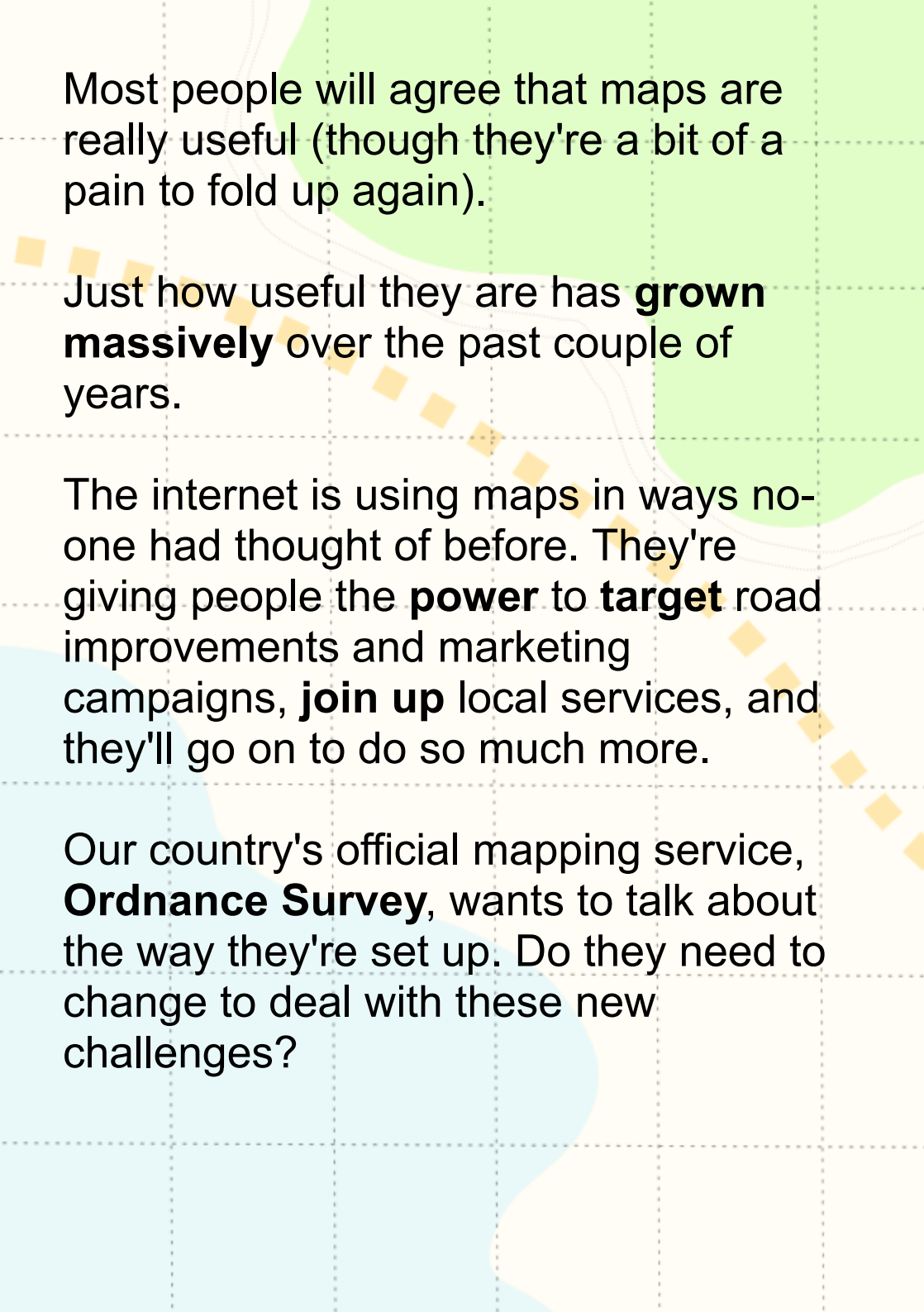


Changing Ordnance Survey

The options

The background features a stylized map with a light green and light blue color scheme. A dashed grey grid is overlaid on the map. A series of yellow diamond shapes forms a path across the map. The text is arranged in three paragraphs, each starting with a new line.

