

# EO Service Sector Representation



## Report T4.1

### Analysis of Representation Mechanisms

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## Executive Summary

The aim of this document is to provide more detailed information on the human and financial resources required to deliver an appropriate level of service, together with a recommendation on a sustainable and preferred model of income and expenditure.

It therefore:

- examines the staffing requirements and structure for a trade association to represent the Earth observation (EO) value adding sector, and uses that to conduct a detailed analysis of the costs, levels of effort, minimum and maximum participation and other resources required for each of the candidate services of the EO trade association;
- conducts a financial analysis of projected cash flow over five years for different scenarios of the trade association, from a baseline configuration offering a minimal service level, to a medium configuration offering a moderate service level, and finally a full configuration offering a high service level.

The analysis finds that:

- there are a range of possible services that can be delivered by an EO trade association to the benefit of the industry as a whole using modest levels of effort and monetary resources;
- it is possible to deliver a baseline level of service in a self-sustaining manner without external funding assistance, but this scenario only provides for a very basic set of services to the industry;
- a more comprehensive level of service could be delivered if the trade association were able to fund part-time or even full-time members of staff including an executive secretary and a chief executive, rather than relying on volunteers from industry who are often busy with their 'day jobs';
- in parallel with this, the trade association would be expanded to provide a more comprehensive range of services; there are initial setup costs associated with establishing these new services which would require a modest level of external financial support to 'kick start' the new services;
- several of the new services will in turn open up new opportunities for additional revenue generation by the trade association on an ongoing basis, which will make the services self-sustaining in the longer term;
- The kick-start funding is therefore a one-off investment requirement only: the financial analysis demonstrates that the expanded trade association would be fully self-supporting within a period of five years.

This document is closely linked to eoVox Report 4.2 (Representation Brochure) which describes the benefits, beneficiaries, targets and objectives of the various services of the EO trade association that are analysed herein.

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# 1 Introduction

The EO Service Sector Representation project aims to improve market awareness and confidence in the EO service industry sector, by defining the combined capabilities and views of the sector, and using these to evaluate mechanisms for representation of the sector, supporting greater growth and prosperity of the overall European EO service industry.

This report is the output of Task 4 of the study (Analyse Representation Mechanisms). Figure 1-1 shows a summary of the high level project logic, and the position of this report in relation to other reports and tasks of the study.

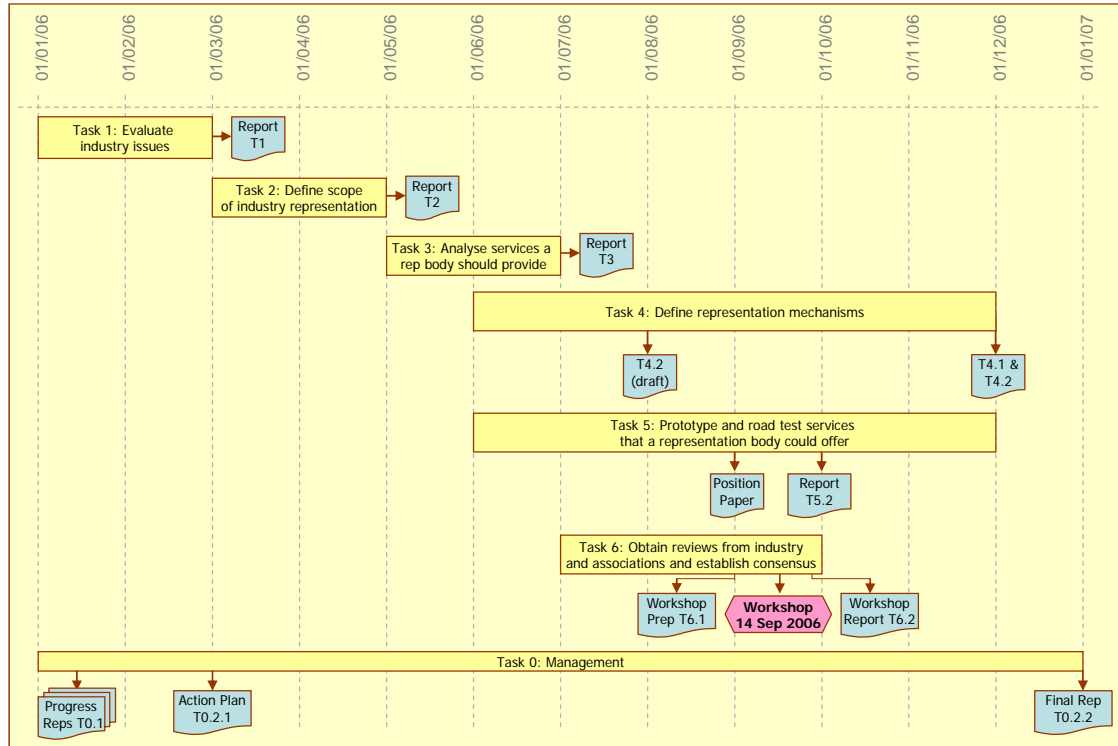


Figure 1-1: eoVox Study Logic and timing

## 1.1 Purpose

This document is intended to complement the **Representation Brochure** by defining a **working model** for a European/Canadian Earth observation trade association.

The aim of the Task resulting in this report was defined as follows in the ESA SOW [3]:

- Specify structure and component parts of the representative body:
  - Define the different internal activities that a representation body should perform (see examples in SoW Table 1, section 7; for instance: collect information, liaise with members, analyse and consolidate information, produce report, organise working groups, organise events, do presentation, etc)
  - Analyse possible models concerning the structure of the representation body, its status and rules (e.g. legal / tax structure and Governance structure, etc) location and staffing (e.g. Executive Director and a team, management board, functional logistics, etc)
  - Define membership criteria and structure (e.g. full membership for

companies/organizations or associations; associate; supporting; sponsor; etc)

- Specify who is to be represented and how additional VACs can be included within the representation activities

Deliverable T4.1: Report of the analysis of representation mechanisms. This shall cover at least the following elements:

- What are to be the structure and component parts of the representation body?
- How is representation requested and how is it funded?

Deliverable T4.2: Representation brochure defining terms of reference and constituent parts of the representation mechanism (First draft for review by industry & industry associations; for public distribution).

**Figure 1-2: Objective of this Task within the eoVox Project**

This report is closely linked to Report 4.2 (Representation Brochure). The representation brochure provides a set of clear and concise statements defining the services and benefits of an EOTA, whereas this report provides analysis and explanation to define a workable organisational structure needed to provide the services that can deliver the benefits.

## 1.2 Change Control

A first draft of this document was produced for internal review at Progress Meeting 4 (15 September 2006). An updated version was delivered for Progress Meeting 5 (16 November 2006). This final version is now issued for public distribution.

## 1.3 Scope

This document covers the following topics:

Section	Description
<b>Section 1</b>	<b>Introduction (this section):</b> Defines the purpose and scope of this document and lists external references and abbreviations used.
<b>Section 2</b>	<b>TA Organisation:</b> Describes the organisation of the Trade Association executive. This organisation structure is used as the basis for estimating effort and costs for the services of the trade association.
<b>Section 3</b>	<b>Services of a Trade Association:</b> This section considers what the priorities and risks are for the services of a trade association, and the resources that each service will consume.
<b>Section 4</b>	<b>Financial Perspective for an EO Trade Association:</b> This section presents a financial model for the EO trade association with fully justified cash flow forecasts in three different scenarios.

**Table 1-1: Topics addressed in this document**

## 1.4 References

No.	Title/Description	File Reference	Version
1	LogicaCMG Management Proposal for EO Service Sector Representation	UK/2004/7852	Issue 1.0 24/10/2005
2	LogicaCMG Technical Proposal for EO Service Sector Representation	UK/2004/7361	Issue 1.0 24/10/2005
3	ESA Statement of Work	EOEP-EOMD-EOPS-SW-05-0001	Issue 1.0
4	“The State and Health of the European EO Service Industry” VEGA Group, Booze Allen Hamilton.	EOMD.REP.0.18	Issue A 24/09/2004
5	eoVox Report T1: Analysis of Industry Issues for Representation	EC201705:06.04	Issue 1.4 08/05/2006
6	eoVox Report T2: Analysis of Scope for Representation	EC201705:06.05	Issue 1.0 02/06/2006
7	eoVox Report T3: Analysis of Services of an Industry Representation Body	EC201705:06.06	Issue 1.0 19/07/2006
8	eoVox Report T4.2: Representation Brochure	EC201705:06.09	Issue 1.0 31/10/2006

**Table 1-2: List of Reference Documents**

## 1.5 Abbreviations Used

Abbr.	Description
BARSC	British Association of Remote Sensing Companies
EARSC	European Association of Remote Sensing Companies
EO	Earth Observation
EEA	European Environment Agency
EC	European Commission
EOMD	Earth Observation Market Development
VHR	Very High Resolution
GMES	Global Monitoring for Environment and Security
KOM	Kick Off Meeting
LBS	Location Based Services
VAC	Value Adding Company
PSI	Public Sector Information
RS	Remote Sensing
SOW	Statement of Work

**Table 1-3: List of Abbreviations Used**



## 2 TA Organisation

### 2.1 Structure

Various models are possible for the administrative structuring of a trade association:

- 1) Voluntary organisation with no legal entity status.
- 2) Legal entity without employment responsibilities. It either purchases professional services from other organisations or self-employed individuals, or seconds them (free of charge) from member companies or agencies (ESA, CNES, BNSC, etc.).
- 3) Legal entity with employment responsibilities.

In this document we have assumed that option 2 is the most practical approach. Option 1 does not formalise the trade association sufficiently as an entity that is able to enter into contracts (for example for undertaking studies or surveys), while option 3 introduces a cumbersome amount of legal and administrative overhead that could easily detract from the effectiveness of the trade association.

### 2.2 TA Staff

In this document we have assumed the following staff exist:

- A Board with a Chairman. All Board members are employees of or sponsored by a member company and they do not receive any fees for their work with the TA. They may receive reimbursements of travel expenses against receipts, subject to Board approval in advance.
- An Executive Secretary which is a part or full time position. The base location of the Executive Secretary is not critical – the person's *mobility* is key. The Executive Secretary is paid for the hours put in and is reimbursed for travel, telephone etc. expenses incurred on behalf of the TA.
- A Chief Executive (which means the same as a 'Secretary General' as used in T4.2) which is a part or full time position. The Chief Executive is paid for the hours put in and is reimbursed for travel, telephone etc. expenses incurred on behalf of the TA.
- Additional staff may be hired for specific tasks as necessary.

Note that there are views for and against the appointment of a Chief Executive. The arguments for having one include:

- The Chief Exec is independent of any commercial or member company and is therefore completely impartial and objective in their role;
- The Chief Exec dedicates their time completely to the task of the TA and does not have a "day job" occupying their time or distracting from their TA duties;
- The Chief Exec is a senior person able to engage at the highest levels with governments, public sector bodies, companies etc., for example for lobbying.

The arguments against having one include:

- Ambiguity regarding what duties should fall to the Chief Exec and what duties should fall to the Board and/or the Chairman;
- Chief Exec competence versus cost dilemma: For the Chief Exec to stay competent and useful, the person would need a large number of hours of activity on behalf of the TA as well as a large number of trips. All this would be considerably expensive and

would be an additional heavy burden on the TA finances as compared to an operation without a Chief Exec – where the large amount of working hours and business trips already covered for members of the Board from their respective companies largely takes this burden off the TA.

## 2.3 TA Beneficiaries

Beneficiaries of an EO TA were analysed in detail in eoVox report T2 [6] and the list is repeated here for ease of reference:

Possible Beneficiaries	Description of Benefits
EO VACs	Handling common issues that the VACs have problems to handle by themselves
Pan-European Policy Bodies	Concerted information regarding the views of the Value-Added EO industry with regard to the possibilities to use EO information
Pan-European R&D Funding Agencies, Pan-European Research Institutions and European/International Research Associations	Concerted information regarding the EO market needs related to the R&D programmes
Public Satellite Investors/Mission Operators	Concerted information regarding the EO market needs
Aerospace TAs	Concerted information regarding the EO market needs
National EO TAs	Stronger influence on the European/Canadian level
European GI TAs	Cooperation in lobbying and networking
Data Providers	Uniform feed-back on market requirements
International TAs	Cooperation in lobbying and networking
EC and/or ESA Initiatives	Better information on user requirements
Market and Market Organisations	Better information on available suppliers and content regarding EO Value-Added products and services
European Telecom & Navigation TAs	Cooperation in networking to find mutual benefits

### 3 Services of a Trade Association

#### 3.1 Introduction

Report T4.2 [8] describes the services of a TA from the point of view of a TA member, asking the question ‘what does it do for me’. This report takes the view of the TA executive asking the question ‘should we deliver this service and if so what resources do we need to do it’. So this section considers what the priorities and risks are and the resources each service will consume.

