

# Open ELS: Relevance to European SMEs

---

## Report of Task 4.4

Author: Neil Sutherland

Date: 10 May 2019

Version: 1.0



## Change Summary

Version	Date	Author/Editor	Change Summary
1.0	10/05/2019	Neil Sutherland	Final report

## References

Ref.	Title/Version/Publication Date/Author

## Contents

1	Abstract/summary .....	4
2	Introduction.....	4
3	Identifying and selecting suitable SMEs .....	5
3.1	Setting the scope .....	5
3.2	Approach to identifying target firms.....	5
4	Surveying European SMEs .....	6
4.1	Rationale.....	6
4.2	Questionnaire design.....	6
4.3	Methodology for target selection .....	6
4.4	Responses.....	7
4.5	Findings.....	8
5	Interviews .....	11
5.1	Selection .....	11
5.2	Responses/findings.....	11
6	Further engagement.....	12
7	Conclusions.....	12
8	Annex 1 – Interview template .....	14

I

## 2 Abstract/summary

Small and medium enterprises may be an important secondary market for Open European Location Services, which are designed primarily to meet the needs of the European institutions. Task 4.4 has explored the opportunities within the SME sector by engaging with a select group of businesses across Europe. This work included an online survey which, though by no means representative of the SME population, found strong interest among the target group. Among the 26 firms that provided full responses:

- Almost all use geospatial data in services for customers already
- Almost all use official maps, but many also use OpenStreetMap and Google
- All data themes examined are of interest – the top three are Administrative Units, Cadastral Parcels and Transport Networks
- Every one of the proposed open services is of interest to a large majority of respondents
- Almost two-thirds say cross-border connectivity is extremely or very important
- Perceived benefits are widely spread across product & service improvement and cost reductions
- Web services are popular but data downloads are required by a third of respondents

Interviews were conducted with six of the survey respondents, either face-to-face or by telephone, to explore in more detail why they responded as they did and how they might use the Open ELS services in their business.

Further engagement included inviting SMEs to provide feedback on the proposed user interface and an invitation to a webinar in which the working interface was demonstrated.

Task 4.4 was complementary to the work of Task 4.6 (Marketing) which encompassed conference presentations and demonstrations at events where SMEs were represented.

## 3 Introduction

This report summarises the Open ELS project's direct engagement with Small & Medium Enterprises (SMEs).

The purpose of the SME Engagement task is set out in the Grant Agreement:

*Small and medium-sized enterprises of specific IT market domains will be engaged and their demand and needs for establishing Open ELS as innovative and user oriented solutions will be analysed. They will furthermore be encouraged to take up the services required.*

*Engagement will be enabled by the initial release of Open ELS Products and Services and feedback from SMEs will allow enhancement of the initial release. The engagement may include workshops, in-depth meetings and interviews or participation in challenges – all activities will encourage the use of the services by SMEs to develop strong relationships to support use & sustainability of the services beyond the end of the project period.*

It is important to recognise that the needs of SMEs are not the primary driver for the creation of Open European Location Services, which are designed primarily to support the geospatial needs of the European institutions. Nevertheless the project team wanted to explore the extent to which the proposed services could fulfil the geospatial data needs of SMEs operating in key sectors, particularly

those that provide value-added services, because providing open services to fledgling commercial operators might offer significant economic benefits in its own right. By understanding what interest SMEs might have in working with Open ELS, and what value might be gained on both sides, the team hoped to establish how SMEs might fit into a future ELS ecosystem.

## 4 Identifying and selecting suitable SMEs

### 4.1 Setting the scope

The first challenge facing the team was to establish the desirable characteristics of businesses with which the Open ELS project should engage.

The project team agreed to adopt the European Commission definition of SMEs, which includes businesses having up to 250 employees and less than €50m annual turnover.

Location services of the type envisaged by the Open ELS project may be useful in a wide range of business domains. Nevertheless, for reasons of practicality, it was decided to focus on fields of business activity where the need for location data is known to be important. The earlier ELF project had identified priority customer segments for such services:

- Energy and Infrastructure
- Emergency Services
- Transport
- Real Estate
- Finance and Insurance

After discussion the Environmental Services sector was added to the list.

