# CONSULTATION DOCUMENT

## Selection and Authorisation of Systems Providing Mobile Satellite Services (MSS)

**Table of contents**

## BACKGROUND AND PURPOSE

On 14 February 2007, the Commission of the European Communities (the Commission) adopted Decision 2007/98/EC designating the 2 GHz frequency bands (1980 – 2010 MHz (Earth to space) and 2170 – 2200 MHz (space to Earth)) for the use by systems providing mobile satellite services (MSS)[1]. This Decision seeks to give certainty with regard to the availability of spectrum resources for the systems concerned. The Decision includes a specific provision for the use of Complementary Ground Components (CGCs)[2] in areas within the footprint or coverage of the satellite(s), within which the satellite service is provided.

This document sets out the proposed framework for the selection and authorisation process to allow the use of the identified radio spectrum (amounting to 2 x 30 MHz[3]) for systems providing mobile satellite services, including systems involving the use of Complementary Ground Components.

The document is the result of several meetings of a dedicated expert group on '2GHz MSS Regulatory Issues' (an informal working group composed of members of the Radio Spectrum Committee and the Communications Committee). At its 24th meeting (7 February 2007), the Communications Committee discussed the document. Members of the Committee called for a quick progress towards implementation of the MSS selection and authorisation framework. They also agreed that a public consultation should be launched as soon as possible.

Given that the 2 GHz frequency bands have been designated for MSS available EU-wide, and in line with the internal market objectives, it would be best to select the assignees of this spectrum through an EU-wide coordinated selection and authorisation process.

Therefore, building on the present document and taking into account the results of the public consultation, the Commission services are considering the need for the Commission to propose a European Parliament and Council Decision based on Article 95 of the EC Treaty in order to provide a binding legal framework for the MSS Selection and Authorisation Process.

Depending on the adoption progress in the Council and the European Parliament, the MSS Selection and Authorisation Process itself could formally start in the first half of 2008, the selection of winning applications could be done at the beginning of 2009, and the necessary rights of use (authorisations) could be granted by Member States shortly thereafter in February 2009.

In the meantime, it is proposed that matters not covered by a proposal for the Article 95 Decision continue to be the subject of discussions with Member States and interested parties before the formal start of the MSS Selection and Authorisation Process.

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1 Commission Decision 2007/98/EC of 14 February 2007 on the harmonised use of radio spectrum in the 2 GHz frequency bands for the implementation of systems providing mobile satellite services, OJ L 43, 15.2.2007, p. 32; Annex 1.

2 In the Commission's Decision 2007/98/EC CGCs are defined as 'ground based stations used at fixed locations in order to improve the availability of the mobile satellite service in zones where communications with one or several space stations cannot be ensured with the required quality'. In any case, in order to avoid harmful interference, such ground based stations could only be used as long as they are an integral part of the mobile satellite system and controlled by the resource and network management mechanism of such system.

3 This spectrum is available and planned to be used for MSS in accordance with decisions taken by the International Telecommunications Union (ITU) at the WARC-92.

## QUESTIONS

This public consultation seeks feedback from **stakeholders** on the various aspects of the proposed MSS selection and authorisation framework, in particular:

1. The EU level coordination of the MSS Selection and Authorisation Process.

2. The overall timing for the MSS Selection and Authorisation Process and the timing of specific phases of the MSS Selection and Authorisation Process.

3. The milestones and their sequence to be used for assessment of implementation progress of candidate MSS systems.

4. The spectrum award for MSS systems which have been ranked through the selection process, including the limitation of the maximum amount of spectrum available for each individual candidate MSS system.

5. The selection criteria.

6. The common conditions to be applied to the rights of use of the 2 GHz MSS spectrum.

7. The arrangements for the authorisation of CGCs.

Corresponding specific questions are brought up in the relevant sections of this document.

Moreover, the public consultation also seeks specific feedback from industry, and in particular from **potential MSS operators,** on the following points:

1. The planned geographic and service coverage areas of their systems. The planned timetable for the steps to reach the planned maximum geographic and service coverage.

2. The planned services and dates for launching these services on a commercial scale. The planned intermediate steps (e.g. deployment of infrastructure) leading to such launching of services.

3. The planned (minimum) requirements for radio spectrum (an upper limit of 2x15 MHz is proposed, see section 2.5 of this document).

Please note that the information provided by interested parties in response to the public consultation is without prejudice to any future application.

## PRACTICAL ORGANISATION OF THE PUBLIC CONSULTATION

This public consultation will run until 14 May 2007. Contributions should be sent by email to

INFSO-B-2GHZMSS@ec.europa.eu

For identification purposes and any questions on contributions, please give the name of person or organisation and a contact person, postal address, telephone and fax numbers, and email address. A notification of receipt for contributions will be sent by email within 2 working days.

All contributions will be published unless confidentiality is specifically requested. Confidentiality can be requested for parts of the contributions.

Personal data gathered in the course of this consultation will be processed in accordance with the applicable legislation on data protection. Please see

http://ec.europa.eu/information_society/policy/radio_spectrum/privacy_statement/index_en.htm

In order to comply with national requirements concerning public consultations prior to the limiting the number of rights of use to be granted for radio frequencies as well as transparency of procedures for granting rights of use, competent national authorities of Member States may have to run national public consultations on the same document in parallel. Contributions to these national consultations should be sent observing the deadlines and conditions stipulated by the relevant national laws and the competent national authorities.

All contributions (both to the EU level public consultation and to national consultations) will be shared between the competent national authorities of Member States and the Commission services, regardless whether confidentiality has been requested. All the contributions will be considered jointly by all Member States and the Commission services.

# 1 MAIN ELEMENTS OF THE MSS SELECTION AND AUTHORISATION FRAMEWORK

## 1.1 Overall Objectives of the MSS Selection and Authorisation Process

The suggested framework seeks to facilitate the emergence of pan-EU mobile services thereby contributing to the internal market, as well as enhance competition and choice of services for the benefit of EU citizens (see also Commission Decision 2007/98/EC).

The suggested timing of the MSS Selection and Authorisation Process seeks to ensure that as many candidate MSS systems as possible have a fair and non-discriminatory opportunity to take part in the selection process, whilst ensuring that the 2 GHz bands are brought into operation as soon as possible.

## 1.2 Guiding Principles of the MSS Selection and Authorisation Process

The MSS Selection and Authorisation Process for the 2 GHz bands relies on a number of guiding principles:

- radio spectrum needs by applicants should be clearly identified, allowing for the verification of effective spectrum scarcity;
- selection criteria should be determined taking into account the need for effective and efficient use of radio spectrum;
- clear procedures and timeframes should be defined for the various steps of the selection and authorisation process;
- the actual selection and authorisation should be coordinated at the EU level.

Moreover, unless a dedicated binding regulatory instrument provides otherwise, any selection and authorisation process should be in accordance with the EU regulatory framework governing electronic communications.