For each service described in T4.2 it covers:

- Justification
- TA Responsibilities/costs
- Income
- Minimum participation required, maximum participation limit.
- Dependencies
- Risks

For a complete description of the beneficiaries, benefits and value/impact of each service please refer to eoVox Report T4.2 [8].

#### 3.2 Raise Awareness of EO

Service A1	Purpose
<b>User-focused Promotional Material</b>	<b>Raise Awareness of EO Attract new customers</b>
<b>Justification</b>	Most members do not give this service a high priority because the benefits to them are indirect, but it is a very important service into both the upstream and downstream allowing the TA to present a coherent image of the industry as a whole.
<b>TA Responsibilities/costs</b>	Executive needs to draft content (10 - 40 days) – effort depends upon the type of material, e.g. small leaflet vs. comprehensive industry brochure. Requires excellent graphic design (buy) and requires printing (buy). Cost €10-20k. Executive needs to devote time to distribution (5 -10 days pa). Executive to secure funding (4 days)
<b>Income</b>	Can make case for full public sector funding.
<b>Minimum participation required</b>	None. It is helpful to have input from members but it is not necessary.
<b>Maximum participation limit</b>	Cannot feature all members. All members could be listed.
<b>Dependencies</b>	Obtaining very high quality content.
<b>Risks</b>	Members may strongly disapprove, so need to ensure that all members have an opportunity to review a draft and comment on how it will be used.

Service A2	Purpose
<b>Maintain an External Contact List</b>	<b>To enable distribution of brochure, newsletter, announcements of workshops, press releases etc.</b>
<b>Justification</b>	This is a core service which supports many other activities of the TA. It is very important that the TA maintains active contacts with external entities, particularly the media.
<b>TA Responsibilities/costs</b>	Executive needs to maintain the list (5 days pa minimum)
<b>Income</b>	None
<b>Minimum participation required</b>	None. It is helpful to have input from members but it is not necessary.
<b>Maximum participation limit</b>	No limit.
<b>Dependencies</b>	None.
<b>Risks</b>	Maintaining confidentiality. Board members may have to review the list, but they must formally agree not to use it for their own marketing purposes. Maintaining privacy – need to ensure that contacts on the list have the option to request removal of their record.

Service A3	Purpose
<b>Presentations on Behalf of EO Industry</b>	<b>Raise Awareness of EO Promote industry capabilities</b>
<b>Justification</b>	As the TA's reputation grows, this service is demanded.
<b>TA Responsibilities/costs</b>	Chief executive needs to identify/respond to opportunities and prepare for them (10 days pa, 10 European travels pa). Travel budget required is approx 10 x 1000 = €10k
<b>Income</b>	None
<b>Minimum participation required</b>	Any Board member can volunteer to give a presentation on behalf of the TA, perhaps with expenses being reimbursed.
<b>Maximum participation limit</b>	No limit.
<b>Dependencies</b>	None.
<b>Risks</b>	Lack of balance: ensure balanced presentation represents the TA view (inform members in advance and seek input). Consult with members in the usual way for reaching a consensus position.

<b>Service A4</b>	<b>Purpose</b>
<b>Communications/Media Services</b>	<b>Raise Awareness of EO</b> <b>Promote industry interests or capabilities</b>
<b>Justification</b>	Good media presence is needed to encourage growth of membership. Need to have TA name appear in key business/technical press/online sites.
<b>TA Responsibilities/costs</b>	Maintaining media contacts (5 days pa) Preparing press material (5 days pa) Initial cost preparing graphical artwork (€5k)
<b>Income</b>	None
<b>Minimum participation required</b>	None
<b>Maximum participation limit</b>	No limit.
<b>Dependencies</b>	Good media contacts and demand for information. Members can also provide links to relevant media contacts.
<b>Risks</b>	Lack of balance: ensure balanced PR represents the TA view (inform members in advance and seek input).

<b>Service A5</b>	<b>Purpose</b>
<b>Web-site</b>	<b>Raise Awareness of EO</b> <b>Promote industry interests or capabilities</b> <b>Provide a member contact point</b>
<b>Justification</b>	This is a core service which supports many other activities of the TA.
<b>TA Responsibilities/costs</b>	Executive needs to monitor the web site and obtain content from members to keep it fresh (20 - 30 days pa). For a medium sized TA the web site could be professionally maintained by a specialist company (e.g. €10k setup and €2-4k pa). (Current EARSC web site was about €5k to set up and takes an hour per day to maintain).
<b>Income</b>	None. (Could offer web banners / sponsored links, but only if they do not affect the image of the web site which should remain neutral & unbiased)
<b>Minimum participation required</b>	All members must have presence and access.
<b>Maximum participation limit</b>	All members
<b>Dependencies</b>	None.
<b>Risks</b>	Not spending enough effort to keep the web site fresh and professional. The web site design must also be kept as simple as possible so that the maintenance cost does not creep up.

<b>Service A6</b>	<b>Purpose</b>
<b>Awards</b>	<b>Raise Awareness of EO</b> <b>Promote industry excellence</b>
<b>Justification</b>	A well managed awards process can be used to attract excellent publicity for individual members – such recognition can deliver a very tangible benefit direct to the winning members and maybe runner ups. However the membership needs to be large enough to secure a good level of nominations.
<b>TA Responsibilities/costs</b>	Secretariat structures the service, manages the chairman, organises panel, requests nominations, buys prizes and publicises the result (10 days pa) Purchase of prizes €500 pa. Travel expenses for awards panel €2000 pa
<b>Income</b>	None
<b>Minimum participation required</b>	Nominations from at least three members in each category. Awards panel with at least two members.
<b>Maximum participation limit</b>	Open to all members.
<b>Dependencies</b>	Need to define award categories that will get a response.
<b>Risks</b>	Risk of disputes is very low, because a panel process is used. It may be prudent to ask nominees to sign a disclaimer stating that the intellectual property being entered for an award is their own and that the TA is not liable for any legal infringements.

<b>Service A7</b>	<b>Purpose</b>
<b>Facts and Figures</b>	<b>Raise Awareness of EO</b> <b>Quantify capacity and economic worth</b> <b>Monitor trends</b>
<b>Justification</b>	There is a high value in collecting metrics for the size of the industry (staff = high value jobs, turnover = wealth creation by market and by product/service category). Markets, investors and government agencies take notice of this type of information – especially when it reveals trends. A small number of good statistics collected annually build confidence in the industry as a whole.
<b>TA Responsibilities/costs</b>	The secretariat designs the questionnaire, takes it to board for approval, manages data collection and disseminates the results (10 – 20 days pa). Chief executive collates the results (and provides input to marketing (10 – 20 days pa).
<b>Income</b>	Small income from sales of the report (20-40 x €50 = €1000 - €2000) Public funding to defray the cost of designing and setting up the first annual survey on the web €5000
<b>Minimum participation required</b>	At least 50% of members
<b>Maximum participation limit</b>	Open to all members. Could also be interesting to include non-members in the survey.
<b>Dependencies</b>	None
<b>Risks</b>	Ensuring commercially sensitive information collected from companies remains confidential. Keeping the data collection as simple and low effort as possible whilst also being meaningful.

Service A8	Purpose
<b>Organise Public Events</b>	<b>Raise Awareness of EO</b> <b>Networking</b> <b>Promote capabilities of members</b>
<b>Justification</b>	Any active trade association needs to mount at least one flagship event per year.
<b>TA Responsibilities/costs</b>	Hire of venue: €2000 (may be less if hosted by a public sector agency or another association) Catering: €2000 (depends upon number of delegates attending). Administrative organisation and publicity (5 – 10 days) Programme design by committee of members Organisation of presentations (5 – 10 days)
<b>Income</b>	Income from paying delegates (50 x €100 = €5000) Sponsorship (5 x €200 = €1000) The objective should be to achieve a small surplus of income minus costs (including the cost of TA staff time and infrastructure)
<b>Minimum participation required</b>	At least 25% of members attending At least 15% of members represented (in exhibition or posters or presentations).
<b>Maximum participation limit</b>	May be limited by capacity of venue. Open to all members. Open to non-members
<b>Dependencies</b>	None
<b>Risks</b>	Ensuring a good level of participation by well planned and executed organisation and advance publicity. If co-organised then need to ensure responsibilities are clearly allocated.

Service A9	Purpose
<b>Publish an External Newsletter</b>	<b>Raise Awareness of EO</b> <b>Promote Capability of EO Companies</b>
<b>Justification</b>	An essential communications tool – core service.
<b>TA Responsibilities/costs</b>	Gathering material from members. Writing editorial. Researching and preparing special articles. Quarterly publication & dissemination (electronically). Administration and production 4 x 5 = 20 days pa Writing editorial 4 x 2 = 8 days pa Graphic designer to produce format (€5k)
<b>Income</b>	None
<b>Minimum participation required</b>	At least 50% of members contributing material at least once per year.
<b>Maximum participation limit</b>	Open to all members, but it may only be feasible to feature a maximum of 20 - 30 members in each newsletter.
<b>Dependencies</b>	None
<b>Risks</b>	Ensuring a good level of participation by well planned and executed organisation, high quality production and good dissemination.



Service A10	Purpose
<b>Attract International Stakeholders to TA Events</b>	<b>Raise Awareness of EO Promote industry interests Influence programmes</b>
<b>Justification</b>	Medium priority, becomes more important as the reputation and status of the TA develops.
<b>TA Responsibilities/costs</b>	Both the Chief Executive and the Chairman should undertake this function with the Chief Executive also providing support to the Chairman by preparing presentations and following up. 3 - 10 days pa including preparation time before each external meeting.
<b>Income</b>	None
<b>Minimum participation required</b>	Chairman.
<b>Maximum participation limit</b>	n/a
<b>Dependencies</b>	None
<b>Risks</b>	None

### 3.3 Forum for Networking

Service B1	Purpose
<b>Maintain a Members List</b>	<b>Facilitate Networking</b>
<b>Justification</b>	This is a core service which supports most other activities of the TA, including collection of subscriptions.
<b>TA Responsibilities/costs</b>	Executive needs to maintain the list (5 days pa)
<b>Income</b>	None
<b>Minimum participation required</b>	All members need to notify changes.
<b>Maximum participation limit</b>	No limit.
<b>Dependencies</b>	None.
<b>Risks</b>	Must be kept up to date. Data protection, measures needed to keep the list confidential to the TA and its members.

Service B2	Purpose
<b>Social Events for Members</b>	<b>Facilitate Networking</b>
<b>Justification</b>	Events of this type tend to be very popular with members.
<b>TA Responsibilities/costs</b>	Administrative organisation (5 days pa) Support to Board planning for the event and follow-up (5 days pa). Contingency for unrecovered costs €1000 (max)
<b>Income</b>	The event should be revenue neutral as far as possible: participating members may be asked to contribute e.g. €30 - €75 per head.
<b>Minimum participation required</b>	20% of members
<b>Maximum participation limit</b>	All members are strongly encouraged to participate. May be limited by capacity of the venue.
<b>Dependencies</b>	Need to schedule carefully with other events in the TA calendar to ensure maximum attendance.
<b>Risks</b>	Cost overrun is possible if members fail to attend.

<b>Service B3</b>	<b>Purpose</b>
<b>EOTA Technical Working Groups</b>	<b>Facilitate Networking</b>
<b>Justification</b>	Cost to the TA is relatively low, but benefits to members can be great.
<b>TA Responsibilities/costs</b>	<p>Assuming 2-3 working groups          Administrative organisation (5 days pa)          Support to WGs such as attending meetings 5 – 10 days pa).</p> <p>Meeting rooms may need to be hired in the absence of TA's own office premises, but the strategy should be to use facilities of member companies or agencies (ESA, EC, CNES, etc.)</p> <p>WGs should appoint a member to keep Minutes of their meetings without the need for TA staff resources unless agreed otherwise by the Board.</p> <p>WG members cover their own costs for attending WG meetings – these are not reimbursed by the TA.</p>
<b>Income</b>	None
<b>Minimum participation required</b>	15% of members
<b>Maximum participation limit</b>	None
<b>Dependencies</b>	Need to identify an effective and enthusiastic WG Chairman who is motivated to build up the WG and who is capable of developing a strategy and work plan for it.
<b>Risks</b>	Risk of failure through lack of activity – although this service is to some extent self-regulating, in that if members are not interested in a WG then its work is by definition low priority.