Other characteristics sought of target firms were:

- Value-added resellers, rather than end-users
- Cross-border or multi-country in scope
- Geographically spread across Europe

### 4.2 Approach to identifying target firms

Having decided on the type of business to target, the next step was to identify firms to contact.

A request was issued to the Permanent Correspondent at every EuroGeographics member organisation, asking for details of firms known to them that might meet the target requirements. This produced only a handful of useable contacts, with limited geographical spread. In retrospect this weak response is perhaps not surprising, since many national mapping and cadastral agencies do not maintain direct relationships with small firms in specialised fields.

It was acknowledged that the names of suitable SMEs might be recorded in various business databases, but with limited resources the problem remained of deciding which to contact. A new approach was needed.

## 5 Surveying European SMEs

### 5.1 Rationale

The initial approaches described above produced an insufficient number of contact details for SMEs fitting the profile described in Section 4.1.

The decision was therefore taken to design a survey that could be issued to large groups of potential users, providing a self-selecting sample of interested users together with sufficient information about their businesses to allow the project team to decide which to follow up.

### 5.2 Questionnaire design

The questionnaire was designed to obtain information from respondents that would enable the project team to select the most suitable firms for active engagement. The potential for analysis of the data at the aggregate level was a secondary consideration.

The questionnaire was divided into three sections:

1. **Using geospatial data in your business:** current usage; whether for customer or internal business use; data themes of interest and whether for customer or internal business use; interest in proposed open services; importance of cross-border harmonisation; preferred method of data delivery
2. **About your business:** customer business sectors; staff numbers; turnover; home country; number of other countries served
3. **Keeping in touch:** contact details and approval for future contact

The full questionnaire is at Appendix 1.

### 5.3 Methodology for target selection

The firms identified by EuroGeographics members, together with other known contacts from the European Location Framework project and Deloitte Belgium (who were contracted to Task 1.4), produced a list of 37 contacts with a high probability of fitting the target market.

Recognising that a wider catchment would be needed to provide a good short list of targets to engage, the team used EuroGeographics' records of people who had downloaded the organisation's EuroGlobalMap 1:1 million scale open data. The database was filtered to include only those who had downloaded data for business use and who had given permission for contact by third parties. With de-duplication, and elimination where possible of public sector organisations, this process produced a list of 275 contacts with a reasonable probability of fitting the target market.

The survey was sent to the identified contacts with a covering email, taking care to ensure GDPR compliance in the case of the EuroGlobalMap users.

In order to broaden awareness and reach target firms unknown to the project partners, the survey was also shared on Twitter and Facebook. With further sharing and retweets this reached a wide audience; albeit with a low individual probability of fitting the target market.

Another source of potential contacts was the list of partners maintained by Esri, Inc. The list is categorised by business size and business sector, which helped with making a manual selection of 30 firms with a good fit to the target market.

The team also considered the potential of the SME database created by the [smeSPIRE](#) project. Unfortunately it was not possible in the time available to make contact with anyone connected with the project in order to understand the conditions under which it might be possible to re-use the data.

## 5.4 Responses

A total of 32 responses were received:

- EuroGeographics members / Deloitte: 8 responses from 37 emails
- Users of EuroGlobalMap: 8 responses from 275 emails
- Esri partner database: 5 responses from 30 emails
- Social media / unknown: 11 responses

Of these, 26 responses were substantially complete and included contact details with permission for further engagement.

By customer business sector:

- Energy and infrastructure: 17
- Emergency services: 8
- Transport: 13
- Real estate: 14
- Finance and insurance: 9
- Environmental services: 14

(Totals add to more than 26 due to overlapping interests)

By home country:

- Belgium 1
- Finland 1
- Germany 2
- Greece 1
- Latvia 1
- Netherlands 2
- Serbia 1
- Spain 12
- Sweden 1
- United Kingdom 4

(Strong showing by Spain due to active EuroGeographics member in that country)

By annual turnover:

- Less than €10m 20
- €26-50m 3
- €51-100m 2

By number of employees:

