



Future CAM Ring with seismic and environmental detection

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ANACOM, <https://www.anacom.pt>

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ANACOM

ANACOM is the Portuguese Regulatory Authority for Communications
(<https://www.anacom.pt/> or <https://www.anacom.pt/render.jsp?categoryId=2958&languageId=1>)

Beyond Regulation, ANACOM assists the Portuguese Government in establishing a national communications strategy and represents Portugal at ITU and several others Int'l organizations for communications.

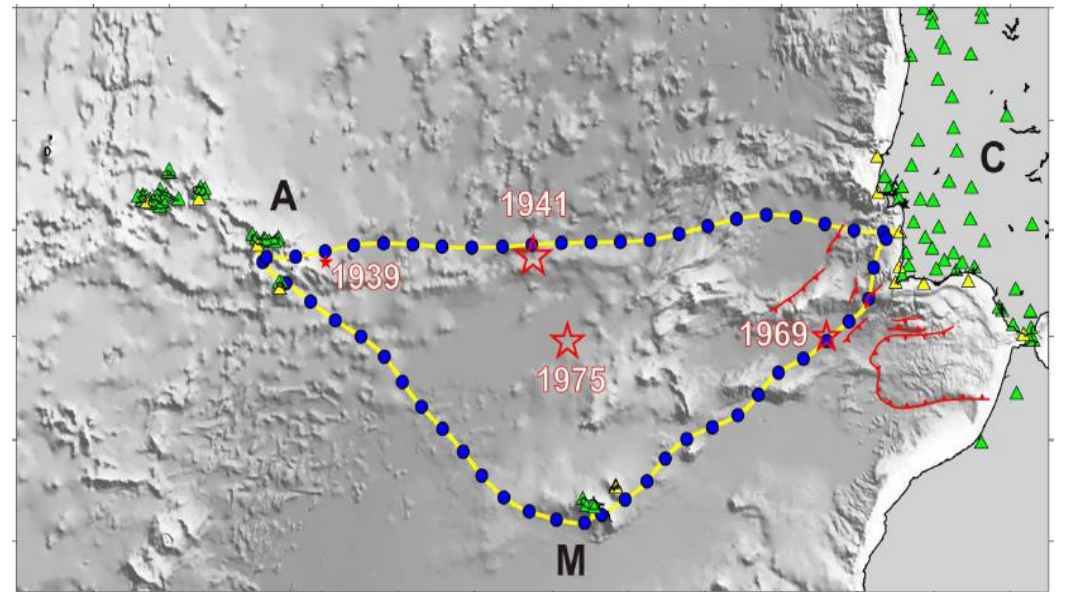
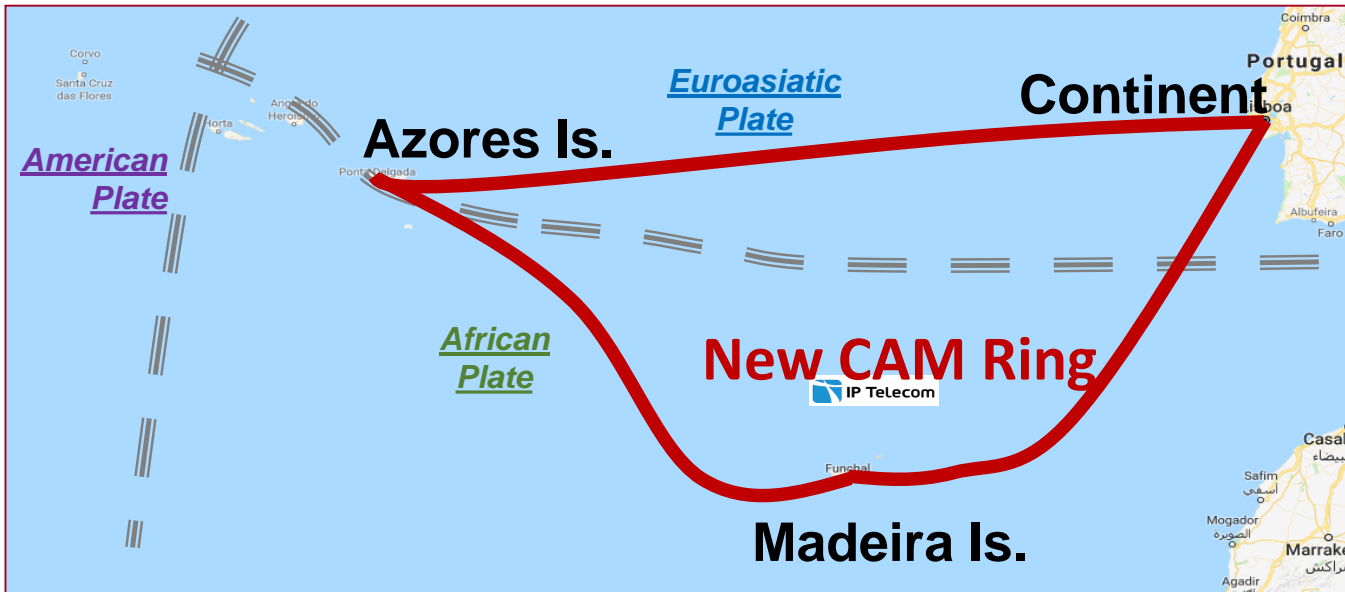
ANACOM challenged the sector so that the future CAM Ring (telecom submarine cable interconnecting Continent, Azores and Madeira Is.) would have the capacity to carry out seismic and environmental detection and have facilitate an intensive dialogue between stakeholders, the result is described with details on <https://www.anacom.pt/render.jsp?contentId=1718868> (download presentations through “Programme” button).

