

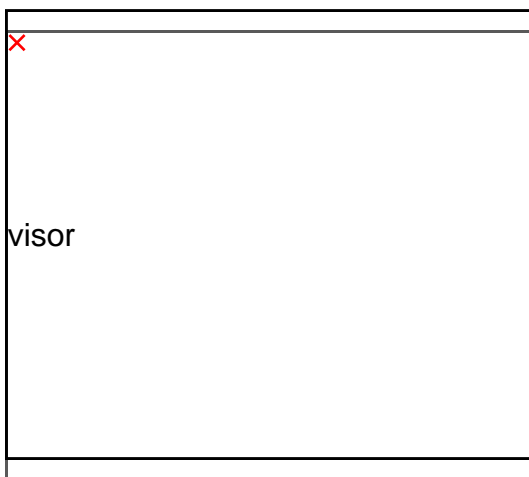
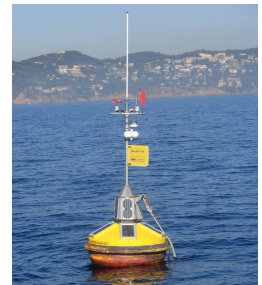
# Spain: sun, sea, and beach data re-use

Submitted on 07 Aug 2013 by Luis Meijueiro

Spain is the country with the longest coastline in the European Union (8,000 Km.) and has [around 3,500 beaches](#). Continuous maritime monitoring records an amazing amount of oceanographic data very useful for governmental agencies, researchers, sea-dependant industries, app developers and PSI re-users.

The Spanish national port system is comprised of 46 ports of general interest managed by 28 Port Authorities, whose coordination and efficiency controls correspond to "[Puertos del Estado](#)", the Spanish national port authority. Puertos del Estado is a body dependent on the "[Ministerio de Fomento](#)", the Spanish ministry responsible for public works, infrastructures, etc.

Puertos del Estado, also maintains a network of oceanographic buoys, which are complex instruments loaded with sensors capable of measuring waves, currents, atmospheric pressure, wind speed, and air and sea temperature. Every hour the data recorded by these buoys is transmitted to ground base for feeding a marine climate monitoring system, which provides a continuous picture of the state of the sea on the Spanish coast and a prediction of the climate evolution for the coming days.

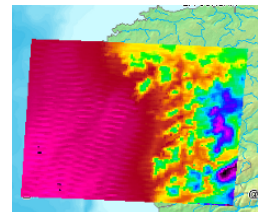


This maritime monitoring may help people in sea-dependent industries, such as fishing, shipping, marine sports and beach tourism, providing them with valuable information to make informed decisions. With it in mind, Puertos del Estado makes publicly available this information to users through an [online viewer](#), iFrame widgets, and via a free mobile application - iMar [for iPhone](#) and [for Android](#) -.

But, what about the sharing of the raw oceanographic data? Is it possible for any researcher, developer, or common citizen to access the data freely and in open formats? Unfortunately the answer is no. At least not freely nor easily.

Currently, the internal policy about data disclosure in Puertos del Estado states as mandatory the fill-out of a [specific form](#) that should be emailed to them upon any request of historical datasets or climate reports. Apart from this, fees will be applied to any individual or organisation that wants to re-use the data in any commercial activity, product or service. For instance, should you want the full series dataset of the aforementioned oceanographic buoys you would have to pay 120€ plus VAT.

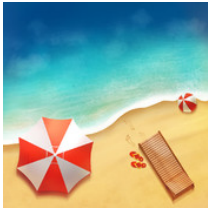
Apart from this legal and procedural issues, there are also technical barriers which makes data re-use difficult, such as the lack of an API or web service to access directly to the real-time data. Speaking of a national government agency, this is more frustrating when some Spanish regional governments do have a web service for that, like the [MeteoSIX API](#) from the Government of Galicia.





In an informal phone call with Susana Pérez, head of the Oceanographic Data Bank Management Division from Puertos del Estado, I was told that they are aware of some developers that manage to retrieve real-time data using scrapping techniques, or undocumented methods guessed from the code in widgets and the online viewer currently active. And in that case Puertos del Estado does not ban them but kindly asks for attribution to the source of data.

So, why does Puertos del Estado still not comply with the [Spanish PSI re-use legislation](#) and even their own [PSI Action Plan](#) issued a year ago? In my opinion two are the main factors: one is that open data policies does not come at no cost, and PSI re-use laws does not provision any specific budget, and two the lack of an "open data culture" nor political leadership in most of the PSI Spanish initiatives.