<b>Service B4</b>	<b>Purpose</b>
<b>External Working Groups</b>	<p><b>Facilitate Networking</b>  <b>Represent the EO Service Sector</b>  <b>Promote Industry Interests</b>  <b>Influence Programmes</b></p>
<b>Justification</b>	Cost to the TA is relatively low, but the strategic benefits to the industry as a whole can be very great provided that full attention is paid to mitigate the risks.
<b>TA Responsibilities/costs</b>	<p>Assume two working groups with attendance at two meetings per year. Preparation time estimated as three times the participation time (3 days preparation for 1 day meeting)                  Support to the Chairman (12 days pa).                  Travels 4 per year = €3500.</p>
<b>Income</b>	None
<b>Minimum participation required</b>	Chairman
<b>Maximum participation limit</b>	May delegate to other Board members or to a member company or to a TA staff member
<b>Dependencies</b>	<p>Identifying and prioritising the most useful working groups.                  Drafting the TA position and obtaining member company consensus agreement via consultation.                  Gaining an invitation to participate – may need to apply political pressure.</p>
<b>Risks</b>	<p>The groups of greatest potential value (i.e. those that can change markets, prepare programmes, allocate budgets etc.) may not accept the TA as a participant and if they do then they may ignore the TA views.</p> <p>Gaining acceptance requires the TA representatives to be trusted and well respected by other participants in the WG and for the TA to put forward a carefully balanced and rational view whilst still promoting industry interests.</p> <p>Other external WG members may see the TA as a threat if it is too aggressive - this may stimulate external actions against the interests of the industry. The TA must present a co-operative and 'win-win' stance as far as possible.</p> <p>The TA needs to ensure that views expressed externally are mature, consistent, have real substance, and are targeted appropriately to each external WG – if are not then this service could damage the TA's reputation. Sufficient time should therefore be allowed to consult with members and to prepare the TA's view.</p>

Service B5	Purpose
<b>Directory of EO Business Resources</b>	<b>Facilitate Networking</b>
<b>Justification</b>	This is a low priority 'background' activity as most members should know about these things. However, over time the TA may accumulate information that could be useful to members. (N.B. This is a list of resources for use by the TA members - it is not for external use. See service C2 for the external directory of members' services).
<b>TA Responsibilities/costs</b>	Executive secretary (3 - 10 days pa) to gather material and publish it on the web site (probably in a members-only area).
<b>Income</b>	None
<b>Minimum participation required</b>	None
<b>Maximum participation limit</b>	None
<b>Dependencies</b>	None
<b>Risks</b>	Maintaining the information up to date. There is a risk of putting effort into this and failing to deliver a benefit to members, so the usage of the information should be monitored (e.g. by browser hits).

Service B6	Purpose
<b>Announcement and News Circulation</b>	<b>Facilitate Networking</b>
<b>Justification</b>	This is a high priority core activity.
<b>TA Responsibilities/costs</b>	Executive secretary (24 days pa) to filter material, edit or repackage it if necessary and circulate it.
<b>Income</b>	None
<b>Minimum participation required</b>	All members receive news. Any member may submit an item to the executive secretary to be considered for circulation.
<b>Maximum participation limit</b>	None
<b>Dependencies</b>	None
<b>Risks</b>	If too much general information is sent out then members will not bother reading any of it. Good judgement is needed about what should be circulated and what should not.  Getting members' attention may sometimes require a short explanation of why a particular item is relevant but this should only be done for the most important announcements.

Service B7	Purpose
<b>Collaboration for Education and Training</b>	<b>Facilitate Networking Education and Training</b>
<b>Justification</b>	Now and in the medium term this is a very low priority service but it may become important for a larger TA and more mature industry.
<b>TA Responsibilities/costs</b>	Existing national/international educational and training institutions can be engaged to design and deliver courses and recover their own costs through course fees, with a percentage being paid to the TA. Executive secretary effort to help promote the courses (0 - 10 days pa) Chief executive assisting the Board to input to and review course materials (0 – 5 days pa)
<b>Income</b>	10% of €1500 course x 50 trainees per year: €7500 Aim to make a small surplus.
<b>Minimum participation required</b>	10% of members
<b>Maximum participation limit</b>	None
<b>Dependencies</b>	Identifying suitable educational institutes and agreeing cooperation
<b>Risks</b>	Need to be certain that members will sign their staff up for a course that the TA has had an input to (i.e. that TA adds value to the course), therefore it will be best to consult with members and prepare carefully with the training institute(s).

Service B8	Purpose
<b>Information Filtering</b>	<b>Assist Members Commercially</b>
<b>Justification</b>	This could be a valuable service both to members and to agencies, however in the short term it is low priority as it is also an activity which the larger members do for themselves anyway.
<b>TA Responsibilities/costs</b>	Executive secretary administers (10 days pa) Chief executive prepares the digest (10 – 20 days pa)
<b>Income</b>	15 x €500 = €7500 pa
<b>Minimum participation required</b>	None needed for inputs. All members receive the papers. At least 15 subscribing members needed.
<b>Maximum participation limit</b>	None
<b>Dependencies</b>	Agencies must agree to provide the papers to the TA in a timely manner.
<b>Risks</b>	Filtering/summarising information correctly so that it is appropriate for all subscribers requires deep knowledge and may be impossible for some types of information.

Service B9	Purpose
<b>Coordinate with National Associations</b>	<b>Facilitate Networking Representation of EO Service Sector</b>
<b>Justification</b>	This is a valuable service to members and to the association as it saves time and enlarges the sphere of influence of the TA. It also demonstrates to the market that the industry is 'joined up'. Once it is set up there is a very low overhead in running it.
<b>TA Responsibilities/costs</b>	Setup time for executive secretary: 5 days. Executive secretary administers (2 - 5 days pa) Chief executive consultation (2 - 5 days pa)
<b>Income</b>	Membership fees 3 x €500 = €1500 pa
<b>Minimum participation required</b>	At least 1 national association (reasonable target of 3)
<b>Maximum participation limit</b>	EOTAs in member states of EU+EUMETSAT+ESA
<b>Dependencies</b>	Agreement of TAs to join
<b>Risks</b>	May reduce the number of company members (risk to income), but this is a low risk if the 'devolved benefits' are carefully managed and it is clearly communicated that additional benefits are available to companies. The benefits of the service should also outweigh this risk. Alternatively it may, in time help to increase the number of members by introducing more companies to the European TA.

Service B10	Purpose
<b>Facilitating Business Opportunities</b>	<b>Facilitate Networking Assist Members Commercially</b>
<b>Justification</b>	This is not carried out as a major or routine activity, but there are occasions when it makes perfect sense for the TA to help members identify commercial opportunities. The effort required is very low.
<b>TA Responsibilities/costs</b>	Chief executive (consulting the Chairman if necessary) to decide course of action and execution of it (1 - 2 days pa). Administration and communication (1 - 2 days pa).
<b>Income</b>	None
<b>Minimum participation required</b>	No input needed from members.
<b>Maximum participation limit</b>	None
<b>Dependencies</b>	External organisations and members need to be made aware that this service is available.
<b>Risks</b>	Requires deep knowledge and good judgement to ensure that the commercial interests of individual members are never compromised.

<b>Service B11</b>	<b>Purpose</b>
<b>Links to Innovation/IPR agencies</b>	<b>Facilitate Networking Assist Members Commercially</b>
<b>Justification</b>	This service is middle level priority.
<b>TA Responsibilities/costs</b>	Chief executive negotiates with agents 5 – 10 days to set up. Executive secretary maintains web information and administers fees 5 – 10 days pa
<b>Income</b>	Fee from agent in each country: €200 x 25 = €5000pa (NB some are EU funded and may not be in a position to pay to participate).
<b>Minimum participation required</b>	1
<b>Maximum participation limit</b>	Agents in all countries
<b>Dependencies</b>	Identification and participation of suitable agents.
<b>Risks</b>	There is a moderate risk that members will not realise a benefit from this service so it needs to be promoted and monitored carefully.  There is a risk that agents will not associate business they get with the TA, so need to ensure referrals are traced.  There is a risk that agents will not get enough business from TA members. So this depends on the level of maturity of the industry.

### 3.4 Promote Capability of EO Companies

<b>Service C1</b>	<b>Purpose</b>
<b>Attend Meetings with International Stakeholders</b>	<b>Promote Capability of EO Companies Influence Programmes</b>
<b>Justification</b>	Very high priority, well established core activity with large benefits to the industry as a whole.
<b>TA Responsibilities/costs</b>	Chief executive, support to Chairman: 12-24 days pa Travel €5000 pa
<b>Income</b>	None
<b>Minimum participation required</b>	Chairman
<b>Maximum participation limit</b>	Small delegations of 2-5 members
<b>Dependencies</b>	None
<b>Risks</b>	Failing to develop coherent messages and target them appropriately to the audience. Can be avoided by investing through good consultation and preparation.

Service C2	Purpose
<b>Directory of EO Companies and Services (e.g. EOPAGES)</b>	<b>Promote Capability of EO Companies</b>
<b>Justification</b>	High priority, should be a core activity.
<b>TA Responsibilities/costs</b>	Setup costs €25000 (on-line service and interface). IT maintenance costs €2500 pa Executive secretary: annual maintenance, promotion and administration 20 days pa Members are given on-line access to populate the directory with their own data – this is done by members at their own expense.
<b>Income</b>	50 members x €50 pa = €2500
<b>Minimum participation required</b>	75% of members
<b>Maximum participation limit</b>	All members
<b>Dependencies</b>	Public funding for setup
<b>Risks</b>	Failing to ensure that the service is used and valued by potential customers. Failing to demonstrate that the service delivers benefit to members. Failing to keep the information fresh.

Service C3	Purpose
<b>Promotion Material - member showcase</b>	<b>Promote Capability of EO Companies</b>
<b>Justification</b>	Value for money, high quality, well targeted 'soft' marketing and sales promotion which is valued by members. The service is revenue neutral.
<b>TA Responsibilities/costs</b>	Organisation and dissemination by Executive Secretary 10 - 20 days. Layout, printing and bulk delivery costs €10000-20000
<b>Income</b>	50% contribution to meet production costs from public funding. 50% contribution to meet production costs from participating members.
<b>Minimum participation required</b>	20 members
<b>Maximum participation limit</b>	In a large TA it may be difficult to showcase all members in a single publication.
<b>Dependencies</b>	Getting material from members requires a lot of effort.
<b>Risks</b>	Getting good quality input from members – need to spend time ensuring that they understand the concept. Ensuring the print run is the right size. Ensuring wide distribution to appropriate targets.



<b>Service C4</b>	<b>Purpose</b>
<b>Promote Business Innovation Networks</b>	<b>Promote Capability of EO Companies</b>
<b>Justification</b>	The TA identifies and researches suitable opportunities to support innovation by its members. This is a medium priority service that could be very valuable, especially to small companies.
<b>TA Responsibilities/costs</b>	Executive secretary: 5 days pa. Chief executive: 5 days pa
<b>Income</b>	Grant funding to the TA: €10k - €25k e.g. from National or European trade/industry/market development institutions
<b>Minimum participation required</b>	All members are informed
<b>Maximum participation limit</b>	n/a
<b>Dependencies</b>	None
<b>Risks</b>	None

<b>Service C5</b>	<b>Purpose</b>
<b>Promote Incubators and Knowledge Transfer</b>	<b>Promote Capability of EO Companies</b>
<b>Justification</b>	The TA identifies and researches suitable opportunities to support knowledge transfer and SME growth amongst its members. This is a medium priority service that could be very valuable, especially to small companies.
<b>TA Responsibilities/costs</b>	Executive secretary: 5 days pa. Chief executive: 5 days pa
<b>Income</b>	Grant funding to the TA: €10k - €25k e.g. from National/European trade/industry/market development institutions
<b>Minimum participation required</b>	All members are informed
<b>Maximum participation limit</b>	n/a
<b>Dependencies</b>	None
<b>Risks</b>	None

### 3.5 Representation of the EO Service Sector

The services in this section are related primarily to the EO industry (within the TA's territory) and representing the interests of all the member companies.