- 1-10 9
- 11-50 13
- 51-150 3
- 151-250 1

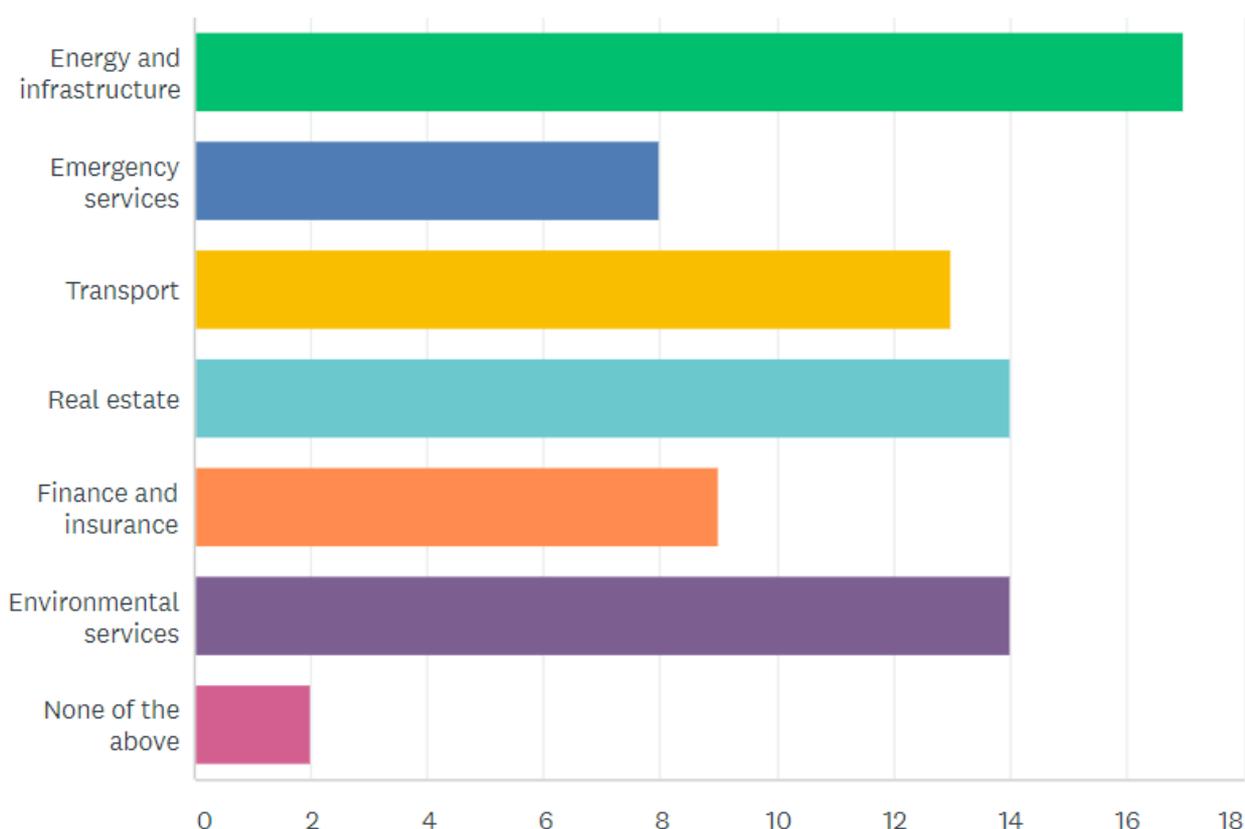
## 5.5 Findings

As explained above, the survey was designed primarily to obtain information that would enable the project team to select the most suitable firms for active engagement. The potential for analysis of the data at the aggregate level was a secondary consideration. Nevertheless the survey has provided useful indications about how open location services may prove economically beneficial in the SME sector. The main findings are reported here.

### Business Sectors served

Respondents were asked whether their business served customers in the priority customer segments identified at the start of the task (see Section 4.1). The chart below shows a good match with the intended target segments, providing initial reassurance that the distribution of the survey had reached the right types of firm.

#### DOES YOUR BUSINESS SERVE CUSTOMERS WHO OPERATE IN ANY OF THE FOLLOWING MARKETS?



### Use of geospatial data

The overwhelming majority of respondents (22/26) reported using geospatial data in services for customers, with 3/26 using such data only for internal business purposes. One was not currently using geospatial data but expected to do so in future.

