



Office of the Director of
**Telecommunications
Regulation**

**New Opportunities in the radio communications market:
Public Mobile Data and
Automatic Vehicle Location/Tracking**

Consultation Paper

Document No. ODTR 01/44

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1 Background

The Director has recently received enquiries relating to the provision of public mobile data services and automatic vehicle location (AVL) services, using radio spectrum in the UHF private mobile radio (PMR) band and the Low Frequency (130 - 170 kHz) bands. Public Mobile Data services provide packet switched data communication between individuals and groups of users and are primarily aimed at the transport, security, distribution and logistics sectors. Typical applications include the sending and receiving of short text or status messages, for example delivery instructions or stock information, between dispatchers and mobile personnel. Automatic vehicle location services use the mobile data network to convey information about the location and/or status of vehicles or other valuable assets at regular intervals to a central control point.

Currently, combined national mobile data and AVL networks are operational in several European countries, including Austria, Belgium, the Netherlands and the UK. The data networks utilise standard 2 x 12.5 kHz PMR channels in the UHF frequency band (450 - 470 MHz) and vehicle locating is achieved by means of radionavigation beacons operating in the LF (130 - 170 kHz) band.

The Director considers there may be benefit in licensing such networks in Ireland and may consider developing a licensing procedure, depending upon receipt of firm expressions of interest in response to this consultation.

This consultation paper does not constitute legal, commercial or technical advice. The Director is not bound by it. The consultation is without prejudice to the legal position of the Director or her rights and duties under relevant legislation and does not form part of any formal tender process.

2 Consultation procedures and timetable

The consultation period will run from 20th June 2001 to 13th July 2001. **Written comments should be marked “Response to ODTR Public Mobile Data and Automatic Vehicle Location consultation paper” and submitted before 5.00 p.m. on Friday 13th July 2001, to:**

Sinead Devey
The Office of the Director of Telecommunications Regulation
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Lower Abbey Street
Dublin 1

All comments are welcome, and should reference the relevant question numbers from this document (for convenience a summary list of the questions is at Appendix A).

The Director expects to publish a report on this consultation shortly thereafter. Apart from expressions of interest, responses to the consultation will be available to the public on request. Where elements of any response are deemed confidential, these should be clearly identified and placed in a separate annex to the main document.

The Director regrets that it will not be possible to enter into direct correspondence with those supplying comments.

3 Proposal to licence Public Mobile Data / AVL services

The Director is aware that there exist other potential means of delivering public mobile data and AVL services, for example the GSM Short Message Service and General Packet Radio Service can be combined with satellite based navigation systems. However, she believes that availability of a dedicated public mobile data / AVL service could provide worthwhile benefits to business and commercial users, and further enhance competition in the mobile data market. She is therefore minded to consider the licensing of one or more national networks, subject to expressions of interest being received in response to this consultation and to the availability of appropriate radio spectrum.

A Public Mobile Data / AVL service would require licensing under the Wireless Telegraphy Acts, 1926 -1988. Should the Director decide to proceed with licensing, Regulations would be prepared under the Act to enable a network to be licensed. In addition, a separate telecommunications services licence under section 111 of the Postal and Telecommunications Services Act, 1983, as amended, may be required.

As radio spectrum is a finite resource and there is particularly heavy demand for frequencies in the UHF band, where the Director decides to licence such systems, it may be necessary to limit the number of operators who could be licensed to provide such a service. Accordingly, where the number of applicants exceeds the number of licences that may be offered, it may be necessary to carry out a competitive selection procedure in order to award a licence to operate the service.

Should a licence or licences be awarded, the following fees will be payable:

- administrative fees, payable at the time of licence issue, to cover the cost of licensing and the running of a competitive selection procedure, as appropriate
- spectrum fees, payable annually, to cover the ODTR's costs associated with spectrum management, monitoring and licence enforcement.

The level of administrative fees would depend upon the number of licences awarded and the work involved in preparing the licences. Spectrum fees would be comparable, pro-rata to the spectrum assigned, to those applied to other national public mobile networks.

4 Consultation and Request for Expressions of Interest

At this stage, the Director wishes to explore the demand for mobile data and AVL services in Ireland, and to consider the possibility of licensing such a service should sufficient interest be apparent. She therefore invites firm expressions of interest in the operation of a national public mobile data / automatic vehicle location service. Subject to a review of the responses to this document, the decision of the Director as to whether to licence such systems and depending upon the number of such expressions received, the Director may then proceed with a competitive selection process. The Director also invites comments on the likely market in Ireland for such a service and upon the extent to which such services might be delivered by alternative means and how the provision of competitive mobile data and AVL service can best be promoted in Ireland.

- Question 1. Do you have a view on the likely market for Public Mobile Data and Automatic Vehicle Location services in Ireland?***
- Question 2. Do you have a view on how such services should be delivered, including the most appropriate radio spectrum and the extent to which such services might be delivered by existing platforms such as GSM cellular and the global positioning by satellite (GPS) system?***
- Question 3. Do you consider that radio spectrum in these bands should be used for dedicated public mobile data / AVL services? (if you do not please explain why)***
- Question 4. Do you have a view on the minimum number of such services that should be licensed, subject to availability of suitable radio spectrum?***
- Question 5. Does your organisation wish to submit an expression of interest in the provision of a national Public Mobile Data and Automatic Vehicle Location network? If so please provide in a separate attachment details of the type(s) of service that would be provided, proposed extent of coverage, how the service would be funded, proposed end-user tariffs, the radio spectrum requirement, any requirements for connection to the PSTN and any other information that you consider to be relevant.***
- Question 6. Do you have a view on the minimum licence conditions that should apply to the operator of a national public mobile data and AVL network?***
- Question 7. Do you have a view on the parameters that should be used in a comparative evaluation process, in the event that the number of expressions of interest exceeds the number of licences that can be accommodated in the available spectrum?***

Respondents should note that the submission of an expression of interest at this stage in no way commits the Director to issue a licence at any stage in the future. Subject to a review of the responses to this document and the decision of the Director whether to licence such systems, in the event of more than one expression of interest being received the Director may proceed with a comparative selection process for the award of one or more national licences. In the event of only one expression of interest being received the Director may proceed to issue a licence, subject to compliance with certain criteria relating to coverage, grade of service, financial soundness and such other matters as she considers appropriate for the issue of such a licence. In such an event, the criteria will be stated in her response to this consultation.