Service D1	Purpose
<b>Maintain an Industry Roadmap</b>	<b>Represent the EO Service Sector</b> <b>Promote Capability of EO Companies</b> <b>Influence Programmes</b>
<b>Justification</b>	The TA needs to develop, maintain and communicate a vision for evolution of the industry. This is a high priority service.
<b>TA Responsibilities/costs</b>	Chief executive support to Chairman: 10 days pa Travel costs for participating members €2000
<b>Income</b>	Public funding is requested to defray costs: ca €7000
<b>Minimum participation required</b>	The Board is consulted during early drafts. All members are consulted on final drafts.
<b>Maximum participation limit</b>	n/a
<b>Dependencies</b>	None
<b>Risks</b>	None

Service D2	Purpose
<b>Prepare Position Papers</b>	<b>Represent the EO Service Sector</b> <b>Promote Capability of EO Companies</b> <b>Influence Programmes</b>
<b>Justification</b>	The TA needs to develop, maintain and communicate an overall position papers on topics deemed relevant by the Board. This is a high priority service.
<b>TA Responsibilities/costs</b>	Chief executive support to Chairman: 10 -20 days pa
<b>Income</b>	None
<b>Minimum participation required</b>	The Board is consulted during early drafts. All members are consulted on final drafts.
<b>Maximum participation limit</b>	n/a
<b>Dependencies</b>	None – note overlap with D4
<b>Risks</b>	None

Service D3	Purpose
<b>Pro-active Dialogue with Stakeholders</b>	<b>Represent the EO Service Sector</b> <b>Influence Programmes</b>
<b>Justification</b>	The TA needs to develop, and maintain regular interactions with key decision makers. This is a high priority service.
<b>TA Responsibilities/costs</b>	Chief executive support to Chairman: 5 days pa
<b>Income</b>	None
<b>Minimum participation required</b>	The Board is kept informed of contacts. All members are informed of TA contacts via Board minutes.
<b>Maximum participation limit</b>	n/a
<b>Dependencies</b>	None
<b>Risks</b>	None

Service D4	Purpose
<b>Consult with Members</b>	<b>Represent the EO Service Sector</b>
<b>Justification</b>	The TA needs to ensure regular and detailed interaction with its members in order to develop the TA position on issues. This is a high priority service.
<b>TA Responsibilities/costs</b>	Executive secretary seeks WG members from member companies and then only coordinates the drafting of groups: 10 days pa. Chief executive support to Chairman: 10 - 20 days pa.
<b>Income</b>	None
<b>Minimum participation required</b>	All members are notified of TA contacts via Board minutes and ad hoc circulars for example on Government Consultations.
<b>Maximum participation limit</b>	All members
<b>Dependencies</b>	None
<b>Risks</b>	Self-regulating in that low membership participation by definition means the topic is low priority. The executive should identify and follow processes that are most likely to secure a response.

Service D5	Purpose
<b>Lobby on Data Policy and IPR</b>	<b>Represent the EO Service Sector Influence Programmes</b>
<b>Justification</b>	The TA needs to develop, and maintain regular interactions with those who influence access to data and conditions of use. This is in the interests of the industry as a whole.
<b>TA Responsibilities/costs</b>	Chief executive support to Chairman: 5 days pa
<b>Income</b>	None
<b>Minimum participation required</b>	The Board is kept informed of contacts. All members are informed of TA contacts via Board minutes.
<b>Maximum participation limit</b>	n/a
<b>Dependencies</b>	None
<b>Risks</b>	Need to avoid any conflict of interest with members who are also data providers.

Service D6	Purpose
<b>Lobby Investors</b>	<b>Represent the EO Service Sector Influence Programmes</b>
<b>Justification</b>	The TA needs to develop, and maintain regular interactions with private and public investors. This is in the interests of the industry as a whole.
<b>TA Responsibilities/costs</b>	Chief executive support to Chairman: 5 days pa
<b>Income</b>	None
<b>Minimum participation required</b>	The Board is kept informed of contacts. All members are informed of TA contacts via Board minutes.
<b>Maximum participation limit</b>	n/a
<b>Dependencies</b>	None
<b>Risks</b>	Need to take special care to ensure that communications are credible and convincing.

### 3.6 Influence Programmes

Service E1	Purpose
<b>Influence Programmes/Missions</b>	<b>Influence Programmes</b>
<b>Justification</b>	This is a core activity. It is mainly delivered via other services.
<b>TA Responsibilities/costs</b>	Dedicated effort is required to understand the programmes and attend briefings etc. Executive Secretary: 5 -10 days pa Chief executive support to Chairman: 5 -10 days pa
<b>Income</b>	None
<b>Minimum participation required</b>	Via other services
<b>Maximum participation limit</b>	n/a
<b>Dependencies</b>	None
<b>Risks</b>	Not obtaining reliable information. Need to ensure that the members views are gathered – if the TA executive fails to carry its members with it then it will lose influence.

Service E2	Purpose
<b>Cooperate with International Associations to Influence Programmes</b>	<b>Influence Programmes</b>
<b>Justification</b>	This service is necessary in order to ensure joined – up thinking and concerted action.
<b>TA Responsibilities/costs</b>	Mainly delivered through other services. But requires dedicated effort to maintain good relationships. Chief executive support to Chairman: 5 -10 days pa. Travel €3000 pa
<b>Income</b>	None
<b>Minimum participation required</b>	Via other services
<b>Maximum participation limit</b>	n/a
<b>Dependencies</b>	None
<b>Risks</b>	Need to avoid falsely competing with other associations.

### 3.7 Other Services

Service F1	Purpose
<b>Certification of Members</b>	<b>Professional Development</b>
<b>Justification</b>	This is a low priority activity at the current time, but may become higher priority as the industry matures.
<b>TA Responsibilities/costs</b>	Coordination and negotiation with the assessment organisation. Executive Secretary: 0 - 5 days pa Chief executive support to Chairman: 0 -5 days pa
<b>Income</b>	None to the TA.
<b>Minimum participation required</b>	10% of members
<b>Maximum participation limit</b>	All members
<b>Dependencies</b>	Existence of a suitable organisation to carry out the assessment.
<b>Risks</b>	Insufficient take-up by members.

Service F2	Purpose
<b>Discount Scheme(s)</b>	<b>Commercial Advantage</b>
<b>Justification</b>	This is a medium priority activity at the current time, many members are interested in this possibility, including data and software vendors.
<b>TA Responsibilities/costs</b>	Coordination and negotiation with vendors. Executive Secretary: 0 - 5 days pa Chief executive support to Chairman: 0 -5 days pa
<b>Income</b>	None to the TA.
<b>Minimum participation required</b>	10% of members
<b>Maximum participation limit</b>	All members
<b>Dependencies</b>	Agreement of vendors and take up by members.
<b>Risks</b>	Need to keep the scheme simple. Discount needs to be large enough to be worthwhile for members.

Service F3	Purpose
<b>Careers Advice and Development</b>	<b>Maintain Workforce</b>
<b>Justification</b>	This is a low priority activity at the current time but will become more important as the industry matures.
<b>TA Responsibilities/costs</b>	Communication with universities. Executive Secretary: 0 - 5 days pa Chief executive support to Chairman: 0 -5 days pa
<b>Income</b>	None
<b>Minimum participation required</b>	n/a
<b>Maximum participation limit</b>	n/a
<b>Dependencies</b>	None
<b>Risks</b>	None

## 4 Financial Perspective for an EOTA

This section presents candidate financial models for the EO Trade Association.

The analysis has been based upon a few different scenarios for the TA, starting from a basic level of service with minimal staffing, and leading up to a comprehensive level of operation delivering all the services described in the preceding section.

For each scenario, this section analyses the costs involved – both for operating the trade association (“internal costs”) and for delivering the relevant services to its members (“external costs”). It also assesses the income that would be generated by the TA in each scenario, looking not only at membership fees but also the income from delivery of revenue-generating services.

The section concludes with an examination of the cash flow picture for each scenario, and makes recommendations showing how a modest level of public sector investment in the trade association would allow it to step up the range of services it offers, and how this will benefit the industry as a whole.

### 4.1 Scenarios Analysed

The following scenarios have been analysed in this section. The decision to split Scenario 2 into two parts, 2a and 2b, was made because there are pros and cons to having a funded Chief Executive post in a medium-sized TA (see Section 2.2).

No.	Scenario	Staffing of the TA
1	Baseline Scenario – based upon the current EARSC setup	One part-time Executive Secretary.
2a	Medium Scenario, offering a moderate level of services, but without a funded Chief Executive post	One full-time Executive Secretary.
2b	Medium Scenario, offering a moderate level of services, and with a funded Chief Executive post	One full-time Executive Secretary and one part-time Chief Executive.
3	Full Service Scenario, offering the highest service level.	One full time Executive Secretary and one full time Chief Executive.

**Table 4-1 Scenarios Analysed**

In all the above scenarios, the Chairman and other board members are assumed to be voluntary posts (as is the case for EARSC), and are not funded by the TA. In scenarios 1 and 2a, it is assumed that the Chairman and other members of the board would perform any necessary duties that would otherwise have fallen to the Chief Executive.

Each scenario adds services to the preceding scenario. Thus Scenario 1 offers the basic level of services that can be provided by the TA having just a part-time executive secretary; Scenario 2a adds more services that can be delivered by simply increasing the executive secretary’s time to full time; Scenario 2b adds services that need at least a part time Chief Executive; and in Scenario 3 the TA delivers the full set of services.

This is summarised in Table 4-2 below, where ● means the service is partially delivered in that scenario, while ✓ means the service is fully delivered:

EOTA Services		Scenarios			
		1	2a	2b	3
<b>A</b>	<b>Raise awareness of EO</b>				
1.	User focused promotional material	•	✓	✓	✓
2.	Maintenance of External contact list	✓	✓	✓	✓
3.	Presentation on behalf of EO Industry			✓	✓
4.	Communications/PR services		✓	✓	✓
5.	Web site	✓	✓	✓	✓
6.	Awards		•	✓	✓
7.	Facts and Figures		✓	✓	✓
8.	Organise Public Events	✓	✓	✓	✓
9.	Publish an External Newsletter	✓	✓	✓	✓
10.	Attract International Stakeholders to TA Events			✓	✓
<b>B</b>	<b>Forum for networking</b>				
1.	Maintain a Members List	✓	✓	✓	✓
2.	Social Events for Members	✓	✓	✓	✓
3.	EOTA Technical Working Groups	•	✓	✓	✓
4.	External Working Groups			•	✓
5.	Directory of Competencies		•	•	✓
6.	Announcement and News Exchange	✓	✓	✓	✓
7.	Collaboration for Education and Training				✓
8.	Information Filtering		•	✓	✓
9.	Coordinate with National Associations	•	•	✓	✓
10.	Facilitating Business Opportunities	•	•	✓	✓
11.	Link to Innovation/PR agencies		•	✓	✓
<b>C</b>	<b>Promote Capability of EO companies</b>				
1.	Attend meetings with International stakeholders			•	✓
2.	Directory of EO companies and services		✓	✓	✓
3.	Promotional material - member showcase	✓	✓	✓	✓
4.	Promote Business Innovation Networks		•	✓	✓
5.	Promote Incubators and Knowledge Transfer		•	✓	✓
<b>D</b>	<b>Representation of EO Service Sector</b>				
1.	Maintain an Industry Roadmap		•	✓	✓
2.	Position Papers			•	✓
3.	Pro-active dialogue with stakeholders			✓	✓
4.	Consult with Members		•	✓	✓
5.	Lobby on Data Policy and IPR			✓	✓
5.	Lobby Investors			✓	✓
<b>E</b>	<b>Influence Programmes</b>				
1.	Influence Programmes/Missions		•	✓	✓
2.	Cooperate with International Associations to Influence Programmes			•	✓
<b>F</b>	<b>Other Services</b>				
1.	Certification of Members			•	✓
2.	Discount Schemes			•	✓
3.	Careers Advice and Development			•	✓

In each scenario, • = service partially delivered; ✓ = service fully delivered.

**Table 4-2 Services Assumed to be delivered by the EO TA in each Scenario**

Note that this set of scenarios can be seen as incremental steps for the evolution of the TA, i.e. they represent a possible progression through time from the current level of service to a future ‘ideal’ or desired end-scenario. This approach was identified as being the most appropriate way forward in earlier eoVox reports T2 [6] and T3 [7], and was confirmed from feedback received at the eoVox industry workshop held at ESRIN on 14 September 2006.

The cost impact of moving from Scenario 1 to a more enhanced level of service delivery is presented below.

## 4.2 Cost Analysis

This section examines the costs involved in delivering the services for each of the considered scenarios. Costs have been identified and divided according to two types:

- **Service delivery or “external” costs:** These are the costs associated with setting up and delivering the services of the TA. For example, paying a graphic designer to design a brochure, paying to hire a venue for an event, and travelling to meetings are all costs incurred through the delivery of specific services to TA members.
- **Overhead or “internal” costs:** These are the costs associated with keeping the TA running. The cost of TA staff and the cost of hiring office space have been considered to be internal costs. Members benefit indirectly from this expenditure.

The service delivery costs and overhead costs are analysed in detail for each scenario in sections 4.2.1 and 4.2.2 respectively.

### 4.2.1 Service Delivery (“External”) Costs

The services of the EO TA were presented in Section 3, grouped into 6 service categories as listed in the table below:

A	Raise awareness of EO
B	Forum for networking
C	Promote Capability of EO companies
D	Representation of EO Service Sector
E	Influence Programmes
F	Other Services

**Table 4-3 Categories of Services**

For each of the services in each category, costs have been broken down into three areas:

- EOTA staff effort (a cost which normally will be paid through a salary);
- Travel costs for the above staff members to attend meetings and events;
- External service costs (such as costs associated with designing and implementing a web service, or the cost of designing and printing a brochure etc.)

