







### The Importance of data in Disaster Management: A Look at VOST Portugal's Initiatives in Real-Time Information Sharing and Disinformation Prevention

João Pires Ribeiro VOST-PT & Técnico



#### Porto, 17th May 2023

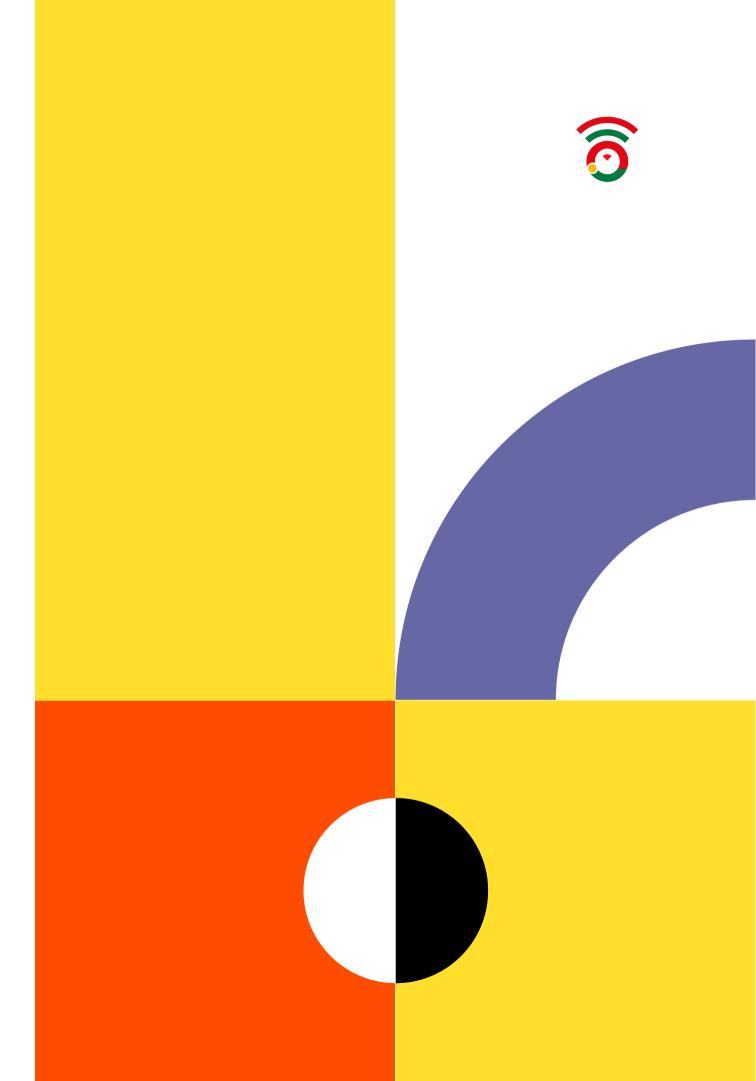
## VOST what are they?

### **VIRTUAL OPERATIONS SUPPORT TEAMS**

The VOST concept was born in the United States, in 2011. Its purpose was the creation of digital volunteers groups that would help the communication of official entities during an emergency, while gathering potentially useful information on social networks and sharing it back with those entities.

VOST are multidisciplinary teams with multiple skills that use social media as a privileged communication channel with citizens.

There are currently over 40 VOST in the world



## VOST PORTUGAL

### **HISTORICAL SUMMARY - PATH TO WHERE WE ARE**



### **Monchique Wildfires (2018)**

Citizens group comes together organically to gather information on the ground and post it on Twitter



#### Hurricane Leslie (2018)

A more organized and enlarged team monitors the situation in the center of the country before, during, and after the passage of hurricane Leslie through mainland Portugal



### VOST Europe (2018)

Formal invitation to join VOST Europe



### **VOST Portugal - Association (2019)**

VOST Portugal legally becomes an association, reflecting the commitment of its founders to this project

# VOST PORTUGAL

### **TEAM AND SKILL SET**



### Multidisciplinary

Developers, OSINT, Civil Protection, Psychologists, Amateur Meteorologists, Researchers, Firefighters, Social Sciences, Data Science, Designers, etc etc etc



### **Digital Native**

The entire team understands the power of social media, technology, open data and open source, and how best to use them for good



### Active Citizenship

Criticize, but present solutions that lead to problem solving, independence, continuous learning and quick adaptation to new realities



### Motto

Working towards invisibility, always with transparency

#### Dissemination

Translation of official messages to shareable content on social media

### Monitoring

Monitoring of social networks during an event to identify content that may be useful to the official entities involved

### Tech4Good

Development of technological solutions, in a timely manner, that allows a more efficient risk management

### **Fighting misinformation**

Identification of online misinformation and its reporting to the platforms, as well as correction / clarification of misinformation





### Pedagogy

In times of peace, production and publication of pedagogical content with varied and updated objectives.