Most people will agree that maps are really useful (though they're a bit of a pain to fold up again).

Just how useful they are has **grown massively** over the past couple of years.

The internet is using maps in ways no-one had thought of before. They're giving people the **power to target** road improvements and marketing campaigns, **join up** local services, and they'll go on to do so much more.

Our country's official mapping service, **Ordnance Survey**, wants to talk about the way they're set up. Do they need to change to deal with these new challenges?

# The past

There's a lot of history behind how our country is mapped, and **how** and **who** we give that information to.

Ordnance Survey (OS) collects land information in quite an old-fashioned way. In most countries these days a person's land is mapped by a **surveyor** and sent in (for a fee). In England it's more about defining what's at the **boundary** of your land – the woods, water, fences, or roads around it.

OS has been collecting this sort of information for **decades**. There's a lot to go through, and a lot of old systems to reorganise, or maybe even get rid of before we can bring mapping into the present.

# The present

We've got a whole lot of **local** and **national** government using databases with geographical information in them.

The trouble is, right now they don't **fit together** well.

With **better, joined up** databases we can make local services more efficient. For example, there's a scheme called **Total Place** that's using mapping data to look at how council services interact, so they can work out ways to get better.

There's **pressure** from outside and inside to **change**. The European Union is asking everyone in the Union to put their information into the same format so it can join up better. They also want some (but not all) of this map information to be **free to search and look at**.

# Why just Ordnance Survey?

At some point, we might want to **privatize** the mapping industry all together, but the government isn't sure this is **necessary** at the moment.

They think there's **nothing really wrong** with having just **one company**, like Ordnance Survey, having responsibility for looking after all that data.

In fact, the government might be the **best people** to run it because, for example, they can often get things **cheaper** than private business.

However, there are **advantages to competition** which might also help make the process of getting together and maintaining all that data more **efficient** and **cheaper**.

The government wants to **protect** Ordnance Survey, but they also want to give companies who want to use OS mapping data a **fair chance**. With better access to geographical information they may be able to make **better profits** and help the **economy** more.

# How are we going to pay for all this data?

Selling information on the internet is notoriously difficult.

No-one has really found a good way to cover their costs, let alone profit from information on the internet.

People expect so much more for free, or for a tiny cost, but this data costs quite a lot to collect and maintain. How could Ordnance Survey get enough money to cover those costs?

At the moment the best ways to get an income from selling information on the internet are:

- **Advertising** (like Spotify),
- Concentrating on **other things** to get money (for example in the music industry, live gigs now makes more than singles),
- Charge people what they **expect to pay** (like advance fares for train tickets, mid-week hotel deals, that sort of thing)
- Charge people by how much they **will pay** (like computer games)
- **Licensing**, where different people paying different amounts for information depending on what they're going to use it for.

# Why is geographical information so important?

- It's used by **so many** companies, from big-business **sat-navs** to small **software** companies.
- The industry could be worth **over £900m** (though there haven't been any really good surveys of what people do with mapping data now, or how they might use it in the future).
- More and more people are using geographical data **everyday**. Our **phones** and **social networking** sites are tapping into its power.
- Businesses use it for **coordinating** their car and lorries, for their **communications** – telephones, internet, for working out **supply** and **demand**.
- The government uses mapping data for all these things and for providing **local services** too. They also look after records on who land belongs to.
- Lots of big businesses and government agencies are really starting to see the **value** of mapping information to help them be more **locally efficient** and improve their **customer service**.
- There's also lots of potential for **3D products** that businesses are looking into.
- The way we use maps and GPS is going to **change quickly** as technology moves on. We're even **creating our own** geographical information, plugging in our own data in Google maps and other places – everything from **restaurant** and **hotel reviews** to **potholes** and **graffiti**.

# What's the future like for map information businesses?

We think the sector's going to get a **bit bigger** (but not too much), especially with more accurate mapping technology.