### Sources of geospatial data

Almost all respondents (23/26) said they use official maps and/or cadastre, a finding that reinforces the continuing importance authoritative data from national sources. The next most popular source

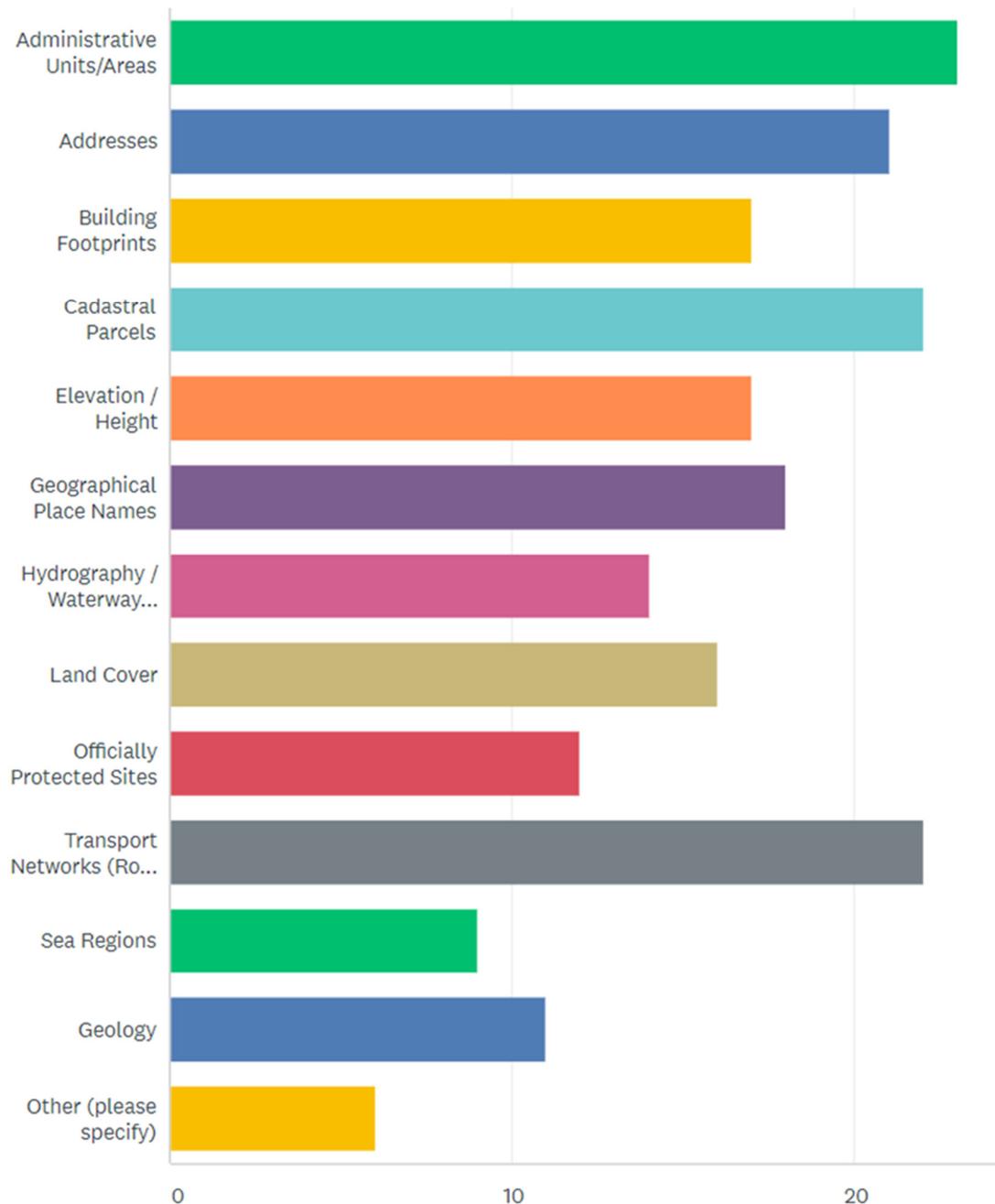


was OpenStreetMap (17/26), followed by Google, Bing and HERE. Many respondents use more than one source of geospatial data.