#### R&D

Contribution with know-how and practical experience with R&D institutions and academics in the areas of DRM

### Dissemination

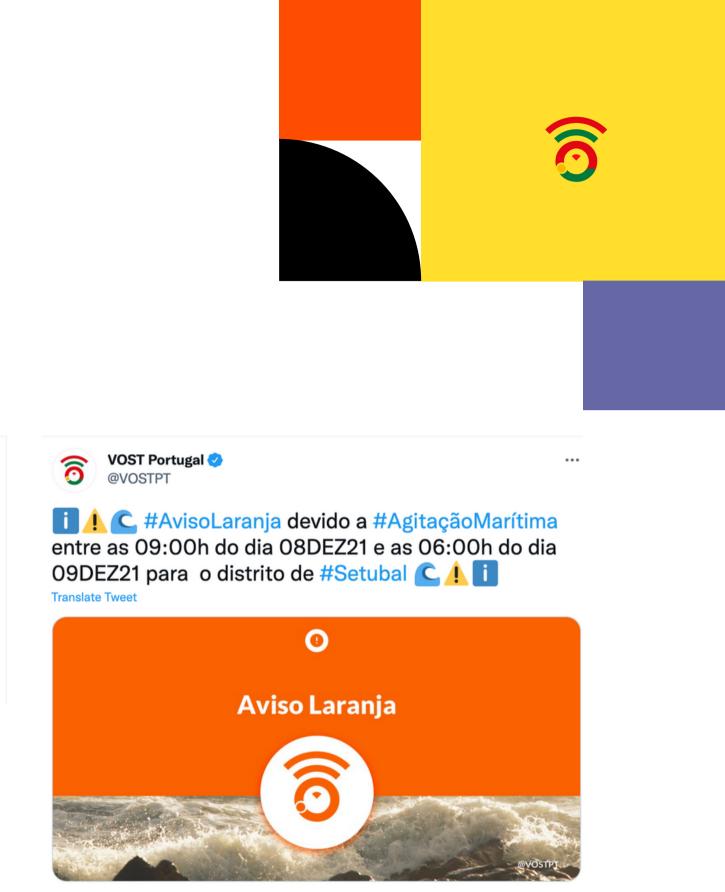
Translation of official messages into shareable content on social networks



AVISOS METEOROLÓGICOS 08/12 1103 (Continente) Foram emitidos avisos meteorológicos de AGITAÇÃO MARÍTIMA. Nível máximo do aviso: LARANJA. +info: zpr.io/68wMk

Translate Tweet

11:45 AM · Dec 8, 2021 · Zapier.com



4:30 PM · Dec 6, 2021 · VOSTPTia

...

### Disseminação

Translation of official messages into shareable content on social networks 6

VOST Portugal @ @VOSTPT · 2h #FMA\_Barra Última nota: Não, não vão ser bons dias para ir tirar selfies nas falésias com as ondas a rebentar em background



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#### Tweet



←

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#### VOST Portugal 🤣 @VOSTPT · Mar 31

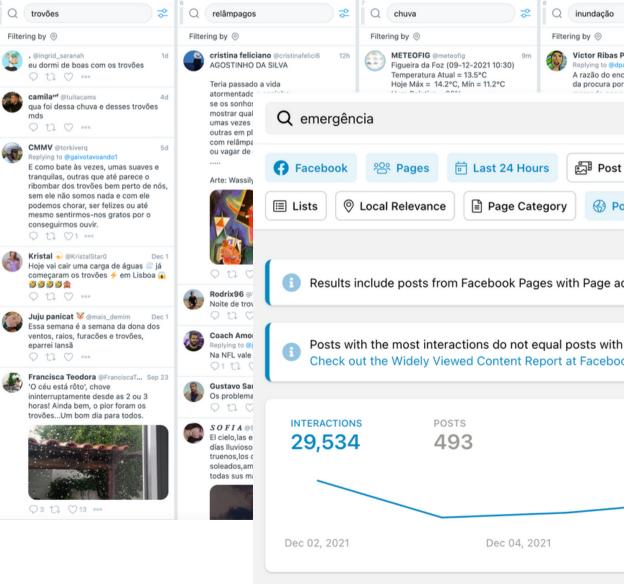
i A Já não é a primeira vez que vai acontecer, não será a última, mas aqui estamos: amanhã, 01ABR2021, a probabilidade de acontecer o fenómeno conhecido por "Chuva de Lama" no nosso país é bastante grande A i