Overall, it **may not** bring in much more money than it already does, though.

Some places we expect it to **grow** into are **insurance** - more insurance companies will start to use mapping data, to map risks like flood plains, and there's also potential for **home delivery** services.

And more people are getting in on the act of **collecting** and **maintaining** mapping data. Ordnance Survey aren't the only people out there any more.

We expect there will be **more competition** in the years to come. These businesses might well be ahead of OS in some areas already.

## The future's bright for businesses and customers

We expect that the cost of getting and distributing all this geographical data will decrease quite quickly because of better satellite technology and software improvements.

## ...but Ordnance Survey has some difficulties ahead

Geographical information is a global business, Ordnance Survey is limited because it only looks at a small area of the world. Most of the companies that do something similar have a much wider view, so Ordnance Survey will have to be competitive.

# Where are they now?

## Key facts

### Ordnance Survey...

- has 1,400 employees
- makes maps for England, Scotland and Wales
- gets nearly everything on the map 6 months after it's built
- does about 5,000 changes to their maps every day
- mostly pays for itself
- gets about £11m profit in 2008/09 after paying the £5m they owe to the government
- gets most of their profit from businesses and government contracts. Only a small percentage comes from people buying paper maps.

### They do **four** main things:

- Map natural features, hills, rivers, and more
- Map addresses
- Map transport networks, roads, railways, and more
- Map satellite photos

## Prices

At the moment they charge customers by splitting them into groups, depending on what they're going to use their mapping data for. Customers who want the same thing generally pay the same price.

# Ordnance Survey and the law

## Public data

Ordnance Survey is a public sector organisation, and the rules for public sector bodies say if people want to reuse or republish the information they collect as part of their duties as a public body, they have to be **fair** about it and not **discriminate** against (or for) anyone in particular.

They also have to go by the Information Fair Trader Scheme, which says they have to:

- let people **reuse** their information unless it's for very good reasons (for example if it's **personal data**)
- keep things **simple**
- if people want to do something **new** they should help them
- people who use their information need to understand what the **limits** to that are
- those limits should be **fair** to the people reusing the information
- a clear way to **complain** and get your complaints dealt with.

If you need to complain, the Office for Public Sector Information handles complaints about OS and fairness and discrimination. Usually they'd look after copyright issues too, but OS is one of the companies that's been given the right to look after its own copyright.

# Ordnance Survey and the law

## Competition law

The OS also has to obey EU and UK laws about business and fair competition, about how we use public information, and in the end it's up to Parliament to keep an eye on it as well.

A study found a few barriers to proper competition for our mapping information services in the UK. These were:

- Raw data is **hard to get hold of**
- Licensing of information is **too limiting**
- People aren't getting a good **quality** service
- **Prices** are too **high**

Ordnance Survey is partly controlled by the **government**. They have quite a lot of say over what OS does, how much it spends, what success and failure means for the business, and who should manage it.

The government thinks they can affect how the OS behaves better by being clearer about how it's run, and by being a good customer. They don't think it would be a particularly good idea if OS was watched over by another public body, though.

# Ordnance Survey and the law

The government has some questions about whether all these laws and rules are **working properly**.

They think they need to be **better** at helping people **make money** from this data, and **clearer** about what data Ordnance Survey needs to give out.

If they don't give out **enough** of the geographical data people need and want, OS won't get the investors it needs.

On the other hand, if they're giving out **too much**, their service might suffer and drive paying business away.

# What people want

We asked people what they wanted from Ordnance Survey. They came up with 6 big ideas:

- **Support** more people to use and re-use map information, including making more info available to the public
- **Help** other businesses compete with OS
- Keep **quality** up
- Make it easier to **make money** with mapping information
- **Value** for money
- Able to do what they've **promised** to do.

We know not all of these can work together, so there are going to have to be some **compromises**.

The government intends to use its own power as one of OS's biggest **customers** to help them improve, too.

# The 3 options

1. The current business model
2. A new business model
3. A halfway house

All these options could have an added extra – a package of **free stuff** from Ordnance Survey.