### Geospatial data themes of interest

Respondents were asked which of several INSPIRE-based data themes could be of interest to their business. The chart below shows a wide spread of interest, with Administrative Units, Addresses, Cadastral Parcels and Transport Networks featuring most often.

#### WHICH OF THE FOLLOWING GEOSPATIAL DATA THEMES COULD BE OF INTEREST TO YOUR BUSINESS?



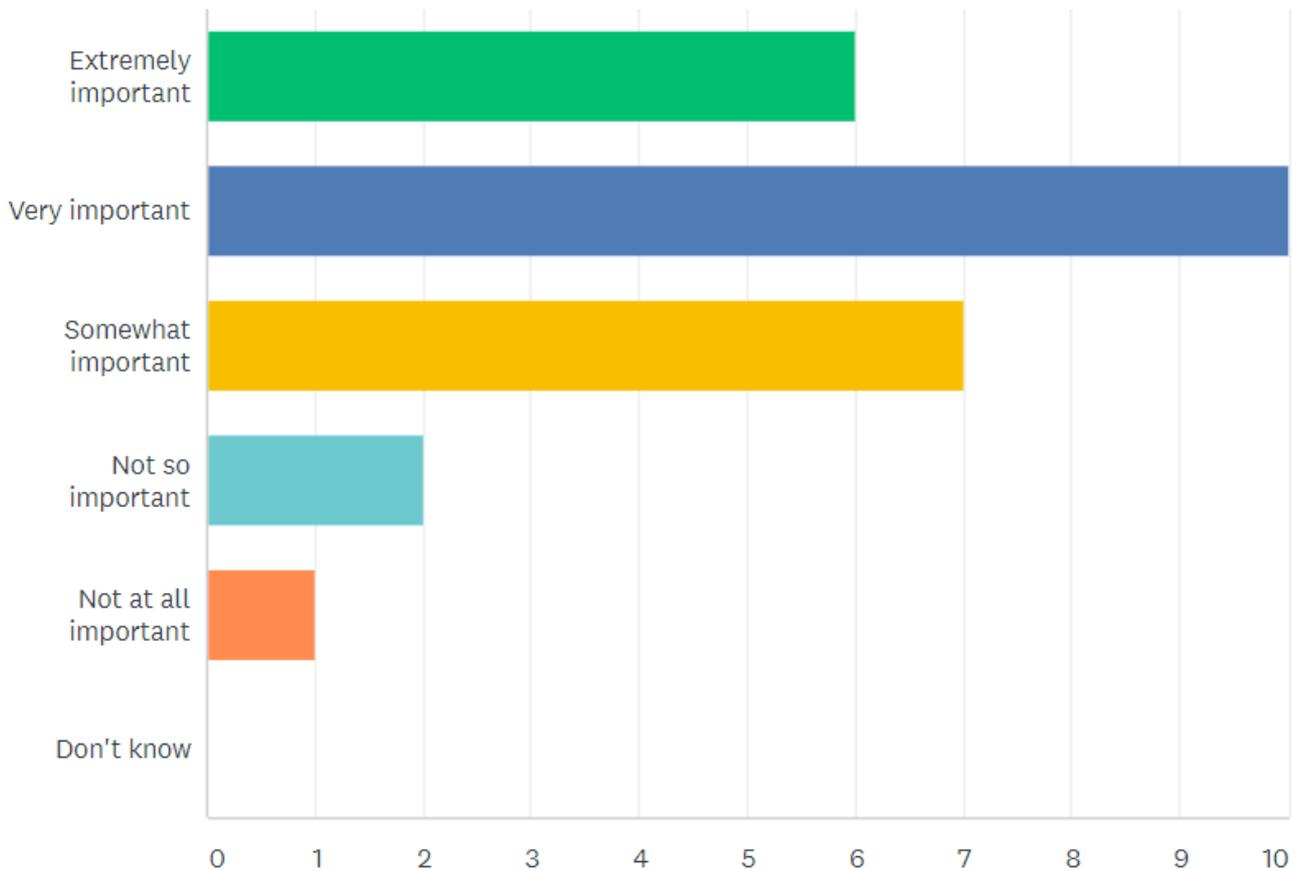
There is a good level of interest in each of the themes selected for development of Open ELS services: Geographical Names, Cadastral Parcels, Addresses, Buildings and Transport Networks. It should therefore not be a surprise that, when respondents were asked subsequently whether free cross-

border services based on these themes would be of interest, in each case more than 90% said they would. This is a very strong result, given the primary purpose of the survey to identify suitable firms with which to engage individually.