These costs were estimated in the tables in Section 3, and the figures from those tables have been collected together in Table 4-4 on the next page. The table provides an overview of all the eoVox services listed under the headings given above. For each service, as a bottom up approach, the type of costs associated with providing each service has been identified.

For each service that requires EOTA staff effort, an estimate of person effort measured in person days per year is provided. The EOTA staff effort is identified separately for the Executive Secretary or and the Chief Executive. Additionally, when an external service cost



or a travel cost is required to deliver a given service, an estimated recurring cost is provided. In a few cases an initial set-up cost is also foreseen - the set-up costs and recurring yearly costs are shown separately in the table.

For example for service A1 (User focused promotional material) – the service will involve the time and effort of EOTA staff, plus the cost of the services of an external graphic design company and a printer to design and print the material. However there is no initial setup cost associated with this particular service.

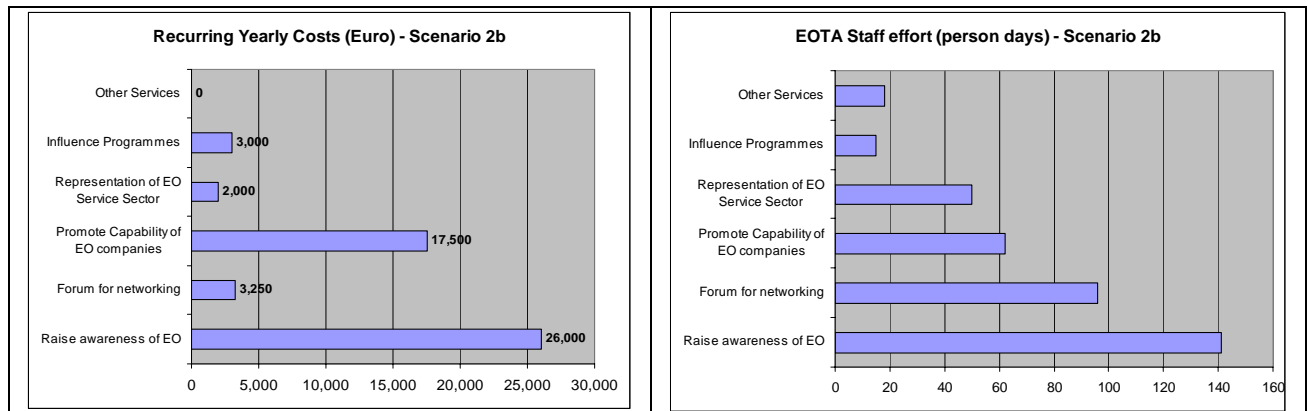
Note that the estimates presented in Section 3 and analysed here are by no means fixed or mandated. For each service it is clear that the TA could decide to spend more or less effort than presented here, and could choose to spend more or less money on the use of external services. Such decisions will in the end be strategic decisions. In this analysis we have estimated a medium level of effort for scenarios 2a & 2b, and a high level of effort for scenario 3. These assumptions clearly should be seen as indicative only, as it is difficult to justify whether to spend 10 person days or 20 person days on a given task.

EOTA Services		Scenario 2a (Days effort per year)		Scenario 2b (Days effort per year)		Scenario 3 (Days effort per year)		Estimated set-up costs (EURO)	Estimated recurring yearly costs (EURO)			Assumptions concerning additional costs
		TA Exec Sec'y	TA Chief Exec	TA Exec Sec'y	TA Chief Exec	TA Exec Sec'y	TA Chief Exec		Scenario 2a	Scenario 2b	Scenario 3	
<b>A Raise awareness of EO</b>												
1.	User focused promotional material	20	0	20	10	20	20		10,000	10,000	20,000	Graphic design costs; printing costs.
2.	Maintenance of External contact list	5	0	5	0	5	0		0	0	0	None
3.	Presentation on behalf of EO Industry	0	0	0	10	0	10		0	10,000	10,000	10 travels/year by Chief Exec
4.	Communications/PR services	5	0	5	5	5	5	5,000	0	0	0	Initial cost - graphic/ artwork design
5.	Web site	20	0	20	0	30	0	10,000	2,000	2,000	4,000	Maintenance and upgrades by external web designer
6.	Awards	5	0	5	5	5	5	500	2,000	2,000	2,000	5 Prizes = €500 1 travel/year
7.	Facts and Figures	10	0	10	10	20	20		0	0	0	None
8.	Organise Public Events	10	0	10	0	20	0		2,000	2,000	4,000	Hire of venue, catering
9.	Publish an External Newsletter	20	0	15	8	20	8	5,000	0	0	0	Initial design of newsletter layout
10.	Attract International Stakeholders to TA Events	0	0	0	3	0	10		0	0	0	None
		95	0	90	51	125	78	20500	16,000	26,000	40,000	
<b>B Forum for networking</b>												
1.	Maintain a Members list	5	0	5	0	5	0		0	0	0	None
2.	Social Events for members	5	0	5	5	5	5		1,000	1,000	3,000	Contingency for unrecovered costs
3.	EOTA Technical Work groups	5	0	5	5	5	10		500	500	1,000	Hire of venue for WG meetings if necessary
4.	External Working Groups	0	0	0	6	0	12		0	1,750	3,500	Travel costs
5.	Directory of competencies	3	0	3	0	10	0		0	0	0	None
6.	Announcement and news exchange	24	0	24	0	24	0		0	0	0	None
7.	Collaboration for Education and Training	0	0	0	0	10	5		0	0	0	None
8.	Information Filtering	10	0	10	10	10	20		0	0	0	None
9.	Coordinate with National Associations	2	0	2	2	5	5		0	0	0	None
10.	Facilitating Business Opportunities	2	0	2	2	4	4		0	0	0	None
11.	Link to Innovation/PR agencies	5	0	5	5	10	10		0	0	0	None
		61	0	61	35	88	71	0	1,500	3,250	7,500	
<b>C Promote Capability of EO companies</b>												
1.	Attend meetings with International stakeholders	0	0	0	12	0	24		0	5,000	5,000	4 travels/year
2.	Online Directory of EO companies and services	20	0	20	0	20	0	25,000	2,500	2,500	2,500	Initial web design; annual hosting costs
3.	Promotional material - member showcase	10	0	10	0	20	0		10,000	10,000	20,000	Layout, Printing, delivery costs
4.	Promote Business Innovation Networks	5	0	5	5	5	5		0	0	0	None
5.	Promote Incubators and Knowledge	5	0	5	5	5	5		0	0	0	None
		40	0	40	22	50	34	25,000	12,500	17,500	27,500	
<b>D Representation of EO Service Sector</b>												
1.	Maintain an Industry Roadmap	0	0	0	5	0	10		2,000	2,000	2,000	Travel costs for participating members
2.	Position Papers	0	0	0	10	0	20		0	0	0	None
3.	Pro-active dialogue with stakeholders	0	0	0	5	0	5		0	0	0	None
4.	Consult with Members	15	0	10	10	10	20		0	0	0	None
5.	Lobby on Data Policy and IPR	0	0	0	5	0	5		0	0	0	None
5.	Lobby Investors	0	0	0	5	0	5		0	0	0	None
		15	0	10	40	10	65		2,000	2,000	2,000	
<b>E Influence Programmes</b>												
1.	Influence Programmes/Missions	5	0	5	5	10	10		0	0	0	None
2.	Cooperate with International Associations to Influence Programmes	0	0	0	5	0	10		0	3,000	3,000	2 travels/year
		5	0	5	10	10	20	0	0	3,000	3,000	
<b>F Other Services</b>												
1.	Certification of Members	0	0	3	3	5	5		0	0	0	None
2.	Discount Schemes	0	0	3	3	5	5		0	0	0	None
3.	Careers Advice and Development	0	0	3	3	5	5		0	0	0	None
		0	0	9	9	15	15	0	0	0	0	
<b>Total costs of delivering services</b>		216	0	215	167	298	283	45,500	32,000	51,750	80,000	
# of person years:		1.0	0.0	1.0	0.8	1.4	1.3					(Assumes 220 working days pa)

**Table 4-4 Analysis of Costs and Effort of Delivering EOTA Services**

In terms of staff effort based on the current analysis it can be concluded that scenario 2a can be fulfilled with a full time executive secretary; scenario 2b can be fulfilled with a full time executive secretary and a part-time (0.8) chief executive; and scenario 3 needs both a full time executive secretary and chief executive plus perhaps a half-time assistant who could take on some of the more straightforward administrative aspects of their work.

This bottom-up approach of allocating costs and staff efforts among the individual service groups leads at the aggregated level to a split of costs and efforts as shown in Figure 4-1 below, using scenario 2b as an example. Keeping in mind the original ‘wish list’ as obtained from the EO VA industry (see eoVox Report T1) a slight reallocation of costs and effort in favour of the lobbying activities might be appropriate.



**Figure 4-1 Relative split of costs and effort among the 6 service categories**

It is also important to note that some of the EO TA activities are self-financing, while some are not. It is important to distinguish between these as the former represent “pass through” and inflate the total figures, thus hiding the basic costs. The effect of this can be seen later in this section where the TA revenues are analysed.

#### 4.2.2 Overhead (“Internal”) Costs

The main overhead costs identified are those associated with the establishment of a dedicated office for the trade association, and the costs associated with retaining the services of an executive secretary and a chief executive.

These overhead costs are analysed separately as they are incurred independently of the services delivered, in the sense that the EOTA needs to hire the Executive Secretary and the Chief Executive on either a part time or full time basis, and once this has been done, their cost is a firm expenditure regardless of what services are delivered by the TA. Likewise, the cost of renting an office etc. is also in that sense a fixed cost as it runs independent of the level of service delivered. The TA would need to sign a contract for hiring an office for a fixed period, e.g. one year.

Note that staff seconded part- or full-time from member companies and agencies (ESA, EC, CNES, DLR, BNSC, etc.) and paid for by their employer may offset many of the staff costs. Similarly, office space provided by a member company free of charge

As with the analysis of the service delivery costs, the overhead costs have been analysed according to the four different scenarios, using the following assumptions.

**Scenario 1:** No office, a part-time executive secretary, no chief executive. This more or less reflects how EARSC operates at the present time.

**Scenario 2a:** No office, a full time executive secretary, no chief executive. The increased time of the executive secretary enables several additional services to be delivered by the TA.

**Scenario 2b:** No office, a full time exec secretary, and a part-time chief executive. The presence of a chief executive allows still more services to be added to the portfolio.

**Scenario 3:** An office based in Brussels, a full-time executive secretary, and a full-time chief executive. This is the “full service” scenario delivering all the services listed in Section 3.

Based on these assumptions, the overhead costs analysed for each scenario in the tables below. To these, the service delivery costs from Table 4-4 are then added, providing a picture of the overall running costs associated with each scenario.

#### 4.2.3 Overall Running Costs of the TA

**Scenario 1:** The ‘Current EARSC’ scenario is based upon EARSC’s accounts for 2005 which also contain predictions for 2006 and 2007. For the following years T+2 to T+5 the costs have been extrapolated assuming 3% price inflation.

EOTA Running Costs - Scenario 1 (Current EARSC)	Assumed		Estimated recurring costs				Notes/assumptions
	2006	2007	T+2	T+3	T+4	T+5	
<b>(A) Overheads (i.e. "internal") costs of the TA</b>							
1. Office costs							
- Office rent, furniture, equipment, utility bills etc	0	0	0	0	0	0	None in present EARSC
- Internet/phone	0	300	309	318	328	338	From EARSC Accounts
2. Staff costs							
- EOTA Chief Executive	0	0	0	0	0	0	None in present EARSC
- EOTA Executive Secretary	20,000	20,000	20,600	21,218	21,855	22,510	
3. Auditors	2,200	2,200	2,266	2,334	2,404	2,476	
4. Membership EUROGI etc	700	700	721	743	765	788	Figures taken from current EARSC accounts
5. AGM	1,000	1,000	1,030	1,061	1,093	1,126	
6. Representation costs	0	0	0	0	0	0	
<b>Total of Overhead Costs</b>	<b>23,900</b>	<b>24,200</b>	<b>24,926</b>	<b>25,674</b>	<b>26,444</b>	<b>27,237</b>	
<b>(B) Service Delivery (ie "external") costs of the TA</b>							
Service delivery costs	11,100	16,300	16,789	17,293	17,811	18,346	Red figures deduced from EARSC accounts; inflated for T+2 - T+5
<b>Total of Service Delivery costs</b>	<b>11,100</b>	<b>16,300</b>	<b>16,789</b>	<b>17,293</b>	<b>17,811</b>	<b>18,346</b>	
<b>Total (overhead+service delivery) costs:</b>	<b>35,000</b>	<b>40,500</b>	<b>41,715</b>	<b>42,966</b>	<b>44,255</b>	<b>45,583</b>	

**Table 4-5 EOTA overhead and service delivery costs - Scenario 1**

**Scenario 2a:** The main difference here is the cost associated with increasing the Executive Secretary’s effort to full time. Other costs such as Auditors are also accordingly scaled up. The service delivery costs here are taken from Table 4-4 and reflect the costs of the services that can be delivered in this scenario.