To help you understand what's on offer, lets have a look at the free stuff first.

# Free mapping data

Back in November the government said some of Ordnance Survey's mapping data (also known as geographical information, or GI) would be released for free.

The date hasn't been set yet, and they're still not sure how they're going to afford it.

However, they are talking about what they might be giving out:

- **Street level data** ([OS Street View](#))  
Road features, building outlines, trees and water
- **Maps**
  - [1:25,000 scale](#) - maps going down to fences separating land, like the Explorer maps
  - [1:50,000 scale](#) - 20km map tiles like the Landranger maps
  - [1:250,000 scale](#) - all the major roads, railways and places for basic route planning
  - [1:1 000 000 scale \(Miniscale\)](#) - good for simple maps without too much information
- **Towns and place names** ([Gazetteer](#))
- **Postcodes** ([Code-Point](#))  
There's still some debate about what it would take to have a proper national postcode database.
- **Local Authority borders** ([Boundary-Line](#))
- **Roads and landscape features** ([Meridian](#) and [Strategi](#))

This list might change, but there's potential to add more in the future, too. Ordnance Survey have to maintain and update the data too. The idea is to have this map data available under [Creative Commons](#).

# A national postcode database

If we want **one** complete national postcode database, we need to get over some **difficulties** first.

There are quite a few postcode databases around at the moment, and they all do different things.

At least **two other companies** are involved, Royal Mail and the NLPG, and at the moment they want to **protect** the money they make from their data.

We need someone in government to **champion the cause** and find some solutions to problems with how to fund and maintain it.

Various government departments are trying to work with everyone and find a solution, but there's a lot to think about and it needs someone to really help drive it.

# How are we going to get to all this data?

There are four ways OS could release all this mapping data:

- **Just looking** – for the general public, with search, printing and the ability to see the data. Probably no satellite images or directions service though.
- **Downloading** – select an area of the map and types of information, and save them to your hard-drive
- **API** – free to access but will probably be limited in some way (perhaps traffic) to keep costs down.
- **Order on DVD**, and get charged for the discs, postage and packing. Ordnance Survey anticipates these will move with the times as technology gets better and faster

All this free data will help people create **new, interesting and profitable** services and products. In Canada a similar scheme has increased map sales quite a bit.

Unfortunately, there may be some major **drawbacks** to this free package. Some people could really lose out:

- **Ordnance Survey**  
This free scheme does mean OS will lose money. It will also cost just under £10m over 5 years to set up the service.
- **Their partners**  
The people who work with OS and add value to the existing mapping info will have a lot more competition.
- **Competitors**  
These are popular products which have some rivals, and we're setting the cost of these products at £0. Some competitors might lose out.
- **Map buyers**  
Less maps might get printed, because people are downloading and printing them instead. If this happens, the government might support a national series of maps.

# Option 1: Keep the current business model

At the moment, collecting all this mapping data, maintaining it and making it into more complicated things are all treated as part of the **same business**.

Accessing **large amounts** of data costs the customer a lot more than **small** or **medium** amounts, and licences are only for a **limited time**.

OS make most of their money by selling large amounts of data directly to customers. Private businesses have **more restrictions** on how they use that mapping data than government clients.

The licensing model lets OS draw up contracts that give businesses really narrow limits on what they can do as well, and there's also a wholesale deal for some companies, but that doesn't apply to everything the OS produces.

# Option 1: Keep the current business model

## Recent changes

Some recent improvements to their business model include:

- **Simpler** contracts and licences
- Licences that let you **test** mapping ideas for **free**
- **New data** for their mapping API, and **licences** to make copies of the API system
- Getting **costs** down
- A new arm of OS (OS Ltd) to look at **new ways** to do business
- You don't have to pay a **fixed amount** in royalties any more.

They're planning some more stuff for the **future** too:

- Making **contracts** more **efficient**
- Even **simpler licences**
- Some **price cuts**
- Selling all their products **wholesale**
- Licences with **more freedom**

OS has had a profit of about **£15m** over the last five years. They're expecting a loss this year because of how much it cost to do the last set of changes to the business model.