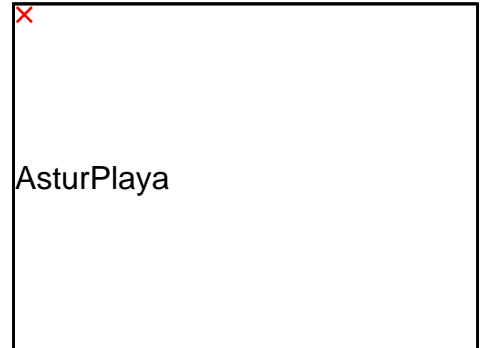
Meanwhile, Spanish entrepreneurs and developers try to overcome these barriers and we see the flourishing of new mobile and web applications for marine activities and beach enjoy. Among them I interviewed [Dan Tamas](#) and [Lucica Ibanescu](#), web and mobile app developers at RBORN, about its latest creation, [AsturPlaya](#), and in general its experience in PSI re-use arena.

Q. What inspires you to create useful apps for citizens?

*A. In our case it came out of necessity: we moved to a new province that we wanted to explore but the information available was incomplete and often incorrect - we decided to build an app mostly for ourselves but because such an app was missing from the Appstore we decided to go all the way and publish it.*

Q. How did you get started reusing open public data?

*A. We started with the local catalogue of data [risp.asturias.es](#) which was useful but did not have all the information we needed, so we went using a set of data from the government website which is open but not easy to obtain. We then started to look around for additional information and googled our way through this sea of tourism related data.*



Q. How come most Open Data Apps seems to be developed in hackathons and contests - why is there no much business going into this sector yet?

*A. We believe the main cause is the lack of ROI and the lack of interconnected datasets - if a company wants to offer a service based on public information it mostly needs to combine data from different public organisms in order to be able to add value to the data - most often pieces of data are missing from this puzzle and so the service a company has to offer is incomplete and not showing the big picture the clients need. In Spain, we believe, most of the apps using open data are launched by programmers and not by companies willing to invest money into research and marketing - we do hope this will change when more data will be published and programmers alone won't have the skill to process all the information and extract from it useful bits of valuable data for the public.*

Q. What challenges do you face in accessing and curating the data?

*A. We faced two challenges. One was the accuracy of the data provided and the other one was the lack of a reusable format of some datasets we needed. We had to correct the data ourselves and to build a conversion interface between the HTML format and our database. For the future we intend*

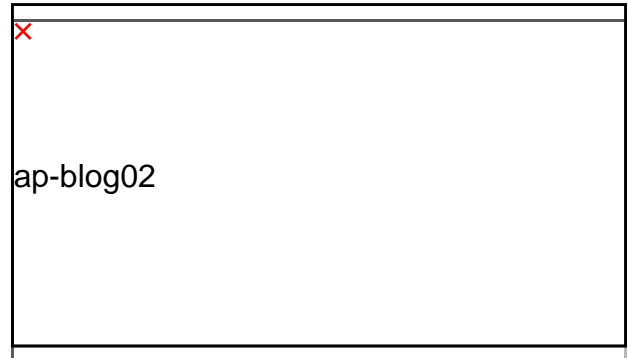
*to improve our app which means we will have to, again, "hack" our way through the public information available as HTML, PDF or widgets.*

Q. What standards are in use or needed?

*A. Most of the governments are late in adopting standards or really really slow - so we are happy for them to just open the data in any reusable format they can and programmers will be more than able to work around the issues.*

Q. How do you work with the government?

*A. The relationship is mostly one way - they publish information and we do our best to work with what we have. We tried to give some feedback a few times but the feeling we get is that nobody listens at the other end or if they do, they seem to pass the issue from one office to the other. It's just a feeling we had while working on this particular tourism related app and since it's the only one we have so far, our experience is limited.*



Q. What kind of governmental data would you most like to be disclosed in open formats - for instance from Puertos del Estado, the Spanish national port authority?

*A. AsturPlaya uses only data related to the Asturian beaches. We have a list with them all and their characteristics but we had to use weather information from a company outside Spain, so it would be nice to have access to weather data from Spain (wind conditions, waves and UV level are what we need now). We also might need access to data related to the tides, water analysis, bathing conditions (this from the local authorities, info which varies daily) and special daily alerts (jelly fish presence for example).*

Good luck!