EOTA Running Costs - Scenario 2a (Medium Service Level, No Chief Exec)	Estimated set-up costs EURO	Estimated recurring costs					Notes/assumptions
		T+1	T+2	T+3	T+4	T+5	
<b>(A) Overheads (i.e. "internal") costs of the TA</b>							
1. Office costs							
- Office rent, furniture, equipment, utility bills etc	0	0	0	0	0	0	None in this scenario
- Internet/phone	1,000	1,200	1,236	1,273	1,311	1,351	
2. Staff costs							
- EOTA Chief Executive		0	0	0	0	0	None in this scenario
- EOTA Executive Secretary		55,000	56,650	58,350	60,100	61,903	Full time, 250 EURO per day*220
3. Auditors		3,000	3,090	3,183	3,278	3,377	
4. Membership EUROGI etc		700	721	743	765	788	
5. AGM		1,000	1,030	1,061	1,093	1,126	
6. Representation costs		2,000	2,060	2,122	2,185	2,251	
<b>Total of Overhead Costs</b>	<b>1,000</b>	<b>62,900</b>	<b>64,787</b>	<b>66,731</b>	<b>68,733</b>	<b>70,795</b>	
<b>(B) Service Delivery (ie "external") costs of the TA</b>							
Service delivery costs	45,500	32,000	32,960	33,949	34,967	36,016	Red figures are from Table 4-4; inflated for years T+2 through T+5
<b>Total of Service Delivery costs</b>	<b>45,500</b>	<b>32,000</b>	<b>32,960</b>	<b>33,949</b>	<b>34,967</b>	<b>36,016</b>	
<b>Total (overhead+service delivery) costs:</b>	<b>46,500</b>	<b>94,900</b>	<b>97,747</b>	<b>100,679</b>	<b>103,700</b>	<b>106,811</b>	

**Table 4-6 EOTA overhead and service delivery costs - Scenario 2a**

**Scenario 2b:** The main difference here is the cost of a part-time Chief Executive. The service delivery costs here reflect the somewhat higher level of services delivered in this scenario as a result of having a chief executive who can open up new areas of activity.

EOTA Running Costs - Scenario 2b (Medium Service Level, with Chief Exec)	Estimated set-up costs EURO	Estimated recurring costs					Notes/assumptions
		T+1	T+2	T+3	T+4	T+5	
<b>(A) Overheads (i.e. "internal") costs of the TA</b>							
1. Office costs							
- Office rent, furniture, equipment, utility bills etc	0	0	0	0	0	0	None in this scenario
- Internet/phone	1,000	1,200	1,236	1,273	1,311	1,351	
2. Staff costs							
- EOTA Chief Executive		55,000	56,650	58,350	60,100	61,903	Part-time, 500 EURO per day*110
- EOTA Executive Secretary		55,000	56,650	58,350	60,100	61,903	Full time, 250 EURO per day*220
3. Auditors		3,000	3,090	3,183	3,278	3,377	
4. Membership EUROGI etc		700	721	743	765	788	
5. AGM		1,000	1,030	1,061	1,093	1,126	
6. Representation costs		2,000	2,060	2,122	2,185	2,251	
<b>Total of Overhead Costs</b>	<b>1,000</b>	<b>117,900</b>	<b>121,437</b>	<b>125,080</b>	<b>128,833</b>	<b>132,697</b>	
<b>(B) Service Delivery (ie "external") costs of the TA</b>							
Service delivery costs	45,500	51,750	53,303	54,902	56,549	58,245	Red figures are from Table 4-4; inflated for years T+2 through T+5
<b>Total of Service Delivery costs</b>	<b>45,500</b>	<b>51,750</b>	<b>53,303</b>	<b>54,902</b>	<b>56,549</b>	<b>58,245</b>	
<b>Total (overhead+service delivery) costs:</b>	<b>46,500</b>	<b>169,650</b>	<b>174,740</b>	<b>179,982</b>	<b>185,381</b>	<b>190,943</b>	

**Table 4-7 EOTA overhead and service delivery costs - Scenario 2b**

**Scenario 3:** The "Full Service Scenario" adds in the cost of an office, located for example in Brussels in close proximity to the EC and providing meeting facilities for events. It also increases the effort of the executive secretary and chief executive to both being full time (the possibility of part-time administrative help has not been included).

In terms of salary for the Chief Executive, we assume that a full-time salary can be slightly lower on a daily basis compared to a part-time salary. The service delivery costs here reflect the high level of services delivered in this scenario.

EOTA Running Costs - Scenario 3 (Full Service Scenario)	Estimated set-up costs EURO	Estimated recurring costs					Notes/assumptions
		T+1	T+2	T+3	T+4	T+5	
<b>(A) Overheads (i.e. "internal") costs of the TA</b>							
1. Office costs							
- Office rent, furniture, equipment, utility bills etc	15,000	24,000	24,720	25,462	26,225	27,012	Recurring cost €2k/month
- Internet/phone	2,000	1,600	1,648	1,697	1,748	1,801	
2. Staff costs							
- EOTA Chief Executive		88,000	90,640	93,359	96,160	99,045	Full time, 400 EURO per day*220
- EOTA Executive Secretary		55,000	56,650	58,350	60,100	61,903	Full time, 250 EURO per day*220
3. Auditors		4,000	4,120	4,244	4,371	4,502	
4. Membership EUROGI etc		700	721	743	765	788	
5. AGM		1,000	1,030	1,061	1,093	1,126	
6. Representation costs		2,000	2,060	2,122	2,185	2,251	
<b>Total of Overhead Costs</b>	<b>17,000</b>	<b>176,300</b>	<b>181,589</b>	<b>187,037</b>	<b>192,648</b>	<b>198,427</b>	
<b>(B) Service Delivery (ie "external") costs of the TA</b>							
Service delivery costs	45,500	80,000	82,400	84,872	87,418	90,041	Red figures are from Table 4-4; inflated for years T+2 through T+5
<b>Total of Service Delivery costs</b>	<b>45,500</b>	<b>80,000</b>	<b>82,400</b>	<b>84,872</b>	<b>87,418</b>	<b>90,041</b>	
<b>Total (overhead+service delivery) costs:</b>	<b>62,500</b>	<b>256,300</b>	<b>263,989</b>	<b>271,909</b>	<b>280,066</b>	<b>288,468</b>	

**Table 4-8 EOTA overhead and service delivery costs - Scenario 3**

### 4.3 Analysis of Revenue

This section estimates the revenue that could be generated by the EO TA in each of the considered scenarios. It also identifies the level of external funding the TA would require in each scenario in order to make the TA self-sustaining in the long term.

#### 4.3.1 Sources of Revenue

Sources of revenue for the EO TA can be broadly categorised into the following areas:

1. **Membership fees.** EARSC currently has 70 members, paying a membership fee of €400 per annum, thus generating revenue of 28k Euro per annum. We have taken this as the baseline for Scenario 1 and assumed higher levels of members and fees for the higher scenarios. Given that the EO VA industry consists of well over 350 companies today, we have conservatively estimated that in the best case the EO TA will attract up to 140 members in 5 years' time.
2. **Revenues from arranging external conferences and events.** Currently EARSC does not make much profit on external events. We have assumed that in the higher scenarios there will be increased scope to achieve this.
3. **Revenues from undertaking projects/consultancy.** The TA can participate in bids for projects where there is no risk of competing with its own members. For example to undertake projects where the industry's views are needed, or where dissemination of results/communication with industry is required.
4. **Sponsorships from industry and institutions.** EARSC currently does not seek such sponsorship but it is envisaged that in the higher scenarios there would be increased scope to do so.
5. **Ad-hoc activities providing services on industry specific information.** This eoVox study is an example of an ad-hoc revenue generating activity that EARSC has been involved in.
6. **Income from user-paid services.** These are services that members are willing to pay extra for. The data for these is taken from the tables presented in Section 3 and then scaled for each of the relevant scenarios, giving the following set of figures (current EARSC does not generate revenue in this way, so Scenario 1 is excluded):

Revenue Generating Services	Revenue in each Scenario (Euro)		
	2a	2b	3
A7 - Sales of facts and figures reports	750	1000	2000
A8 - Income from public events	1500	3000	6000
B2 - Social events for members	500	750	1500
B7 - Education and training services	0	0	7500
B8 - Information filtering service	2000	3750	7500
B9 - National associations as members	500	750	1500
B11 - Innovation / IPR services	1500	2500	5000
C2 - Directory of services (EOPages)	750	1250	2500
C3 - Member showcase	2500	5000	10000
<b>Total</b>	<b>10000</b>	<b>18000</b>	<b>43500</b>

**Table 4-9 Estimate of likely income for user-paid services**

The baseline that has been used for the revenue analysis is the EARSC 2005 accounts, which includes forecasts and estimates for 2006 and 2007, with the higher scenarios being based upon expanding EARSC to encompass the additional services associated with those scenarios. It should be noted that the EARSC finances don't reflect the substantial level of "in kind" contribution that is currently made by the chairman and other members of the board in terms of their professional effort.

### 4.3.2 Revenue in each Scenario

**Scenario 1.** This is based upon the current EARSC accounts.

EOTA potential revenue - Scenario 1 (Based upon current EARSC)	Assumed		Estimated potential revenue				Notes/assumptions
	2006	2007	T+2	T+3	T+4	T+5	
1. Membership fee	28000	30800	40000	40000	48000	48000	EARSC currently has 70 members, x membership fee of €400 = 28000 EURO. This scenario assumes the number of members to stabilise around 80 members with the membership fee rising to €500 from T+2 and to €600 in T+4
2. Arrangement of Conferences/Net revenue	2000	0	0	0	0	0	Currently EARSC is not making much profit on this. We will assume that with closer collaboration with other TAs there might be a potential for co-arranged conferences/workshops
3. EC consultancy/support projects	0	0	0	0	0	0	None in this scenario
4. Sponsorships	0	0	0	0	0	0	None in this scenario
5. Services on industry specific information	25500	0	0	0	0	0	One service to be delivered to ESA could be facts and figures from members. Currently ESA pays a consultancy company to gather financial and market information from VACs. An EOTA could do this. The EOVOX study is an example of this.
6. Other	500	500	500	500	500	500	According to current EARSC accounts (interest rates)
<b>Total potential revenue streams</b>	<b>56000</b>	<b>31300</b>	<b>40500</b>	<b>40500</b>	<b>48500</b>	<b>48500</b>	

**Table 4-10 EOTA Revenue – Scenario 1**

**Scenario 2a.** For this scenario, a slightly higher level of revenue is assumed, and income from other revenue sources are included:

EOTA potential revenue - Scenario 2a (Medium Service Level, No Chief Exec)	Estimated potential revenue					Notes/assumptions
	T+1	T+2	T+3	T+4	T+5	
1. Membership fee	30800	40000	42500	55800	60000	EARSC currently has 70 members, x membership fee of €400 = 28000 EURO. This scenario assumes the number of members to grow to around 100, with an average membership fee of 500 EURO from T+2 raising to 600 EURO by T+4
2. Arrangement of Conferences/Net revenue	3,000	3,500	4,000	4,500	5,000	Currently EARSC is not making much profit on this. We will assume that with closer collaboration with other TAs there might be a potential for co-arranged conferences/workshops
3. EC consultancy/support projects	15,000	15,000	15,000	15,000	15,000	An EOTA should not compete with industry, however where industry's view is needed or dissemination of results/communication EOTA has a unique, non-competing status
4. Sponsorships	12,500	12,500	12,500	12,500	12,500	Assuming 5 large space companies and space agencies and other stakeholders sponsor 2500 EURO each a year
5. Services on industry specific information	12,500	12,500	12,500	12,500	12,500	One service to be delivered to ESA could be facts and figures from members. Currently ESA pays a consultancy company to gather financial and market information from VACs. An EOTA could do this more cost efficient and with more confidence.
6. Income from user-paid services	0	10,000	10,000	10,000	10,000	A modest level of user paid services is assumed in this scenario based on income from the services as listed in table 4.9 below: Total: 10 KEURO per year potentially (from T+2)
<b>Total potential revenue streams</b>	<b>73,800</b>	<b>93,500</b>	<b>96,500</b>	<b>110,300</b>	<b>115,000</b>	