### Importance of cross-border harmonisation

Respondents were asked about the importance of having data harmonised across national borders, this being a key feature of future Open ELS services. The chart below shows a majority reporting that this aspect is extremely or very important.

**FOR YOUR BUSINESS, HOW IMPORTANT IS IT TO HAVE DATA THAT IS HARMONISED ACROSS NATIONAL BORDERS?**



To explore this in more detail, respondents were asked two further questions:

1. For your business, how important is it that geographical features - roads and buildings, for example - match visually/topographically across national borders?
2. For your business, how important is it that network features - roads and rivers, for example - connect topologically across national borders?

The responses to both these questions closely mirrored the chart above, though with small increases in the number of respondents selecting 'Not so important'.

These findings confirm that cross-border harmonisation is likely to prove a worthwhile benefit for this group of users.

## Benefits of Open ELS services for SMEs

Respondents were asked about the benefits they would expect to gain from the use of Open ELS services. This provided a useful synergy with the work done in Task 1.4 – Economic Appraisal.

### WHAT MIGHT BE THE MAIN BENEFITS FOR YOUR BUSINESS OF HAVING ACCESS TO FREE-OF-CHARGE HARMONISED GEOSPATIAL DATA SERVICES BASED ON AUTHORITATIVE OFFICIAL SOURCES?

ANSWER CHOICES	RESPONSES	
▼ Possibility to improve your internal business processes	34.62%	9
▼ Possibility to improve your existing products and services offering	76.92%	20
▼ Possibility to develop new products and services	73.08%	19
▼ Possibility to develop new cross-border products and services	61.54%	16
▼ Reduced costs for acquiring/accessing data	69.23%	18
▼ Reduced time and costs of dealing with different national mapping and cadastral agencies	73.08%	19
▼ Reduced time and costs linked to data cleaning and handling	57.69%	15
▼ Don't know	0.00%	0
▼ Other (please explain)	Responses	3.85% 1
Total Respondents: 26		

Of particular note is the finding that more than half the respondents see the potential for developing new cross-border products and services as a benefit of Open ELS. Taken together with the majority believing that Open ELS could reduce the time and cost of dealing with multiple mapping and cadastral agencies, this serves as a strong endorsement of the Open ELS approach.

## 6 Interviews

Having successfully identified a number of SMEs apparently meeting the criteria set out at Section 4.1, the next sub-task was to make contact with a selection of those firms to find out more about their current use of geospatial data and the benefits they might gain from Open ELS.

### 6.1 Selection

Thirteen of the survey respondents were selected for initial contact, prioritising those with existing cross-border business and potential to act as value-added resellers while ensuring a good geographical spread. Members of the task team were assigned to make contact and, if possible, arrange interviews – preferably face-to-face.

A standard semi-structured interview template was prepared to facilitate the interviews and collection of broadly-comparable information from each. The template is at Annex 1.

Inevitably there was some attrition during the process; some potential interviewees did not respond to requests and in other cases it proved impossible to arrange interviews.

### 6.2 Responses/findings

Six interviews were achieved with a good range of SMEs:

**Strategia & Kalidad GIS, Spain** – GI solutions

**Realo, Belgium** – real estate portal

**PitPoint, Netherlands** – provider of vehicle fuelling points for electric, hydrogen, LNG, etc.

**Goolzoom, Spain** – integration of GI data sources; initially cadastre and Google Maps

**Cunning Running, UK** – counter-terrorism and missing person search

**GeoDux, Serbia** – survey, engineering, IT and cadastre

The original interview reports are provided as Appendix 2 to this report.

Worthy of note is that several interviewees commented on difficulties they had experienced in obtaining reliable geospatial data in other countries, which had hindered their efforts to expand internationally. Such expansion was inevitably slow, because the data had to be sourced separately for each country and was not harmonised. This was especially a problem where relevant data sets are held by regional or local government. Cost was sometimes seen as an issue, but ready availability and easy access were considered more problematic. One may conclude that certain SMEs would find it easier to expand internationally if harmonised data were available; an effect that is hard to quantify economically, but potentially significant.