On the one hand, the regulatory framework imposes a number of requirements when considering whether or not to limit the number of rights of use: (a) Member States shall give due weight to the need to maximise benefits for users and to facilitate the development of competition; (b) Member States shall give all interested parties, including users and consumers, the opportunity to express their views on any limitation (public consultation); (c) Member States shall publish any decision to limit the granting of rights of use, stating the reasons therefore; (d) Member States shall review the limitation at reasonable intervals or at the reasonable request of affected undertakings (see Article 7 of the Authorisation Directive 2002/20/EC).

On the other hand, should a limitation be needed, the provisions of the Authorisation Directive require that rights of use are granted on the basis of selection criteria which must be objective, transparent, non-discriminatory and proportionate. Moreover, any selection procedure must give due weight to objectives such as the development of competition, diversity of services and benefits to end users, whilst achieving spectrum efficiency and technology neutrality (see Article 7(3) of the Authorisation Directive 2002/20/EC which refers to the objectives mentioned in Article 8 of the Framework Directive 2002/21/EC).

## 1.3 Co-ordination of the MSS Selection and Authorisation Process at the EU Level

A key consideration for the framework is the assessment of applications against the agreed criteria. The assessment of all applications against each of these criteria by each Member State in isolation would, by

necessity, result in a major duplication of effort which is not considered desirable, together with a potential diversity of approaches that would jeopardise the possibility itself to offer EU-wide services.

A coordinating role in the MSS Selection and Authorisation Process is therefore envisaged, in particular regarding the definition of the evaluation methodology, the assessments of applications as well as the coherent selection of applicants. This approach provides greater clarity to applicants, reduces the administrative burden which the selection procedure might otherwise impose on Member States as well as the time required to undertake the evaluation.

As a result, it is proposed that this co-ordination will be based on formal procedures involving Member States[4]. A coherent selection of applicants would be implemented by all Member States in their national systems, implying that the selected MSS operators will have to formally obtain rights of use for radio frequencies at the national level, in line with relevant national requirements.

The selection process may require assistance of independent external consultants, in particular for the analysis of the applications and other documents received from candidate operators as well as for office / secretarial support. Different independent external consultants could be contracted for different specific tasks.

The Commission's Decision designating the 2 GHz bands to MSS was adopted on the common understanding that Member States would refrain from granting rights to use the 2 GHz spectrum until such time as the outcome of the co-ordinated selection process is known, and that Member States do their best endeavour for finalizing the MSS Selection and Authorisation Process by the end of 2008. The selection framework proposed therefore assumes that both competent authorities of Member States and prospective MSS operators will not seek to achieve authorisation of the spectrum nationally, in advance of the selection co-ordinated at the EU level.

***Question 1: What is your opinion on the approach proposed for the coordination of the MSS Selection and Authorisation Process at the EU level?***

### 1.4 Analysis of Selection Options

A variety of selection mechanisms have been considered in the development of the proposals set out in this document. These include:

a) a selection based on competitive bids (auctions);

b) a selection based on beauty contest (criteria-based);

c) a selection based on achievements against pre-defined milestones.

**a) Competitive selection procedure ('auction')**

Generally auctions, and other forms of 'competitive bids', might prove the most straight-forward and transparent way of granting rights of use. However, this option is not considered further in this consultation document. In particular, a number of Member States are reluctant to consider auctions. An auction-based approach might also lead to lengthy discussions in the Council and the European Parliament during the legislative process, which could result in delays in the overall MSS Selection and Authorisation Process. Furthermore, difficulties may arise in arranging a "pan-EU" auction, not least regarding how to share the revenues in an appropriate way between Member States.

[4] Comitology, see Council Decision 2006/512/EC of 17 July 2006 amending Decision 1999/468/EC laying down the procedures for the exercise of implementing powers conferred on the Commission, OJ L 200, 22.7.2006, p. 11.

**b) Comparative selection procedure ('beauty contest')**

A comparative selection procedure also called 'beauty contest' is a process by which all applications are evaluated against objective, pre-agreed selection criteria which attempt to capture the key attributes that are expected from the candidate systems. The main issue with a beauty contest is therefore the definition of appropriate selection criteria and their weightings.

**c) Milestone review process ('MRP')**

This option implies the verification as to whether certain pre-defined milestones which are relevant to the progressive implementation of MSS systems are fulfilled by applicants by given dates. Access to the radio spectrum would be granted if critical milestones are passed, ending the process if the spectrum band is filled up with successful candidates.

Comparison of these options leads to the following observations concerning their suitability for the MSS Selection and Authorisation Process:

Time limitations applied in option c) could be useful in ensuring that the radio spectrum is brought into use in a timely fashion, but bear the risk to prematurely exclude systems if the timetable is too short for certain applicants to meet the proposed 'milestones'. Option b) in contrast makes it possible to judge a wide range of candidates but could result in spectrum still remaining unused for a long period of time if there is no obligation to pass milestones by a given date.

### 1.5 The Proposed Selection Option

In the view of the advantages and disadvantages of the various options, it is proposed to combine options b) and c) and use a **comparative selection procedure (**beauty contest), however on the basis of candidates pre-selected according to the fulfilment of pre-defined milestones by given dates.

That option provides a mechanism to eliminate candidates which do not give a clear evidence for progress in implementation of MSS systems through the completion of milestones which will require a commitment of funds to the project (so avoiding 'paper satellites'), whilst still retaining the ability to award the spectrum to the applicant(s) which can show the best 'fit' with the objectives set. This appears to meet the twin objectives of getting the spectrum into use in a timely fashion whilst gaining maximum benefit out of the use of such spectrum.

The overall selection process is described in more detail in section 2 of this document.

***Question 2: What is your opinion on the proposed approach to selection (MRP followed by beauty contest)?***

## 2 MSS SELECTION AND AUTHORISATION PROCESS

### 2.1 Summary and Timeline

The table below presents the proposed outline of the MSS Selection and Authorisation Process, in the form of sequential steps based on the proposed selection option (MRP followed by beauty contest). It shows the objectives of the different phases, what each phase will consist of, the roles of the parties involved (presented separately for administrations and interested parties) and the proposed time line.

The timescales for the key milestones in the MSS Selection and Authorisation Process have been determined with the aim to ensure that all candidate systems can be accommodated, whilst ensuring that the 2 GHz bands are brought into operation as soon as reasonable. The two key milestones themselves

define the level of maturity of the candidate MSS systems required to qualify their applications for the stages of 1st and 2nd assessment.

The full list of milestones is provided as Annex 2 of this document. The key milestones include:

- Milestone 2 – Satellite Manufacturing, documented through binding manufacturing contracts; and

- Milestone 5 – Gateway Earth Stations, documented through binding construction and installation contracts.