Because their most **detailed maps** are their **best earners**, the vast amounts of data they have to collect, monitor and maintain keeps their **costs** and **prices** high.

# Option 1: Keep the current business model

## Room for improvement

The current business model relies on keeping the value of all their mapping products high. It's made OS **resistant to change** and made it difficult to be as **transparent** as people want it to be. However, it's also consistently produced really **high quality** data.

People are especially worried that OS's **government** contracts are **too cheap**, and mean that private businesses are charged far too much.

Licences to use mapping data, even for government, have been kept under very **tight control**, and there are still arguments raging over using postcode data. The current business model won't let that change much.

People don't know how OS get their **wholesale** prices for their medium and small mapping products. They also can't tell how money **moves** between different **departments** in Ordnance Survey.

The public sector is only really offered a **standard set** of OS mapping products. They've got very little ability to ask for **tailored data**.

At the moment all this **reorganisation** has a **high cost** – they're trying to be more efficient but ending staff contracts early costs them a lot of money.

# Option 2: Change the business model

There's the potential for a new idea. They could **split** the OS into **two** main **departments**, one to supply **raw data**, probably looked after by **government money**, and one for the products they make from the data, which may have to go **private** eventually.

This could let partners, distributors and competitors use the data or products **however they want** and develop their own terms and conditions for their customers.

The data they pay for **wouldn't** have a limited time-frame any more – they get access to updated data for as long as they want. This may have a **hefty price-tag** though.

The data processing part of Ordnance Survey could be wholly paid for through:

- **Government subsidy** (although this might limit the money available)
- Collaborating with Land Registry for an **increase in fees** (although the income would be uncertain)
- People **paying for changes** to their data (new laws will be needed, and they'll need to make sure everyone pays a fair amount)
- or by **contracting** it out to a **private** firm (this fixes OS on a long term path, making short term changes difficult)

# Option 2: Change the business model

## Pros and cons

Freeing up all this mapping data could get the country as much as **£168m** every year.

The problem is that this is an **irreversible change**. It requires an awful lot of money to set up and OS might lose more money while they're doing it. There's a lack of confidence in what the **benefits** might be and how much **money** it could end up making.

There's no guarantee that the money OS currently makes with its mapping products will keep rolling in, when their competitors have access to exactly the same information they do. The products end of Ordnance Survey will probably have to go **private**, using its current expertise to give itself an edge.

This **drastic change** will also reset how much mapping products are **worth**. It might take a while for the industry to **settle**. Competitors and partners would see **great benefits** from cheaper data, but companies who make their own data might **suffer** with much more free or cheap data around.

# Option 3: Somewhere in between

The idea here would be to keep Ordnance Survey in **one piece** but:

- **Balance out** the difference between what the public and private sectors pay for OS mapping data.
- Make pricing **consistent**, and make the customers who want particular products pay for exactly what they want. This would be make their prices more transparent too.
- Leave Option 2 **open** for a later date
- Fit the current 5 year plan into a **smaller time-frame** by being clearer about where OS is going, more transparent about cost and prices, and with a small amount of government money.
- Take this opportunity to **rewrite** what OS's **duties** are, how they go about them and how they're measured.

For this option, OS will need **£40m** from the government to cover OS Free and the new prices this year. The government will need **new contracts**, because of the effects of OS Free, and that might be a good time to start **balancing** the prices out.

And if they're going to survive in this more **competitive market**, OS will need to get very **efficient** and have very **low costs**.

# Getting your voice heard

This consultation ends on **17 March 2010**, so if you want to comment you have to get your thoughts in by then.

If you need more detail, please have a closer look at the [original consultation](#).

**Email** in your thoughts, comments, questions, theories (backed up with evidence!) and ideas, or **post** them to:

## **GI Consultation**

CLG

Zone 2/G9

Eland House

Bressenden Place

London

SW1E 5DU

This is an **unofficial** plainer English version by [Simply Understand](#).