**Table 4-11 EOTA Revenue – Scenario 2a**

**Scenario 2b.** For this scenario, an even higher level of revenue is assumed, and additional income from other revenue sources is considered viable:

EOTA potential revenue - Scenario 2b (Medium Service Level, with Chief Exec)	Estimated potential revenue					Notes/assumptions
	T+1	T+2	T+3	T+4	T+5	
1. Membership fee	40,000	45,000	60,000	84,000	91,000	Due to the increased level of service offered, the EOTA may be able to attract more members. This scenario assumes number of members rising to 90 in T+1 and to a total of 120 by T+5. At the same time we assume members are willing to pay more for more benefits. In average from 500 EURO in T+1 to 700 in T+5
2. Arrangement of Conferences/Net revenue	3,000	3,500	4,000	4,500	5,000	Currently EARSC is not making much profit on this. We will assume that with closer collaboration with other TAs there might be a potential for co-arranged conferences/workshops
3. EC consultancy/support projects	30,000	30,000	30,000	30,000	30,000	An EOTA should not compete with industry, however where industry's view is needed or dissemination of results/communication EOTA has a unique, non-competing status
4. Sponsorships	25,000	25,000	25,000	25,000	25,000	Assuming 10 large space companies and space agencies and other stakeholders sponsor 2500 EURO each a year
5. Services on industry specific information	25,000	25,000	25,000	25,000	25,000	One service to be delivered to ESA could be facts and figures from members. Currently ESA pays a consultancy company to gather financial and market information from VACs. An EOTA could do this more cost efficient afn with more confidence.
6. Income from user-paid services	0	18,000	18,000	18,000	18,000	A modest level of user paid services is assumed in this scenario based on income from the services as listed in table 4.9 below: Total: 18 KEURO per year potentially (from T+2)
<b>Total potential revenue streams</b>	<b>123,000</b>	<b>146,500</b>	<b>162,000</b>	<b>186,500</b>	<b>194,000</b>	

**Table 4-12 EOTA Revenue – Scenario 2b**

**Scenario 3.** In the case of the full-service scenario, with two full-time staff, it is assumed that an even higher level of income can be achieved.

EOTA potential revenue - Scenario 3 (Full Service Scenario)	Estimated potential revenue					Notes/assumptions
	T+1	T+2	T+3	T+4	T+5	
1. Membership fee	75,000	82,500	120,000	130,000	140,000	At this very high service level we will assume the EOTA can attract 100 members from T+1 and increase this to 140 by T+5. An average membership fee of 750 EURO is envisaged in T+1 increasing to 1000 EURO in T+5.
2. Arrangement of Conferences/Net revenue	4,000	4,500	5,000	5,500	6,000	Currently EARSC is not making much profit on this. We will assume that with closer collaboration with other TAs there might be a potential for co-arranged conferences/workshops
3. EC consultancy/support projects	50,000	50,000	50,000	50,000	50,000	An EOTA should not compete with industry, however where industry's view is needed or dissemination of results/communication EOTA has a unique, non-competing status
4. Sponsorships	30,000	30,000	30,000	30,000	30,000	Assuming 10 large space companies and space agencies and other stakeholders sponsor 3000 EURO each a year
5. Services on industry specific information	25,000	25,000	25,000	25,000	25,000	One service to be delivered to ESA could be facts and figures from members. Currently ESA pays a consultancy company to gather financial and market information from VACs. An EOTA could do this.
6. Income from user-paid services		43,500	43,500	43,500	43,500	A higher income level of user paid service are assumed in this scenario based on income from the service listed below in Table 4.9. Total: 36 KEURO per year potentially from T+2.
<b>Total potential revenue streams</b>	<b>184,000</b>	<b>235,500</b>	<b>273,500</b>	<b>284,000</b>	<b>294,500</b>	

**Table 4-13 EOTA Revenue – Scenario 3**

#### 4.4 Cash Flow Analysis

Having considered the costs of running the TA in each scenario, and the likely revenue generated by the TA in each scenario, it is possible to do a 5-year cash flow analysis for each scenario. Table 4-14 below provides an overview of the cash flow of each of the scenarios over a five-year period (from 2007 to 2011) given the assumptions for both costs and revenue as described and analysed in the previous sections. The balance (costs minus expenses) for each year is provided as well as the accumulated balance. The first column gives the Net Present Value (NPV) for both the revenue and the costs.

NPV	Cash flow	T+1	T+2	T+3	T+4	T+5
		2007	2008	2009	2010	2011
<b>Scenario 1 (Current EARSC)</b>						
<b>190,555</b>	Revenue	31,300	40,500	40,500	48,500	48,500
<b>196,602</b>	Costs	40,500	41,715	42,966	44,255	45,583
<b>-6,047</b>	Annual Balance	-9,200	-1,215	-2,466	4,245	2,917
	Cumulative Balance	-9,200	-10,415	-12,881	-8,637	-5,720
<b>Scenario 2a (Medium Service - no Chief Exec)</b>						
<b>445,295</b>	Revenue	73,800	93,500	96,500	110,300	115,000
<b>505,825</b>	Costs (incl Set-up costs)	141,400	97,747	100,679	103,700	106,811
<b>-60,531</b>	Annual Balance	-67,600	-4,247	-4,179	6,600	8,189
	Cumulative Balance	-67,600	-71,847	-76,026	-69,426	-61,237
<b>Scenario 2b (Medium Service - with Chief Exec)</b>						
<b>738,810</b>	Revenue	123,000	146,500	162,000	186,500	194,000
<b>868,689</b>	Costs (incl Set-up costs)	216,150	174,740	179,982	185,381	190,943
<b>-129,880</b>	Annual Balance	-93,150	-28,240	-17,982	1,119	3,057
	Cumulative Balance	-93,150	-121,390	-139,371	-138,252	-135,195
<b>Scenario 3 (Full Service Scenario)</b>						
<b>1,157,282</b>	Revenue	184,000	235,500	273,500	284,000	294,500
<b>1,304,854</b>	Costs (incl Set-up costs)	318,800	263,989	271,909	280,066	288,468
<b>-147,572</b>	Annual Balance	-134,800	-28,489	1,591	3,934	6,032
	Cumulative Balance	-134,800	-163,289	-161,698	-157,764	-151,732

**Table 4-14 Cash flow for all scenarios**

The above cash flow table is presented graphically for each scenario below.



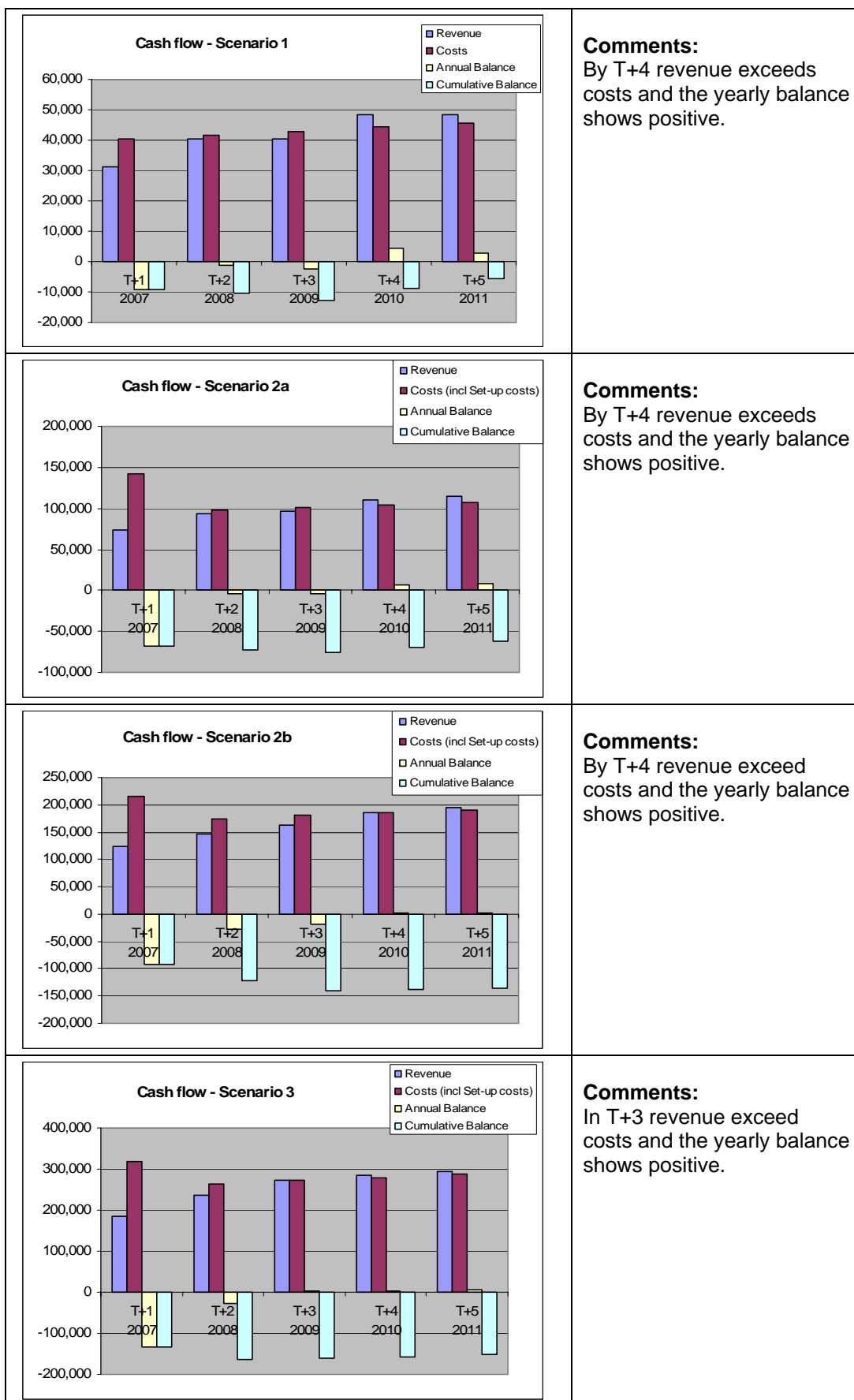


Figure 4-2 Graphical Presentation of Cash Flow for each Scenario

From Table 4-14, it is seen that in all the higher scenarios (2a/2b/3) there is a negative NPV, showing that the overall costs in each of these scenarios are higher than the estimated revenues.

From the cash flow graphs, it is worth noting that in all scenarios the TA does reach a state in around 4 years time (T+4) where the *Annual Balance* becomes and remains positive. However, in the higher scenarios (2a/2b/3), the *Cumulative Balance* shows no sign of returning to zero (i.e. break-even) in the short term.

#### 4.5 Seed Money to “Kick Start” the Services

The analysis in the previous section demonstrates that there is a definite problem for the EO TA to step up to each successive operational scenario, in that each scenario has a fixed amount of one-off setup costs associated with it, and these costs are not easily recoverable through service delivery revenues or membership fees.

One solution to this problem would be for the EO TA to seek an initial amount of “seed money” to kick-start the move to the next higher operational scenario. The seed money would be sought from public sector institutions that have an interest in the overall welfare and development of the EO VA industry.

The cash flow analysis has therefore been enhanced to allow for the effect of a fixed level of external investment to be modelled and understood. This analysis provides the arguments, from an economic perspective, for a level of external investment that can be associated with a set of benefits to the overall EO VA industry.