For the purposes of the MSS Selection and Authorisation Process achieving a required milestone would imply achievement of all the preceding milestones (e.g. achieving milestone 5 implies achieving milestones 1 to 5).

Throughout the MSS Selection and Authorisation Process the following rules concerning handling of information and documents shall apply:

- Calls for applications shall be issued centrally;

- Administrations of EU Member States shall be kept informed about applications received.

## *Overview of the MSS Selection and Authorisation Process*

*Legend: S&A= selection and authorisation.*

| *Phase Objectives* | *Constituencies* | *Time line (tentative)* | *Administrations of Member States/ Co-ordination - EU Level* |
|---|---|---|---|
| ***PUBLIC CONSULTATION & ADOPTION / PUBLICATION OF FRAMEWORK***<br><br>***Transparency / early announcement of the selection procedures; obtaining feedback; gain better understanding of demand for spectrum; legal certainty.*** | | ***30/3/2007*** | ***Launch of public consultation on the overall S&A framework. Request of voluntary information from interested parties on their anticipated spectrum requirements, coverage, services, dates of commercial operation.*** |
| | ***Comments on overall S&A framework. Informal expressions of interest by candidates.*** | ***30/5/2007*** | ***Receipt of informal expressions of interest and responses to consultation document.*** |
| | | ***30/6/2007*** | ***Formal proposal of the S&A framework for 2 GHz MSS.*** |
| | | ***31/3/2008*** | ***Adoption and publication of the S&A framework for 2 GHz MSS.*** |
| | | ***30/4/2008*** | ***Adoption and publication of the detailed requirements of the MSS S&A process.*** |
| ***FIRST CALL FOR APPLICATIONS***<br><br>***Establishing list of eligible candidates; validating spectrum requirements by the candidate operators; obtaining information on the planned milestone fulfilment.*** | | ***30/4/2008*** | ***Issue of the 1st call for applications.*** |
| | ***Applications to be sent, including evidence for passing milestones 1-2. Achieving milestones 1-2.*** | ***30/6/2008*** | ***Receipt of applications. Closure of the list of interested parties.*** |
| | | ***31/7/2008*** | ***Evaluation of responses: short-listing eligible applicants, achieving milestones 1-2. First test of scarcity of spectrum.*** |
| ***SECOND CALL FOR APPLICATIONS***<br><br>***Obtaining detailed information on applicants' MSS projects.*** | | ***31/8/2008*** | ***Call for more detailed applications from eligible applicants.*** |
| | ***More detailed applications to be sent, including evidence concerning milestones 1-5.*** | ***31/10/2008*** | ***Receipt of more detailed applications.*** |
| ***FINAL SELECTION***<br><br>***Establishing list of eligible candidates; scarcity test. Ranking of applications, selection of operators.*** | ***Additional evidence sent of meeting milestones 1-5, if required. Achieving milestones 1-5.*** | ***31/12/2008*** | ***Short-listing eligible applicants who have achieved milestones 1-5. Second test of spectrum scarcity.*** |
| | | ***31/1/2009*** | ***Evaluation of the eligible applications, based on the pre-defined criteria: scoring candidate applications. Selection of applicants by ranking. Validation of the results at the EU level.*** |
| ***AUTHORISATION***<br><br>***Assignment of usage rights at national level.*** | | ***28/2/2009*** | ***Individual MS to grant the spectrum usage rights, where required.*** |
| ***COMPLETION OF THE S&A PROCESS***<br><br>***Bringing MSS into service and achieving pan-EU service coverage.*** | ***Evidence concerning milestones 6-9 to be sent. Achieving milestones 6-9.*** | ***1/1/2011*** | ***Validation of evidence provided.*** |

***Question 3: To what extent is the overall timing for the MSS Selection and Authorisation Process adequate to ensure that as many candidate systems as possible will have a fair and non-***

***discriminatory opportunity to take part in the selection process, whilst ensuring that the 2 GHz bands are brought into operation in a timely fashion? What is your opinion on the timings of specific phases of the MSS Selection and Authorisation Process?***

***Question 4: What is your opinion on the milestones themselves and their sequence? To what extent are milestones 2 and 5 the proper ones to be met for, respectively, the first and second application?***

The different phases shown in the table are described in more detail below.

### 2.2 The Public Consultation & Adoption / Publication of Framework Phase

This document represents the beginning of the public consultation phase of the MSS Selection and Authorisation Process which is being launched at the EU and national levels. Launching of the public consultation was supported by the 24th meeting of the Communications Committee ('COCOM') that took place on 7 February 2007.

Building on the responses to this consultation document, the final MSS Selection and Authorisation Process will be developed, including full descriptions of each phase, and the necessary legal instruments. Section 4.1 of this document briefly describes the EC legal instrument proposed in this document - a Council and Parliament Decision based on Article 95 of the EC Treaty.

### 2.3 First Call for Applications Phase

The next step will be a formal call for applications addressed to all parties that wish to be considered in the selection process.

The information requested will include details of spectrum requirements and expected progress against the planned milestones (as defined in Annex 2 of this document) and include the date at which the system is planned to be in commercial operation. In addition, each application must include evidence that milestones 1-2 have been met.

This represents the start of the formal selection process and the subsequent selection process will be limited to those systems which have been submitted through completed applications.

While applicants manifesting interest during this call may be asked to outline how they intend to meet the milestones (e.g. an indication of achieved milestones or timing foreseen for achieving outstanding milestones), the situation of the different players as for the fulfilment of milestones would at this stage not be used to eliminate manifestations of interest, except for milestones 1-2 as described below.

The first step in the evaluation of the results of the call for applications would be to eliminate those applications which do not provide sufficient evidence for having passed the threshold milestones 1-2. Sufficient evidence will only be considered to have been provided where a binding contractual agreement can be shown to exist. Only the remaining applicants would be considered eligible for the subsequent selection process.

The second step would be to determine whether or not there is spectrum scarcity. If the responses to the call for applications demonstrate that all the eligible candidates can be accommodated within the available radio spectrum the conclusion would be that there is no scarcity. In that case spectrum will be awarded to the candidate systems. The successful candidates will have to meet all the milestones according to the agreed timetable, as well as any minimum requirements which may be imposed in the context of an Article 95 Decision.

No consideration will be taken of which country made the International Telecommunications Union (ITU) filing for MSS systems included in the application.

While the first call for applications is intended to gain better understanding on possible spectrum scarcity and possibly eliminate less serious candidates ('paper satellites'), removing this stage might simplify the overall MSS Selection and Authorisation Process.

***Question 5: What is your opinion on a possibility of removing the first call for applications phase from the MSS Selection and Authorisation Process?***

## 2.4 Second Call for Applications Phase

If, following the 1st call for applications phase, there is found to be spectrum scarcity, a final stage of the selection process will be necessary. Candidates that have submitted successful applications, including evidence of meeting milestones 1-2, would be invited to submit final bids requesting authorisation. These bids would have to include evidence that also milestones 3-5 would have been or could be met by 31 December 2008.

