future.

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### 3.2 General systems capital costs

The TRA has determined that the general system capital costs shall be charged on the basis of two steps as set out in the regulation:

8.1.1 General system provisioning costs should be borne by the CPS provider and recovered through charging from them to the CPS operator as follows:

- A per operator set up charge. The level of this set up charge will be determined by the TRA, with the remaining costs recovered through;
- A surcharge to all minutes originated by the CPS provider for services where CPS is effective, regardless of which operator subsequently carries them.

The allowance of a per operator set up charge recognises an element of the capital charges are incurred as a result of the entry of new operators under the principle of cost causality. However, under its objective to encourage competition the TRA is concerned that this initial charge should not act as a deterrent to market entry. The TRA will set the level of this charge taking into account, among other things, the telecommunications licence fees that a CPS operator will be expected to pay.

The principle of recovering the remaining general system provisioning costs from all operators including the originating operators "self interconnected" calls; is established in other jurisdictions, for example in Malta, the UK and Ireland, and is noted in the recent OECD report. As an example the Irish regulator Comreg set out the following position in regulation D2/99 in relation to the calculation and charging of CPS order handling charges.

*"In relation to General System provisioning costs defined as "once off costs mainly incurred by the incumbent operator in modifying network and support systems to enable CPS. System provisioning costs are independent of operator demand.*

*"The director considered that justified and appropriate costs incurred in system set up and provisioning for CPS should be recovered from all operators, including Eircom (the SMP operator). The costs would be spread across all network elements used in providing interconnected calls, including Eircoms "self- interconnected calls" such that the costs are recovered from all such network elements"*

The Malta Communications Authority, in its May 2004 Report on Consultation and Decision for 'Introducing Carrier Selection and Carrier Pre-selection in Malta' states:

*"Decision 7: The MCA directs that CS and CPS obligations fall on voice telephony operators with a dominant market position. Consequently, and as proposed in the consultative paper, general system provisioning costs incurred by the DMP operator for CS and CPS (as separated facilities) are to be recovered through a supplemental charge on call origination for all relevant call minutes originating on the network.*

*It should be noted that relevant call minutes are all calls of a type available under the CS/CPS schemes and that the charge should recover only the costs of an efficient operator using as much as possible an efficient technical solution".*

The OECD report cited in Section 3.1 above, which analysed CPS implementation in 26 OECD countries, states "costs of upgrading the networks which become necessary as a result of CPS should be distinguished from those that arise from day to day operation of CPS (i.e. incremental costs of switching over a customer). The former

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*costs should be split in a competitively neutral way among all carriers including the incumbent”, (e.g. by market share as a reflection of the benefits from the upgrade).*

The underlying rationale for this principle of cost recovery is that all customers are net beneficiaries from the increased competition and consequential downward pressure on prices brought about by CPS including Batelco’s non CPS customers. The recovery is only against minutes for call types where a CPS service has become effective.