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**Public consultation concerning The Swedish National Post and  
Telecom Agency Draft Regulations on licences to use radio  
transmitters in the 2500–2690 MHz-band**

Dear Sir or Madam,

Inquam Broadband GmbH intends to build and operate Broadband Wireless Access Networks in Europe.

Therefore Inquam Broadband welcomes the opportunity to provide its views and comments concerning the issues for the frequency bands identified in the above public consultation document.

We hope that our responses provide a helpful contribution for your further proceedings. Please feel free to contact me either by phone at +49 221 5000-201 or by email [andrzej.cwik@inquam-broadband.de](mailto:andrzej.cwik@inquam-broadband.de) with any questions regarding the above.

Kind regards,  
Inquam Broadband GmbH



Uwe Pietschmann for  
Dr. Andrzej Cwik, CTO

Attachment  
Inquam Broadband Responses

**Inquam Broadband Responses  
to the  
Public consultation concerning The Swedish National Post and  
Telecom Agency Draft Regulations on licences to use radio  
transmitters in the 2500–2690 MHz-band**

1. Nationwide licence  
Due to the provision of mobile services and the efficient use of the spectrum the decision to assign nationwide licences is the right approach from Inquam Broadband's point of view.
2. Auction process  
Inquam Broadband appreciates the auction via the Internet. This forms the most economic way for all involved parties.
3. Bidding process  
The design of the bidding process and the calculation of eligibility seems very complicated. However, it has the definite advantage to let the market express itself on the relative weight of the forecasted duplexing methods. Inquam Broadband agrees with this approach.
4. FDD / TDD spectrum  
In our opinion TDD is more suitable for future 4G mobile services. Currently there are effectively only 30 MHz available where the maximum radio power of 54dBm/MHz EIRP can be used. Taking into account that systems short term will support 20 MHz channels especially for mobile services providing higher data rates in an urban environment only one channel could be implemented. Therefore the amount of TDD spectrum should be increased.

When considering tougher power limits for the lower TDD band, the spectrum split for FDD and TDD deployments should be nearly the same. See also our comments under No. 5 below.

5. Radio power limitations in TDD  
Inquam Broadband appreciate the possibility to deviate from certain technical conditions and limitations subject to co-ordination between the licence holders of their radio transmitters.

PTS should provide more clarification if the radiated power limitations, specified for the lower 10 MHz range of the TDD band, also apply under the assumption that neighbouring operators coordinate their deployments and/or employ mitigation techniques. In such a case the limits of 18.2 dBm/MHz and 28 dBm/MHz would lead to unnecessary guard bands and results to inefficient use of the limited TDD-spectrum.

Field trials with UTRA TDD networks in core UMTS band have shown that co-existence among networks in adjacent TDD 5 MHz channels under coordinated conditions could be achieved without reducing

transmit power by applying mitigation measures.

Similar field test have also shown that mobile networks which met 3GPP co-siting limits could use adjacent 5 MHz channels, without synchronisation of Up- and Downlink, but just ensuring 30 dB minimum coupling loss.

There are references to figure 6 in Appendix 1 part "licence conditions and information for the frequency block TDD1:" paragraph 5 – 7. Figure 6 is not available in the draft document. PTS is asked to provide figure 6 or the reference for this figure for comments.

The table in Appendix 1 part "licence conditions and information for the frequency block TDD1:" item 9 specifies the Out-of-Band emission for TDD-BS upper edge. The values in the first two lines seem to follow technical standard ETSI TSG 25-105, however the values in the last two lines cannot be found in this technical standard. Inquam would appreciate if PTS provides the source for these values or the basis for their definition.

### 6. Spectrum cap

To limit the maximum amount of spectrum owned by one company will ensure competition to the benefit of the customers. A spectrum cap of 140 MHz, which includes existing assignments in comparable bands (e.g. 1.9- 2.2 GHz), will allow at least two different operators within this band. This approach would stimulate competition in regard to mobile services and would avoid spectrum hoarding by those companies that rather intend to hinder competition to protect their existing business.

### 7. Services and Technologies

Inquam Broadband supports service and technology neutral attribution in all bands. Market requirements should decide about the best fit of technology to the customer demand.