Applicants would be required to provide specific statements as to the extent to which they meet the selection criteria, providing clear references to the relevant sections of their business plan which support these claims.

The Applicants would also be required to provide a full business plan for the system (an indicative format is proposed in Annex 3 of this document).

The evaluation of the bids would first be used to eliminate those applications which do not give sufficient evidence of meeting the threshold milestones 3-5. Only the remaining applicants would be considered eligible to the subsequent selection process.

The second step would be to determine whether there still remained spectrum scarcity. As was done previously, if it is found that all the candidates submitting bids and demonstrating compliance with milestones 3-5 can be accommodated within the available radio spectrum the conclusion would be that there is no scarcity and the process could go directly into the authorisation (assignment of spectrum) phase, subject to meeting all the milestones according to the agreed timetable, as well as any minimum requirements which may be imposed in the context of an Article 95 Decision.

## 2.5 Final Selection Phase

If however, scarcity is found, it will be necessary to proceed with the selection process through the ranking of suitable applicants.

Applicants will be awarded an overall rank based on the extent to which they meet the criteria. Applicants' business plans will be used to build an understanding of the applicants' capacity to meet the milestones and the commitments made against the selection criteria. Applicants will then be ordered in terms of ranking with the highest rank accorded the first place. The applicant with the highest rank will be awarded the spectrum demanded; the remaining spectrum will then be assigned to those with lower ranks, in order of decreasing rank order.

Based on a survey by CEPT,[5] 13 systems were identified with an intention to operate in the 2 GHz bands, most intending to incorporate CGCs. The total amount of spectrum required by these systems significantly exceeds the 2 x 30 MHz available. Therefore, in case of spectrum scarcity, the intention is to impose a strict limit on the maximum amount of spectrum which any individual MSS system will be assigned, which is proposed to be limited to 15 MHz in each direction of transmission. This limitation would allow selection of at least two winning applicants while leaving sufficient scope for different types of spectrum requests (in any case the amount of radio spectrum obtained by each selected operator should be in line with what was requested for ensuring viable commercial operations).

[5] ECC(06)097 Annex 14, reflecting the situation as of July 2006.

The proposed methodology would in effect determine the number of rights of use dependent on the ranking of the applicants during the selection process in combination with their spectrum requirements. In contrast, there is currently no intention to limit or pre-empt the number of rights of use to be granted, should no spectrum scarcity be demonstrated.

***Question 6: What is your opinion on the proposed ranking / spectrum award option? What is your opinion on the proposed limitation of the maximum amount of spectrum which any individual MSS system could be assigned to 15 MHz in each direction of transmission? Do you have any proposals for alternative methods which could be used to select successful candidate systems?***

### 2.6 Assignment of Spectrum (Authorisation) Phase

Following the selection of the winning applicants it is proposed that according to a pre-agreed common framework each Member State will authorise the selected systems in a common agreed timeframe and identified specific spectrum range used by each authorised party, as well as the common conditions attached to the rights of use of spectrum. Member States will authorise the selected MSS systems in accordance with national legislation.

### 2.7 Completion of the Selection and Authorisation Process

Following the granting of rights of use, the progress of the applicants' systems against milestones 6-9 will continue to be monitored. The intention is to set a deadline of 1 January 2011 by when all the milestones must be met by all the winning applicants.

In order to monitor individual operator's progress towards milestone 9, regardless of whether a beauty contest has been undertaken, successful operators will be required, as a condition of the authorisation, to provide an annual report, detailing its status against its business plan as provided in the winning bid.

## 3 SELECTION CRITERIA

### 3.1 Principles Underpinning the Selection Criteria

The Selection Criteria must be in accordance with the following principles:

a) They must be objectively justified and proportionate;

b) They must be transparent – i.e., can be easily understood by potential applicants and can be verified by the assessing bodies;

c) They must be non-discriminatory – i.e., do not unduly discriminate between different satellite applications/operators.

### 3.2 List of Criteria

The following criteria have been identified for the purposes of the beauty contest:

- **Ensuring the Pan-EU Geographic Coverage**

This criterion would be used to assess the geographic service areas of specific candidate MSS systems. The criterion comprises two sub-criteria: *number of EU Member States included in the service area* and *degree of geographical coverage in each EU Member State* - based on the applicant's declaration on the service area of the mobile satellite system that will be completed at milestone 9 (as indicated in its application).

- **Creating Consumer and Competitive Benefits**

This criterion would be used to assess the consumer and competitive benefits which specific candidate MSS systems will provide, in addition to those consumer benefits identified within the other criteria. The definition of this criterion is therefore deliberately limited to the following three sub-criteria: *infrastructural competition* - different platforms and technologies can introduce competition between the providers thereby increasing choice of providers at competing prices; *service competition* - diversity and choice of services can increase demand; innovation creates further demand and can increase consumer welfare; *date(s) of commercial service* – earlier availability of services could provide additional consumer benefit.

- **Compliance with the Spectrum Efficiency Objective**

This criterion would be used to assess spectrum efficiency of specific candidate MSS systems. The criterion includes four sub-criteria: *total amount of spectrum required*, *effective management of frequencies*, *satellite system performance* (satellite frequency re-use pattern and data rate per MHz) and *coverage performance per MHz*.

- **Compliance with Other Public Policy Objectives**

This criterion would be used to assess the extent to which specific candidate MSS systems contribute to achieving certain public policy objectives not dealt with by the three preceding criteria. The criterion comprises three sub-criteria: *ensuring provision of vital public interest services* (i.e. public protection and disaster relief), *integrity and security of services* and *coverage of rural areas in the EU*.

***Question 7: What is your opinion on the proposed selection criteria?***

### 3.3 Assessment of Compliance with the Criteria

It is suggested that for the purposes of assessment of applications the following weights are associated with the criteria:

- **Ensuring the Pan-EU Geographic Coverage** **40 %**
- **Creating Consumer and Competitive Benefits** **20 %**
- **Compliance with the Spectrum Efficiency Objective** **20 %**
- **Compliance with Other Public Policy Objectives** **20 %**

The assessment of compliance with the criteria would comprise the following stages:

a) A score assigned for each application against each criterion, taking account of the extent of fulfilment of the criterion and the credibility of the evidence submitted;

b) The criterion weighting multiplied by each applicant's criterion score, providing an applicant's weighted score;

c) A summation of each applicant's weighted scores.