The red figures in Table 4-14 provide a guide for the level of investment required in each scenario. To summarise:

Scenario	Kick-Start Funding Required (Euro)
Scenario 1	None
Scenario 2a	60,531
Scenario 2b	129,880
Scenario 3	147,572

**Table 4-15 Cash flow all scenarios – Incl. seed money ESA**

The effect of including this one-off amount of external funding in the overall revenue for each scenario 2a, 2b and 3 is as follows:

EOTA potential revenue - Scenario 2a (Medium Service Level, No Chief Exec)	Estimated potential revenue					Notes/assumptions
	T+1	T+2	T+3	T+4	T+5	
<b>Total potential revenue (See §4.3.2)</b>	<b>73,800</b>	<b>93,500</b>	<b>96,500</b>	<b>110,300</b>	<b>115,000</b>	
7. Kick start/seed money	60,531	0	0	0		A modest amount of public sector funding to kick-start the EOTA to the benefit of the industry. Funding provided only for an initial period, after which the EOTA will be self-sustaining
<b>Total including seed money</b>	<b>134,331</b>	<b>93,500</b>	<b>96,500</b>	<b>110,300</b>	<b>115,000</b>	

EOTA potential revenue - Scenario 2b (Medium Service Level, with Chief Exec)	Estimated potential revenue					Notes/assumptions
	T+1	T+2	T+3	T+4	T+5	
<b>Total potential revenue (See §4.3.2)</b>	<b>123,000</b>	<b>146,500</b>	<b>162,000</b>	<b>186,500</b>	<b>194,000</b>	
7. Kick start/seed money	129,880	0	0	0		A more generous amount of public sector funding to kick-start the EOTA to the benefit of the industry. Funding provided for an initial period, after which the EOTA will be self-sustaining
<b>Total including seed money</b>	<b>252,880</b>	<b>146,500</b>	<b>162,000</b>	<b>186,500</b>	<b>194,000</b>	

EOTA potential revenue - Scenario 3 (Full Service Scenario)	Estimated potential revenue					Notes/assumptions
	T+1	T+2	T+3	T+4	T+5	
<b>Total potential revenue (See §4.3.2)</b>	<b>184,000</b>	<b>235,500</b>	<b>273,500</b>	<b>284,000</b>	<b>294,500</b>	
7. Kick start/seed money	147,572					A more generous amount of public-sector funding to kick-start the EOTA to the benefit of the industry. Funding provided only for an initial period, after which the EOTA will be self-sustaining
<b>Total including seed money</b>	<b>331,572</b>	<b>235,500</b>	<b>273,500</b>	<b>284,000</b>	<b>294,500</b>	

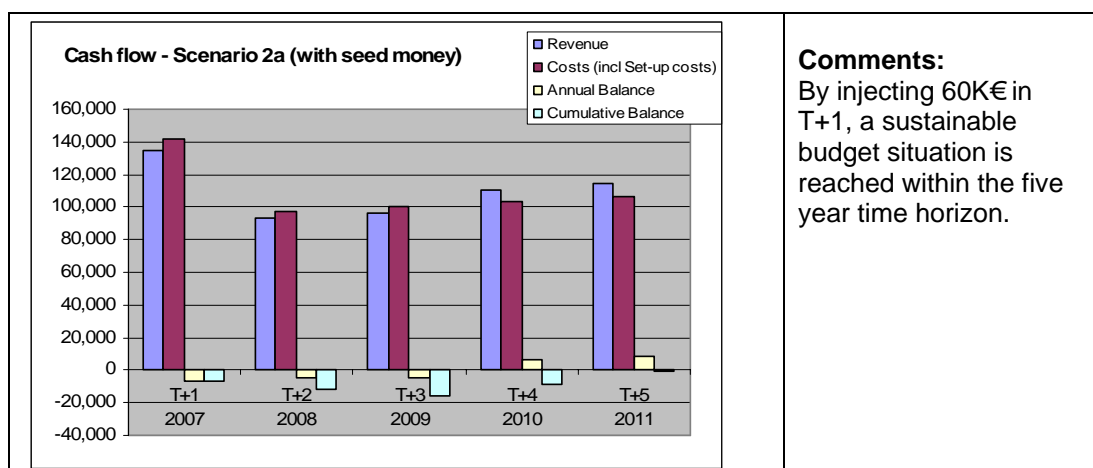
**Table 4-16 EOTA Revenue including “Kick Start/Seed Money”**

Using these revised revenue figures, it is possible to present a revised version of the cash flow table seen earlier, which now looks like this:

NPV	Cash flow					
	(With seed money)	T+1 2007	T+2 2008	T+3 2009	T+4 2010	T+5 2011
<b>Scenario 1 (Current EARSC)</b>						
190,555	Revenue	31,300	40,500	40,500	48,500	48,500
196,602	Costs	40,500	41,715	42,966	44,255	45,583
-6,047	Annual Balance	-9,200	-1,215	-2,466	4,245	2,917
	Cumulative Balance	-9,200	-10,415	-12,881	-8,637	-5,720
<b>Scenario 2a (Medium Service - no Chief Exec)</b>						
504,062	Revenue	134,331	93,500	96,500	110,300	115,000
505,825	Costs (incl Set-up costs)	141,400	97,747	100,679	103,700	106,811
-1,763	Annual Balance	-7,069	-4,247	-4,179	6,600	8,189
	Cumulative Balance	-7,069	-11,316	-15,496	-8,895	-706
<b>Scenario 2b (Medium Service - with Chief Exec)</b>						
864,906	Revenue	252,880	146,500	162,000	186,500	194,000
868,689	Costs (incl Set-up costs)	216,150	174,740	179,982	185,381	190,943
-3,783	Annual Balance	36,730	-28,240	-17,982	1,119	3,057
	Cumulative Balance	36,730	8,490	-9,492	-8,373	-5,315
<b>Scenario 3 (Full Service Scenario)</b>						
1,300,556	Revenue	331,572	235,500	273,500	284,000	294,500
1,304,854	Costs (incl Set-up costs)	318,800	263,989	271,909	280,066	288,468
-4,298	Annual Balance	12,772	-28,489	1,591	3,934	6,032
	Cumulative Balance	12,772	-15,717	-14,125	-10,191	-4,159

**Table 4-17 Cash flow all scenarios – Including Kick Start/Seed Money**

The above cash flow table is presented graphically for each scenario below.



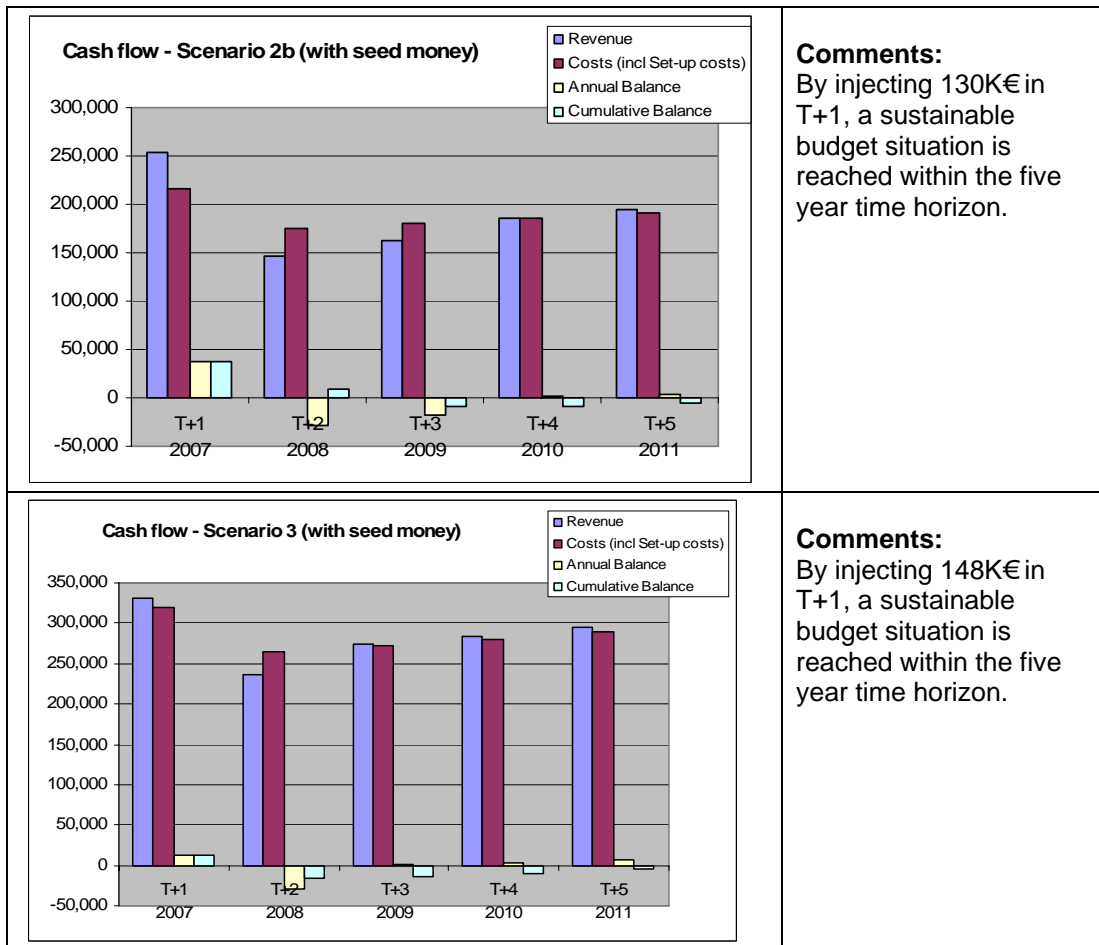


Figure 4-3 Graph of Cash Flow if Seed Money is injected in T+1

#### 4.6 Summary

This section has provided an analysis of the financial perspectives of an EO TA at four different activity levels, starting with the current EARSC scenario and building incrementally to a full service scenario. Each of these are believed to represent a realistic future, and each reflects a given level of service to the EO VA industry, resulting in a given level of benefits, but requiring a certain level of necessary investment.

The three scenarios can be seen as a evolution path for an EO TA: progressing over time from current EARSC with its limited resources and service, to in the short term a slightly more ambitious EOTA with a modest budget delivering a broader suite of services; and eventually a full service Scenario offering the highest level services to its members. Of these alternatives, Scenario 2a or 2b is likely to be the most realistic scenario although even scenario 2b is fairly ambitious and is quite a big step from the current EARSC setup.

This section has demonstrated that the current EARSC, which presently operates in a scenario 1 mode, cannot move to a more ambitious working scenario such as 2a for instance without an influx of seed money to kick start some of the new services. Developing a quality service of EOPages, or opening a permanent office, would require some financial support from the public sector – for example from ESA or the EU. With ESA being the closest to the relevant industry, it is the priority channel for the TA to seek such support. This would allow the TA to create the additional momentum needed for the development of new services such as those identified in Section 3.

Given the limited possibilities to generate revenue, a modest injection of capital (in the order of 60k€ to 150k€) to kick start a set of new services, to take on suitable staff and if appropriate to establish an office, would ensure self-sustainability of the EO TA within 3-4 years depending upon the activity level. Such seed money would in particular kick start and cover set-up costs for the web based services and promotional material and would support the financing of suitable staff allowing for resources to be invested and securing future revenue streams, e.g. involvement in support project, sponsorships, and entering into arrangements with ESA and other public sector bodies to provide industry specific statistics and surveys.

It should be noted that the scenarios outlined in this section could be changed and mixed in a number of alternative ways. For instance perhaps it is not necessary to have a physical office at all, and that money might be better invested in staff costs. Or that a member company with offices in Brussels could offer to host the EOTA office as an in-kind contribution. Or that focussing on a limited number of services and delivering them well is more appropriate than offering a wide range of services.

Whichever way forward is selected, the eoVox team believes that this financial modelling exercise will prove to have been immensely useful even if it just stimulates discussion on the priorities and ambitions within the EO VA industry and helps shape the future of its Trade Association, and if it serves to stimulate the public sector into investing in the TA to help it achieve its aims.

## 5 Conclusion

This report has demonstrated that there are a range of new services that could be provided to the European and Canadian EO Value Adding Sector, which would be to the overall benefit of the industry. It has further demonstrated that these services can be self-sustaining in the long term, but that an initial modest level of external funding is required to help the current trade association, EARSC, to step up to providing such an enhanced suite of services.

**As a first step, EARSC could seek to evolve in the short term from its present setup to Scenario 2a. Some examples of the immediate benefits that would accrue to the EO VA industry through EARSC's doing so include:**

- Provision of an online directory of EO VA services, such as the "EOPages" concept, that would be accessible to new customers looking to adopt EO data sources in their established business sectors;
- Access to improved promotional material for the industry, such as a user-focussed annual industry brochure, helping attract new users and customers to adopt EO value-added information in their industries;
- Provision of an information/news filtering service that members would be prepared to pay a nominal fee to receive – helping the industry remain aware of developments and opportunities, and thus gain competitive advantage over non-members;
- Promotion of innovation in the industry and fostering development of leading edge EO VA techniques through the introduction of ideas such as awards and through links to innovation and incubation networks;
- Better communications and public relations services, such that the TA publicises itself as well as the capabilities of the industry, which in turn will serve to gather momentum for the TA and thereby boost its own membership base;
- Better consultation with members, in order to draw up consolidated positions on the issues affecting the industry today and in the future; and thereby maintaining an industry roadmap reflecting where the industry is today and where it is headed;
- Better coordination with national and international associations and institutions, making the consolidated position of the EO VA industry known, so that these organisations can take the needs and views of the industry better into account;
- Further enhancement of already existing EARSC services such as the web site, newsletter, industry events, etc. such that the industry remains better informed and is able to react and respond to new opportunities.

This would be achieved if a modest level of external funding, in the order of €60K, could be made available to EARSC to kick-start these services.

In the medium term, if funding at the €30k or €50k levels could be made available, then a lot more than the above can be achieved by EARSC - by moving to Scenario 2a or even to Scenario 3 in the 3-5 year timeframe.

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