### Monitoring

Monitoring of social networks, during an event, to identify content that may be useful to the official entities involved

Code of Practice on Disinformation Signatory. Cocoordinator of Crisis Response Subgroup https://disinfocode.eu/



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Portugal only ×        Portugal only × <th>Se Branded Content</th> <th>Verified Status</th>	Se Branded Content	Verified Status
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Dec 06, 2021	Dec 07, 2021	Dec 09, 2021

### Pedagogy

In times of peace, production and publication of pedagogical content with varied and updated objectives.

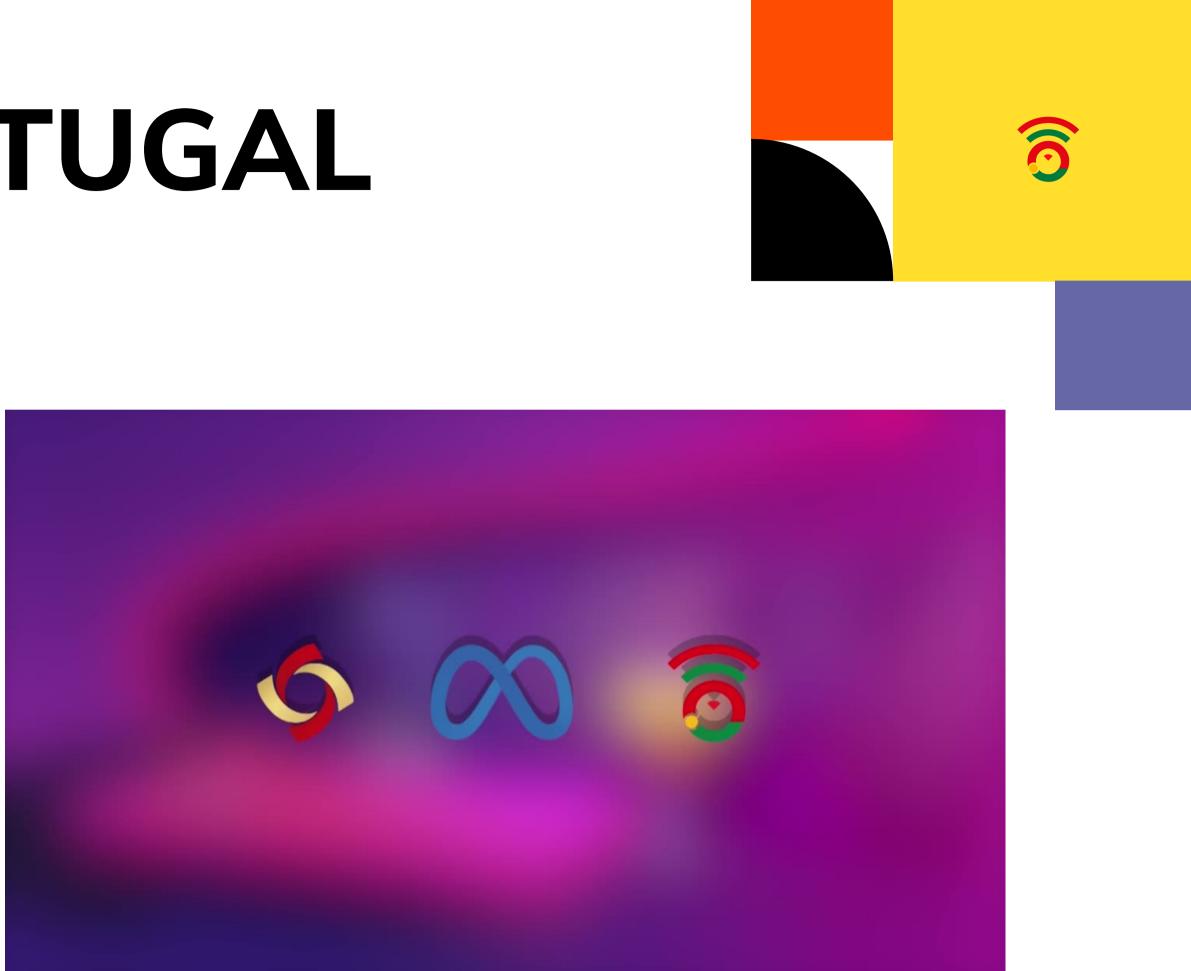






### **Pedagogy**

LINKS is a animated series, with 10 episodes, produced by VOST Portugal, in cooperation with Facebook / META and the Portuguese Press Association (API)