***Question 8: What is your opinion on the use of scoring and weighting as an appropriate mechanism to select MSS operators? To what extent are these weightings appropriate? Have you any suggestions for a more appropriate mechanism which would meet the objectives of the assessment?***

# 4 LEGAL AND REGULATORY ISSUES

## 4.1 The EU Legal Framework

In order to coordinate at the EU level the MSS Selection and Authorisation Process, the following two alternative instruments have been considered:

- A recommendation based on Article 19 of the Framework Directive ('Article 19 Recommendation');

- A decision based on Article 95 of the EC Treaty ('Article 95 Decision').

Article 19 Recommendations make specific recommendations but do not produce legally binding effects. Nevertheless, Member States must ensure that their national regulatory authorities take the utmost account of these recommendations. Any diverging national regulatory authority further has the duty to inform the Commission, giving its reasoning for any divergence from the Recommendation (see Article 19 of the Framework Directive 2002/21/EC).

A Council and Parliament Decision based on Article 95 of the EC Treaty on the other hand is binding in nature. However, it implies a proposal from the Commission and co-decision by the European Parliament and the Council.

Even though adoption of an Article 19 Recommendation could require several months less than adoption of an Article 95 Decision, the former is not considered as an appropriate legal instrument to provide a framework for the MSS Selection and Authorisation Process:

a) Only the Decision can give the legal certainty stakeholders need;

b) In a Recommendation scenario, applications would have to be collected and assessed by all Member States individually, following guidance on the criteria contained in the Article 19 Recommendation. However, Member States might still adopt separate approaches with the consequence that a non-fragmented outcome could not be guaranteed.

Therefore it is envisaged that the Commission could propose an Article 95 Decision to provide legal certainty to the MSS Selection and Authorisation Process. The specific role of this Decision could consist in:

a) Establishing the main elements of the MSS Selection and Authorisation Process, including timetable and milestones, selection criteria, the link between the results of the selection co-ordinated at the EU level and the national authorisations, co-ordinated enforcement procedure;

b) Providing a legal basis for co-ordination pursuant to comitology procedures of the detailed methodology of evaluation of applications as well as for a coherent selection of applicants to be implemented by Member States.

The table "Overview of the MSS Selection and Authorisation Process" contained in section 2.1 of this document assumes that an Article 95 Decision would be adopted and published by 31 March 2008. **It must be stressed that feasibility of such a comparatively quick adoption is conditional upon widespread support of both Member States and members of the European Parliament**.

## 4.2 Common Conditions to Be Attached to MSS Authorisations

Common conditions which would be applied to all rights of use (whether for satellite components or CGCs) include:

- The designation of the service for which rights of use are granted, i.e. mobile satellite services (MSS);

- The commitment to meet all the milestones according to the agreed timetable as well as the commitments undertaken in the context of the beauty contest or the minimum requirements which may be imposed in the context of an Article 95 Decision, as the case may be;

- Maximum duration.

Other conditions that may be attached to the MSS satellite component rights of use in accordance with the EU regulatory framework for electronic communications and applicable national laws and regulations include (a) usage fees and conformity with provisions for the avoidance of harmful interference and for the limitation of exposure of the general public to electromagnetic fields from Part B of the Annex to the Authorisation Directive; as well as (b) all the conditions listed in Parts A and C of the Annex to the Authorisation Directive, such as administrative charges, environmental and town and country planning requirements, granting of access rights and rights of way, network security and integrity.

In line with section 4.3 of this document, no *a priori* restrictions are suggested on other conditions that may be attached to the CGCs rights of use in accordance with the EU regulatory framework for electronic communications (in particular the Authorisation Directive) and applicable national laws and regulations.

***Question 9: To what extent are the proposed common conditions to be applied to the rights of use of the 2 GHz MSS spectrum sufficient and appropriate? What would be the appropriate maximum duration of these rights of use?***

### 4.3 Authorisation of CGCs

Commission Decision 2007/98/EC on the harmonised use of radio spectrum in the 2 GHz frequency bands for the implementation of systems providing mobile satellite services allows for the inclusion of CGCs i.e. ground based station(s) used at fixed locations, which are an integral part of the mobile satellite system and controlled by the satellite resource and network management system. They will use the same direction of transmission and the same portions of frequency bands as the associated satellite components and shall not increase the spectrum requirement of its associated mobile satellite system.

Whilst Member States have agreed that the authorisation of the satellite component would best be undertaken within an EU context, it is considered that the spectrum assignment and authorisation regime for the use of CGCs should be dealt with at national level. It remains necessary however, to ensure the compatibility of the CGC authorisations with the selection and authorisation of the satellite component.

In particular, Member States would:

- Not proceed to authorisation of CGCs before the EU level co-ordinated selection of MSS operators is completed;

- Grant, to those MSS operators authorised to use the 2 GHz bands for satellite component, the right of use for national CGCs, if and when requested within the service area of the satellite;

- Provide that CGCs may continue operating for a maximum period of 18 months, in case of failure of the satellite component[6].

[6] As indicated in the Commission Decision 2007/98/EC designating the 2 GHz frequency bands (1980 – 2010 MHz and 2170 – 2200 MHz) for the use by systems providing mobile satellite services (MSS), "CGCs could also be utilised even if signals are not transmitted through the satellite components".

Some Member States have indicated their intention to allow bringing CGCs in operation before the satellite component starts functioning subject to safeguards ensuring the eventual operation of the whole MSS system.

***Question 10: What is your opinion on the proposed arrangements for the authorisation of CGCs?***

### 4.4 Authorisation Fees

Individual Member States may levy fees, as appropriate under national authorisation regimes. This may include specific fees in relation to authorisation of CGCs.

***Question 11: What is your opinion on the proposed arrangements for national authorisation fees?***

### 4.5 Enforcement Procedures

It is intended that two layers of enforcement procedures would apply:

As regards CGC rights of use granted on a national basis, the enforcement procedures provided by national laws of respective Member States would apply.

As regards MSS rights of use granted following the MSS Selection and Authorisation Process co-ordinated at the EU level, a commonly agreed co-ordinated procedure of enforcement would be carried out if, following the authorisation of spectrum, an operator fails to meet any of the agreed milestones or conditions of authorisation.

It is proposed that the co-ordinated procedure of enforcement entails:

- A notification to a MSS operator of its failure to meet any of its obligations stemming from the MSS Selection and Authorisation Process, containing a request to ensure performance of such obligations within a reasonable period of time;

- Revocation of all the rights of use issued by administrations of Member States in case the MSS operator concerned does not cure its non-performance of the relevant obligations within the timeframe stated in the notification.

It is suggested that administrations of Member States would monitor the compliance of the authorised MSS operators against their obligations stemming from the MSS Selection and Authorisation Process. Any information obtained as a result of such monitoring would be shared with administrations of other Member States as well as with the Commission services.

The existing ITU frequency coordination procedures would continue to apply. In particular, in the event of a satellite failure the Member State, through whom the filing was made, can request a suspension of the filing for up to 2 years. If however, the satellite is not brought back into regular use by this time the assignment would be cancelled by the ITU.