There is a strong expectation that the new CAM Ring will be one of the first telecom cables with seismic and environmental detection in operation worldwide (by 2025).

New CAM Ring with seismic and environmental detection

*Portuguese Continental Shelf is a meeting area of three tectonic plates
(considerable seismic activity)*

At the service of Science communities and Citizens, according to UN SDGs, a telecom submarine cable will be used for additional purposes such as to obtain data on real time for oceanography, environmental (climate change) and geophysics studies, as well as to produce early warnings of earthquakes (tens of seconds) and tsunamis (tens of minutes) serving Portugal and beyond (Spain, Morocco, France, ...).



Environment and seismic detection using telecom Sub. Cables

LEA (*Listening to the Earth under the Atlantic*) is a consortium with two public Institutes and one not-for-profit organization of public interest:

- **IPMA**, <https://www.ipma.pt/en/index.html>
- **IDL**, <http://idl.campus.ciencias.ulisboa.pt/>
- and **IT**, <https://www.it.pt/>

LEA partners are members of **JTF SMART Cables**, <https://www.itu.int/en/ITU-T/climatechange/task-force-sc/Pages/default.aspx>



- **LEA** is fully aware that **interests of telecom cable will be always protected** and **SMART activities will not put in risk, in any circumstances, the telecom activities of the New CAM Ring.**
- According to the principles established by JTF SMART Cables, **LEA** have already delivered IP Telecom SMART specifications for the **New CAM Ring with environment and seismic detection.**
- **LEA** is dialoguing with **telecom Sub. Cable suppliers, Sensors suppliers** as well as **telecom operators.**
- **LEA** is open for collaboration and is establishing MoUs with stakeholders.

Opportunities for future partnerships (public and private entities from Canada and Portugal)

FAR NORTH FIBRE ROUTE



Far North Fibre will be the first submarine fibre system through the Northwest Passage connecting Asia to North America, Europe, and Scandinavia. SMART cable technologies offer remarkable new tools to study the most rapidly changing ocean on earth, climate change mechanisms and seafloor seismicity.

Canada has similar project of a SMART Cable to interconnect northern Europe to Japan through the northwest passage.

Beyond international interconnections of Norway, Ireland, Canada, US and Japan, Canadian domestic interconnection is also under consideration (territorial cohesion).