In relation to costs, interviewees commented on the amount of effort they currently expended on obtaining geospatial data, and that having a single source would release substantial cost savings.

Among the potential services, Open Cadastral Index Map was considered particularly attractive, and in some cases interviewees would consider paying for click-through access to property ownership data.

## 7 Further engagement

The list of survey respondents was later utilised to invite these firms to evaluate the Open ELS user interface during its development phase; first as wireframes and later in prototype form. The feedback from this engagement helped to refine the customer journey through the system and encouraged the team to include more information for new users.

As the end of the project approached there remained less time for demonstrating the services to users than would have been ideal. Nevertheless the team was able to schedule a webinar to which all interested parties were invited, and during which the use of the services through the new user interface was demonstrated.

Open ELS demonstration and test services were launched at the Geospatial World Forum in April 2019, where an exhibition stand provided further opportunities to demonstrate the functionality and future potential of the services. The event generated a good deal of interest and provided further links with firms large and small who expressed an interest. Contact details have been compiled into a single spreadsheet along with those of the survey respondents.

## 8 Conclusions

After some initial difficulties in identifying suitable firms with which to engage, the SME Engagement task produced useful insights which have affirmed the usefulness of the Open ELS approach to providing geospatial services to this sector. It also offers indications as to how such services may be marketed to SMEs based on their data needs, the benefits they expect from the services and their preferred means of gaining access to those services.

Comparing with the original plan, there was more focus on ascertaining user needs and less on providing opportunities for users to explore and evaluate the prototype services. As reported elsewhere, it took longer than expected to resolve some technical issues with the services and with

the data supply from EuroGeographics members. With the benefit of hindsight it may have been ambitious to expect services to be ready for testing at the end of the first year of the project and, as a consequence, the opportunities for sharing outcomes with the SME community were somewhat restricted.

## 9 Annex I – Interview template

Open European Location Services (Open ELS)

# SME Engagement Programme

[Name of firm]

---

Initial interview by Open ELS project team

Interviewer:

Project Partner:

Date:

Version:

## I Interviewee

[Name]

[Position]

[Email]

[Telephone]

## 2 Nature of business

### 2.1 Description taken from web site [abc.com]

### 2.2 As described by interviewee

### 2.3 Customer business sectors

From survey findings; validate with interviewee

Energy and infrastructure

Emergency services

Transport

Real estate

Finance & insurance

Environmental services

Others

### 2.4 Geospatial data sources currently in use

From survey findings; validate with interviewee

Bing

Google

Here

Official maps/cadastre

OpenStreetMap

Others

### **3 Open ELS proposed services**

Validate with interviewee which services are of interest.

In each case, guided by survey responses, find out:

What problem would you use this service to help you solve?

How could you use the service to address that problem?

What would the service have to provide to be of use to you?

[List must-have features. Probe: cross-border harmonisation (of what?), topographic matching, network connectivity]

What other features and characteristics should the service have, ideally?

How would you expect to get access to the service?

Would you expect to have to register to use the service?

#### **3.1 EuroGlobalMap as a service**

#### **3.2 Regional Geographical Names**

#### **3.3 Open Cadastral Index Map**

#### **3.4 Addresses**

#### **3.5 Buildings**

#### **3.6 Transport Network (Road & Rail)**

### **4 Benefits anticipated from use of Open ELS services**

In each case explore:

How would the benefits be achieved?

How could they be measured?

Quantify if possible, as:

- % of effort on a particular task
- Time saved
- Money saved
- Additional revenue opportunities

- 4.1 Possibility to improve your internal business processes**
- 4.2 Possibility to improve your existing products and services offering**
- 4.3 Possibility to develop new products and services**
- 4.4 Possibility to develop new cross-border products and services**
- 4.5 Reduced costs for acquiring/accessing data**
- 4.6 Reduced time and costs of dealing with different national mapping and cadastral agencies**
- 4.7 Reduced time and costs linked to data cleaning and handling**
- 4.8 Other (please explain)**

## **5 Next steps and further contact**

May we contact interviewee later to give him or her the chance to provide further input, and help us refine the specification of our proposed services?

Do we have correct contact details?