In the event that action to revoke spectrum rights of use is undertaken for an individual operator, it would be necessary to develop a further selection and authorisation procedure, for that part of the spectrum which will remain unassigned, which may or may not be based on the framework proposed in this document.

### 4.6 Appeals Procedures

The ordinary appeals procedures provided by the EU law and national law of Member States would apply.

## 4.7 Regulations of the International Telecommunications Union (ITU)

Satellite frequency co-ordination must be handled at an international level due to the large satellite coverage areas, unconstrained by national borders. This co-ordination is managed through the ITU filing process which operates on a first come, first served basis. Under this process, satellites that have completed frequency coordination and whose frequency assignments have been recorded in the ITU Master Register are afforded protection from interference. Specifically, coordination agreements protect the satellite receiver from interference from other space and terrestrial systems. Also, administrations agree that emissions from the satellite will not cause harmful interference to their networks. However, ITU frequency coordination does not guarantee that satellite emissions will be received free of interference in all countries. This must be negotiated on a case by case basis except where regional agreements or plans have been adopted.

The ITU imposes strict deadlines on the time by which a satellite is required to become operational following its filing, before the filing is cancelled. The ITU imposes no limit on the number of filings a particular applicant can make. However, a later filing has more coordination constraints than a sooner one and this may change the initial business model for applicants.

Some potential applicants for the 2 GHz bands might have existing ITU filings but it is not intended that the priority invested to these systems under existing ITU filings will be reflected within the proposed selection process.

**LIST OF ANNEXES:**

**Annex 1**

Commission Decision

of 14 February 2007

on the harmonised use of radio spectrum in the 2 GHz frequency bands for the implementation of systems providing mobile satellite services

(notified under document number C(2007) 409)

(Text with EEA relevance)

(2007/98/EC)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to Decision No 676/2002/EC of the European Parliament and of the Council of 7 March 2002 on a regulatory framework for radio spectrum policy in the European Community (Radio Spectrum Decision) [1], and in particular Article 4(3) thereof,

Whereas:

(1) Effective and coherent use of radio spectrum is essential for the development of electronic communications services and can help the European Community to stimulate growth, competitiveness and employment; access to spectrum must be eased to improve efficiency, promote innovation as well as greater flexibility for users and more choice for consumers, while taking into account general interest objectives [2].

(2) The Commission promotes new and innovative communications systems using any kind of technical platform and capable of providing services in the Member States, regionally or at a pan-European level.

(3) In this context, systems capable of providing mobile satellite services (MSS) are seen as an innovative alternative platform able to provide various types of pan-European telecommunications and broadcasting/multicasting services regardless of the location of end users, such as high speed internet/intranet access, mobile multimedia and public protection and disaster relief. These services could improve coverage of rural areas in the Community, thus bridging the digital divide in terms of geography. The introduction of new systems providing MSS would potentially contribute to the development of the internal market and enhance competition by increasing the offering and availability of pan-European services and end-to-end connectivity as well as encouraging efficient investments.

(4) Systems capable of providing MSS should include at least one or more space stations and they could include complementary ground components (CGC), i.e. ground based stations used at fixed locations in order to improve the availability of the mobile satellite service in zones where communications with one or several space stations cannot be ensured with the required quality.

(5) Radio spectrum is available and planned to be used for MSS in the frequency bands 1980 to 2010 MHz and 2170 to 2200 MHz (2 GHz bands), in accordance with decisions taken by the International Telecommunications Union (ITU) at the WARC-92.

(6) A harmonised and efficient use of the 2 GHz bands for systems providing MSS at regional or pan-European level is necessary, in particular due to the scope of satellite signals, which are by nature crossing national borders.

(7) A mandate [3] was issued on 6 October 2005 by the Commission to the CEPT, pursuant to Article 4(2) of Decision No 676/2002/EC, to study the harmonised technical conditions for use of the 2 GHz bands for MSS in the Community. Pursuant to this mandate, the CEPT has submitted its report providing the technical conditions for the use of the 2 GHz spectrum by such systems.

(8) The 2 GHz bands are currently unused in most Member States and should, in line with the CEPT technical conclusions, be designated and made available without unnecessary delay in all Member States for systems providing MSS to ensure the development of such systems.

(9) CEPT has concluded that the coexistence of systems capable of providing MSS and systems providing terrestrial-only mobile services in the same spectrum in the 2 GHz bands without harmful interference is not feasible in the same geographical area. Consequently, in order to avoid harmful interference to MSS and inefficient use of spectrum, it is necessary to designate and make available the 2 GHz bands to systems capable of providing MSS on a primary basis. This means that where the 2 GHz bands are used by other systems, which are not capable of providing MSS, these other systems should not cause harmful interference to nor claim protection from systems providing mobile satellite services. According to the CEPT, CGCs would not cause harmful interference, as long as they are an integral part of the system providing MSS, are controlled by the resource and network management mechanism of such system, and are operating on the same portions of frequency band as the satellite components of the system. Under these conditions, subject to an appropriate authorisation regime, CGCs could also be utilised even if signals are not transmitted through the satellite components.

(10) The results of the work carried out pursuant to the Commission mandate should be applied in the Community.

(11) It is appropriate to give priority to systems providing MSS in the 2 GHz bands because other frequency bands, for example those designated for GSM and UMTS/IMT-2000, are available for systems providing terrestrial-only mobile services.

(12) Considering the market developments and evolution of technologies, the need for this Decision, as well as its scope and application, may need to be reviewed in the future, based in particular on assessment by the Commission and on information provided by the Member States.

(13) The provisions of this Decision should be without prejudice to the granting of authorisations for the use of the 2 GHz bands.

(14) The measures provided for in this Decision are in accordance with the opinion of the Radio Spectrum Committee,

HAS ADOPTED THIS DECISION:

Article 1

The purpose of this Decision is to harmonise the conditions for the availability and efficient use of the frequency bands 1980 to 2010 MHz (earth-to-space) and 2170 to 2200 MHz (space-to-earth) for systems providing mobile satellite services in the Community.

Article 2

For the purposes of this Decision, "systems providing mobile satellite services" are systems capable of providing radiocommunications services between a mobile earth station and one or more space stations, or between mobile earth stations by means of one or more space stations, or between a mobile earth station and one or more complementary ground based stations used at fixed locations.

Article 3

1. Member States shall designate and make available as from 1 July 2007 the frequency bands 1980 to 2010 MHz and 2170 to 2200 MHz for systems providing mobile satellite services.

Any other use of these bands shall not cause harmful interference to systems providing mobile satellite services and may not claim protection from harmful interference caused by systems providing mobile satellite services.

2. Any complementary ground based station shall constitute an integral part of the mobile satellite system and shall be controlled by the satellite resource and network management system. It shall use the same direction of transmission and the same portions of frequency bands as the associated

satellite components and shall not increase the spectrum requirement of its associated mobile satellite system.