### Tech4Good

Development of technological solutions, in a timely manner, that allow a more efficient risk management



## VOST PORTUGAL

### Tech4Good

"Já Não Dá para Abastecer" was deployed in less than 5h to crowdsource information regarding the capacity of fuel stations, during the fuel distribution strike in Portugal. The data was shared with the public and authorities that used it as a tool to support the decision-making process, during a strike that stopped, literally the country.



Omapbox VOST.PT





### Estatísticas Sobre Media Adicionar Inf Opcões iltros de visualizaçã Indos os Pos Com Gase em GPI ostos REPA Postos REPA - Ger

## VOST PORTUGAL

### TESTIMONY

"the reliable information from all the gas stations that had fuel, when there was a strike by the truck drivers, was given by VOSTPT. We were able to have an updated dashboard because VOSTPT was giving us the information".



DUARTE COSTA ANEPC PRESIDENT





### ício Estatísticas Sobre Media Adicionar Inf Opcões iltros de visualização Todos os Post Com Gasolin Sem GPI Sem Nenhu ostos REPA Postos Não REP Postos REPA - Gera Postos REPA - Prioritá

@mapbox VOST.PT



# But does it work?

Does it have an impact? Is it worth it?

### JNDPA DATA

Abril e Agosto 2019

PageViews



Peak Users on the site at the same time









# But does it work?

Does it have an impact? Is it worth it?

**FOGOS.PT DATA** 

2021

Notifications

**33**M

Sessions







# Fogos.pt

### FOGOS.pt

#### LOCAL

Beja, Serpa, Vila Verde De Ficalho - E.N. 260 (SÃO JORGE (FICALHO)) Mais detalhes