Article 4

Member States shall keep the use of the relevant bands under scrutiny and report their findings to the Commission to allow for a review of this Decision if necessary.

Article 5

This Decision is addressed to the Member States.

Done at Brussels, 14 February 2007.

For the Commission

Viviane Reding

Member of the Commission

[1] OJ L 108, 24.4.2002, p. 1.

[2] Council Conclusions 15530/04 and 15533/04 of 3.12.2004.

[3] Mandate to CEPT to study and identify the technical conditions relating to the harmonised approach in the European Union of Mobile Satellite Services in 2 GHz bands (1980 to 2010 MHz and 2170 to 2200 MHz).

**Annex 2**

## Milestones for the introduction of MSS systems within the bands

## 1980 - 2010 MHz and 2170 - 2200 MHz

NOTE – These milestones are those contained within the ECC Recommendation (06)05, except for milestones 4,5 and 9 which have been reworded to refer to the EU Member States rather than CEPT countries.

MILESTONES

1. Submission of ITU request for co-ordination

The satellite system operator shall provide clear evidence that the administration responsible for an MSS system has submitted the relevant ITU RR Appendix 4 information.

2. Satellite manufacturing

The satellite system operator shall provide clear evidence of a binding agreement for the manufacture of its satellites. The document shall identify the construction milestones leading to the completion of manufacture of satellites required for the commercial service provision. The document shall be signed by the satellite system operator and the satellite manufacturing company.

3. Completion of the Critical Design Review

The Critical Design Review is the stage in the spacecraft implementation process at which the design and development phase ends and the manufacturing phase starts.

The satellite system operator shall provide clear evidence of the completion of the Critical Design Review in accordance with the construction milestones indicated in the satellite manufacturing agreement. The declaration shall be signed by the satellite manufacturing company and shall indicate the date of the completion of the Critical Design Review.

4. Satellite launch agreement

The satellite system operator shall provide clear evidence of a binding agreement to launch the minimum number of satellites required to provide a continuous service within the territories of the **EU Member States**. The document shall identify the launch dates and launch services and the indemnity contract. The document shall be signed by the satellite system operator and the satellite launching companies.

5. Gateway Earth Stations

The satellite system operator shall provide clear evidence of a binding agreement for the construction and installation of Gateway Earth Stations that will be used to provide MSS services within the territories of the **EU Member States**.

6. Satellite mating

The mating is the stage in the spacecraft implementation process at which the Communication Module (CM) is integrated with the Service Module (SM).

The satellite system operator shall provide clear evidence that the Test Readiness Review for SM/CM mating has taken place in accordance with the construction milestones indicated in the satellite manufacturing agreement. The declaration shall be signed by the satellite manufacturing company and shall indicate the date of the completion of the satellite mating.

7. Launch of satellites

(a) The satellite system operator shall provide documents confirming the first successful satellite launch and in-orbit deployment.

(b) The satellite system operator of an NGSO system shall also provide periodic evidence of subsequent launches and successful in-orbit deployment of the necessary number of satellites in the constellation to provide commercial service.

8. Frequency co-ordination

The satellite system operator shall provide documents relating to the successful frequency co-ordination of the system with respect to other MSS systems pursuant to the relevant provisions of the Radio Regulations. However, a system which demonstrates compliance with milestones 1 to 7 inclusive is not obliged to demonstrate at this stage completion of successful frequency co-ordination with those MSS systems which fail to comply adequately and reasonably with milestones 1 to 7 inclusive.

9. Provision of satellite service within the territories of **EU Member States**

The satellite system operator shall provide notification that it has launched, and has available for the provision of service, the number of satellites it previously identified under milestone 4 as necessary to provide continuous commercial service within the territories of the **EU Member States** using parts of the frequency bands 1980-2010 / 2170-2200 MHz.

**Annex 3**

**Business Plan Format for Applicants in Support of**

**Applications for the 2GHz MSS Bands**

## 3.1 Introduction

The following provides the format for a business plan which an Applicant needs to provide as part of its application for spectrum in the 2GHz MSS band. It provides the section headings and detailed descriptions of the information to be provided within each section, as well as the format in which the financial forecasts and other statements should be provided.

The business plan format has been designed to facilitate the assessment of the credibility of applicants' business plans, in so far as they relate to the Selection Criteria and the Milestones. An Applicant is encouraged to provide as detailed a business plan as its current situation allows. In particular, where an Applicant indicates that it meets certain criteria detailed information which relates to such a claim should be provided.

An Applicant should provide verifiable evidence to support any material claims within its business plan, supported by physical evidence where possible, e.g. contracts and/or MoUs, which should be included as Annexes to the business plan.

**All Applicants are reminded that commitments made within their business plans, where such commitments relate to the Selection Criteria or Milestones, will be subsequently monitored and enforced.** Therefore, in cases where Applicants are unsure of their ability to deliver such commitments, they should indicate their reservations and provide a detailed assessment of the Risk of failure (see section 3.11 for greater detail).

The business plan should comprise the following sections:

- **Satellite System and** (if applicable) **CGC Description**
- **Service Descriptions**;
- **Market Analysis;**
- **Distribution Strategy;**
- **Revenue Forecast;**
- **Capex and Opex Forecast**;
- **Legal and Financial Credibility;**
- **Full Financial Forecast;**
- **Risk Factors and Mitigation.**

The following sections describe in further detail the information which should be contained under each of these headings. In these descriptions it should be noted that:

- where services meeting the 'Other Public Policy Objectives' are referred to, these services must meet such objectives, rather than being used for a purely commercial service with a future capability of delivering these services;

- a Member State will not be deemed to be within the service area of the system providing MSS until, for that specific country:
    - distribution channels exist and service can be purchased by consumers;
    - terminals supporting that specific service are available;
    - and the required customer service infrastructure is in place, including billing.

### 3.2 Satellite and CGC System

This section should provide a detailed description of the satellite system and any CGC to be used to complement the satellite system. It should include:

- The number, type and orbital slot(s) of satellites within the system, which must be supported by clear evidence of the:
    - submission of ITU request for co-ordination for these satellites i.e. evidence of an Administration having submitted the relevant ITU RR Appendix 4 information;
    - ITU filing allowing start of commercial operation between 31/1/2009 and 1/1/2011;
    - binding contracts for the satellite(s) construction, satellite(s) launch, construction and installation of Gateway Earth Stations clearly referenced to the CAPEX section of the business plan;
    - a declaration signed by the satellite manufacturing company indicating the date of completion of the Critical Design Review;
    - the cost of the construction and launch of the satellite system clearly referenced to the CAPEX section of this business plan.
- A technical description of the satellite system, including:
    - a broad technical description of the operation of the satellite and CGC system (where applicable);
    - a technical description of the management and control of the frequencies used by any CGC component;
    - specific details of the satellite service coverage areas, which should be clearly referenced to the service description section;
    - specific technical details on the delivery of any service the Applicant believes to support the 'Other Public Policy Objectives', this should include the proposed transponder capacity to be reserved for these services, or the forecasted capacity to be utilised in the delivery of such services;
    - a discussion of the degree of flexibility of the satellite system in terms of satellite service coverage area, range of services etc., once satellite(s) is (are) in orbit.
- A technical justification for the use of spectrum. This would incorporate:
    - the technical spectrum efficiency of the system;

- a justification of why the Applicant cannot achieve the same coverage using other (e.g. terrestrial) frequencies at the lowest cost to the consumer;

- a justification of why the Applicant cannot provide the same consumer/competition and public policy benefits with smaller bandwidth requirement within 2GHz.

- Specific evidence of the Applicant's intention to implement CGCs, where appropriate, including the anticipated costs involved. This should be clearly referenced to the CAPEX section of this business plan.

- A country-by-country Roll-out plan for each of the satellite and CGC service areas.

- CGC roll-out plans should, where possible, indicate the extent of CGC coverage within each country.

### 3.3 Gateway Earth Stations

- Applicants should provide details of the planned Gateway Earth stations to be installed. In particular, details should be provided of the planned:

  - number and location of Gateway Earth stations;

  - cost of each Gateway, with a clear reference to individual line items in the CAPEX section.

### 3.4 Service Descriptions

The range of services, which the Applicant intends to provide, should be described. An Applicant should state whether these services are planned to be retail or wholesale.

The description of services should include:

- a technical description of the service delivery, including references to the satellite technical description in the satellite system section. This should include a clear description of the role of any CGCs in the service delivery.

- the technical and commercial implications of the 2GHz MSS spectrum not being available, including what the 'next best' spectrum and technology mix would be used to provide an equivalent service.

- a technical description of anticipated terminal types, including the satellite and CGC capabilities of each type of terminal. Any additional communications mode planned for the terminal should also be indicated, e.g. 3G mode.

- a detailed roll-out plan of specific service coverage areas, which should be provided on a country by country basis. This should be supported by clear references to the specific financing and resourcing requirements contained in specific line items within the overall financial forecasts of the business plan.

- a description of how any subset of services will support the 'Other Public Policy Objectives' including coverage of rural areas in the EU. This should be supported, where appropriate by:

  - specific regional roll-out plans within individual MS;

  - evidence of the inclusion of specific financing and resourcing requirements to provide such services, referenced to specific line items within the overall financial forecasts of the business plan.

### 3.5 Market Analysis Description

An Applicant should provide an analysis of each of the markets it intends to address. In particular, an Applicant should provide its:

- assessment of the size of the market for each service type it plans to offer. Service types as a minimum should be clearly defined so as to separate services which **deliver** the 'Other Public Policy Objectives' and those which do not;

- competitor analysis, which as a minimum should provide the number of competitors in each of the markets assessed;

- forecast of the Applicant's market share in each of the markets.

In addition, an Applicant should assess the extent to which its system will provide consumer benefits in the form of infrastructural competition and/or choice of services to end-users. Wherever possible, such an assessment should be provided on a country-by-country basis.

An Applicant should provide clear references from this analysis to the revenue section.

### 3.6 Distribution Strategy

An Applicant should provide details of its planned distribution strategies, which as a minimum should address separately the services delivering the 'Other Public Policy Objectives' and those which do not.

Where services are to be provided on a wholesale basis, an Applicant should provide detailed distribution strategies on a country by country basis. Where an Applicant has existing relationships with partners it intends to offer service through, it should provide documented evidence of such in the form of contracts, MoUs, etc.

Where services are intended to be provided on a retail basis, an Applicant should provide details of its current and planned presence on a country by country basis, as well as other distribution strategies on a country by country basis.

Clear references to specific line items in the OPEX forecast section of the business plan should be provided.

### 3.7 Revenue Forecast

An Applicant should provide a ten year revenue forecast with as many details as possible. As a minimum, an Applicant should provide separate revenue forecasts for:

- services which deliver the 'Other Public Policy Objectives' and services which do not;

- services provided directly over the satellite and those provided only over CGCs.

Where possible, an Applicant should provide these on a country by country basis. In any event, if the forecast revenue for any one Member State is anticipated to be over 20% of the total revenue in any one year this should be clearly indicated and an explanation provided, referencing to the Market analysis section, where necessary.

Clear references should be made to the Market analysis section supporting these revenue forecasts.

### 3.8 CAPEX and OPEX Forecasts

An Applicant should provide ten year CAPEX and OPEX forecasts for the services with as many details as possible.

For the CAPEX forecast, an Applicant should, as a minimum, provide separate forecasts for:

- satellite manufacture;
- satellite launch & insurance;
- Gateway stations, including installation and commissioning;
- TT&C and Network Management.

Clear references, from each line item above, should be provided to the relevant sections in the business plan describing them.

The OPEX forecast should as a minimum be provided either on a country by country basis, or by service type (such that cost associated with delivering the 'Other Public Policy Objectives' can be separately identified from those which do not).

In addition, separate forecasts should be provided, where applicable, for OPEX costs associated with the:

- satellite component;
- CGC component, on a country by country basis;
- distribution on either a country by country basis, or a service type basis;
- other OPEX costs, e.g. sales and marketing, billing, customer service etc.

Clear references, from each line item above, should be provided to the relevant sections in the business plan describing them.

### 3.9 Legal and Financial Credibility

An Applicant should provide details and evidence of its legal status.

It should also provide evidence of its financial standing.

### 3.10 Full Financial Forecast

An Applicant should present a full ten year financial forecast in the following format:

Table to be developed as part of the detailed assessment methodology

### 3.11 Risk Factors and Mitigation

An Applicant should identify the key areas of Risk for each element of its business plan. This should specifically address Risk on a country by country basis, wherever sufficient information is available. Where such a country by country analysis is not available, this will be taken to imply that the risk of service delivery on a pan-EU basis is higher than where such a risk assessment is provided.

For each Risk identified, an Applicant should provide details of the:

- nature of event;
- probability of event;
- assessment of the impact of event, quantified where possible;
- mitigation steps which will/can be taken.

Risk Factors should be identified for the total system and separately for the specific service and service coverage areas directly related to the Selection Criteria.

An Applicant should inform as and when, events occur which change the risk profile of its system. This should take the form of an updated version of this section. Any failure by an applicant to inform of known changes to its Risk profile will result in launch of the enforcement procedure.

Where an Applicant has provided details of Risk Factors to other Regulatory Bodies, e.g. FCC, all of these Risk factors and their associated details should be reflected in the Application.

The Risk Factor for any particular system will be used to inform the selection process of the likelihood of the satellite system delivering its planned services.