#### INÍCIO

17-05-2023 07:38

NATUREZA

Agrícola

LOCALIZAÇÃO

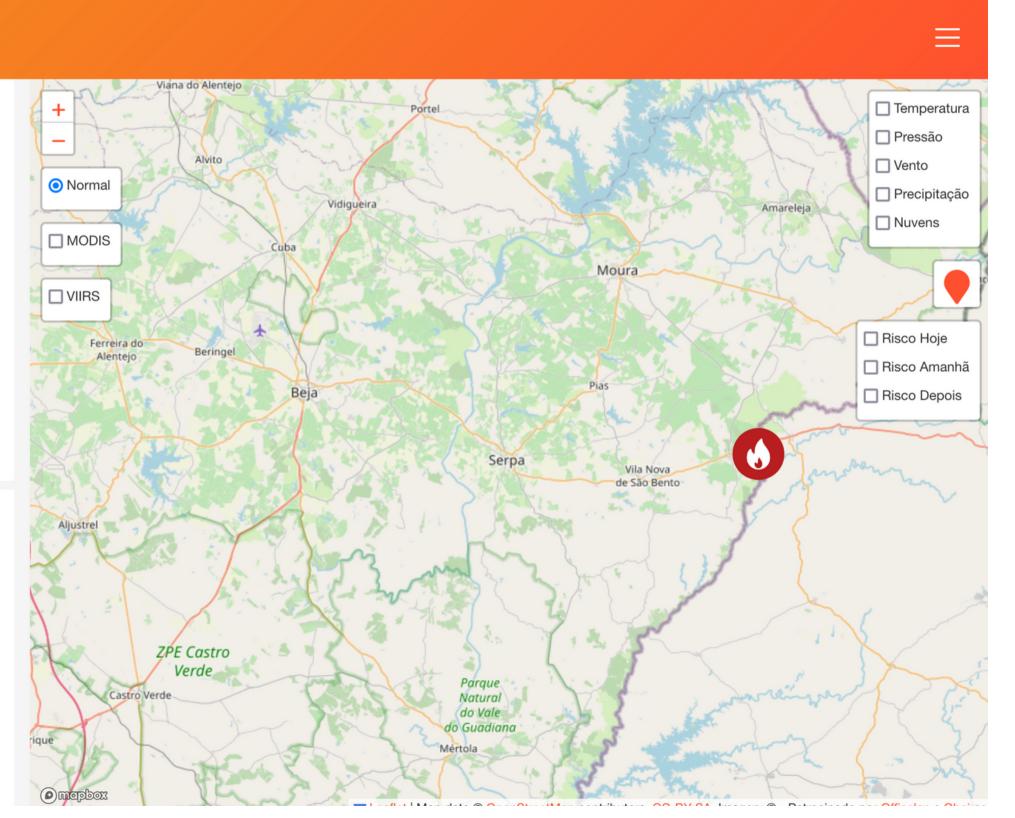
1 37.95588,-7.271392

#### MEIOS





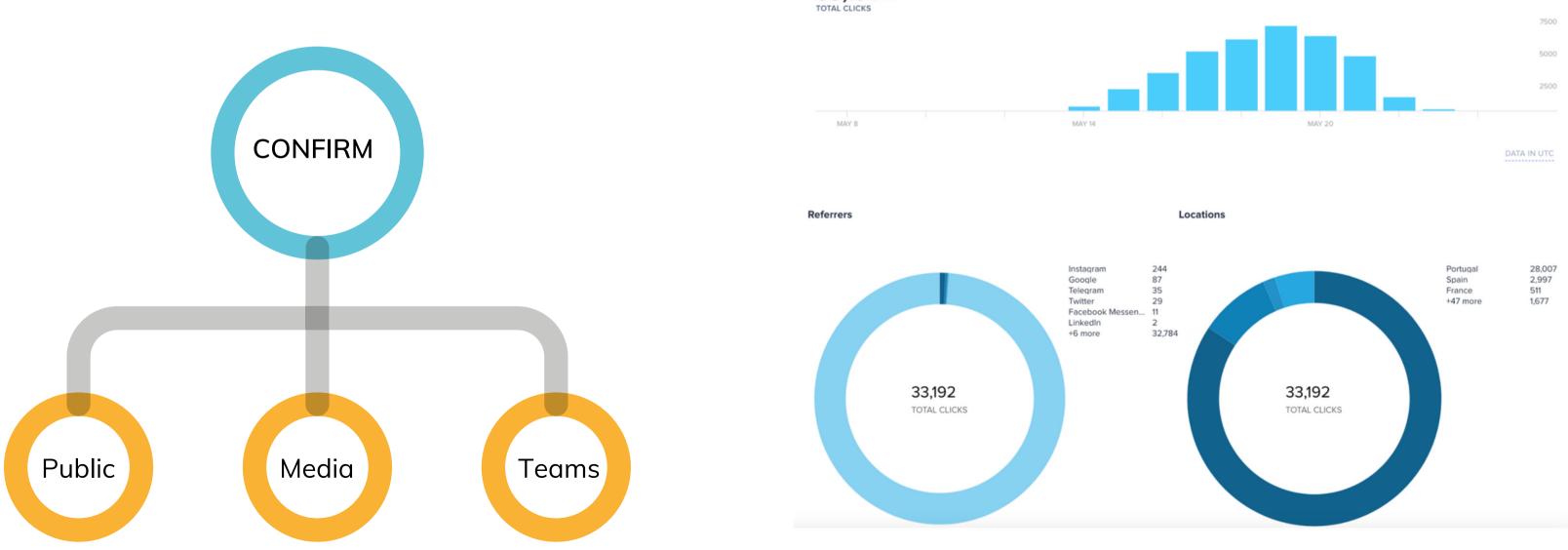




## **VOST PORTUGAL**

### **Portugal Rally**

Use of the CONFIRM tool to help manage and provide better information to the public, media attending and participating teams.



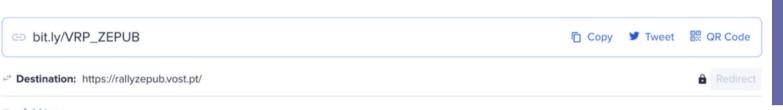
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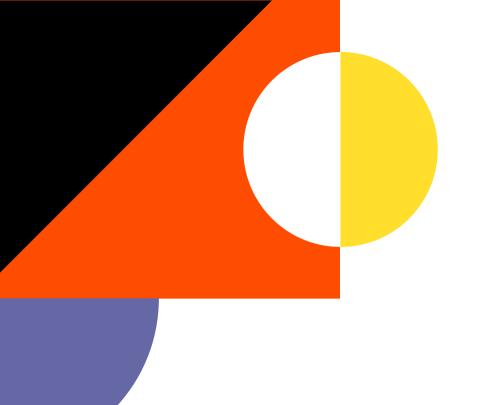
Add tags

33,191









# But does it work?

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### Rally de Portugal 2021 (CONFIRM)

May 2021

**Platform unique users** 



Information requests

9850000

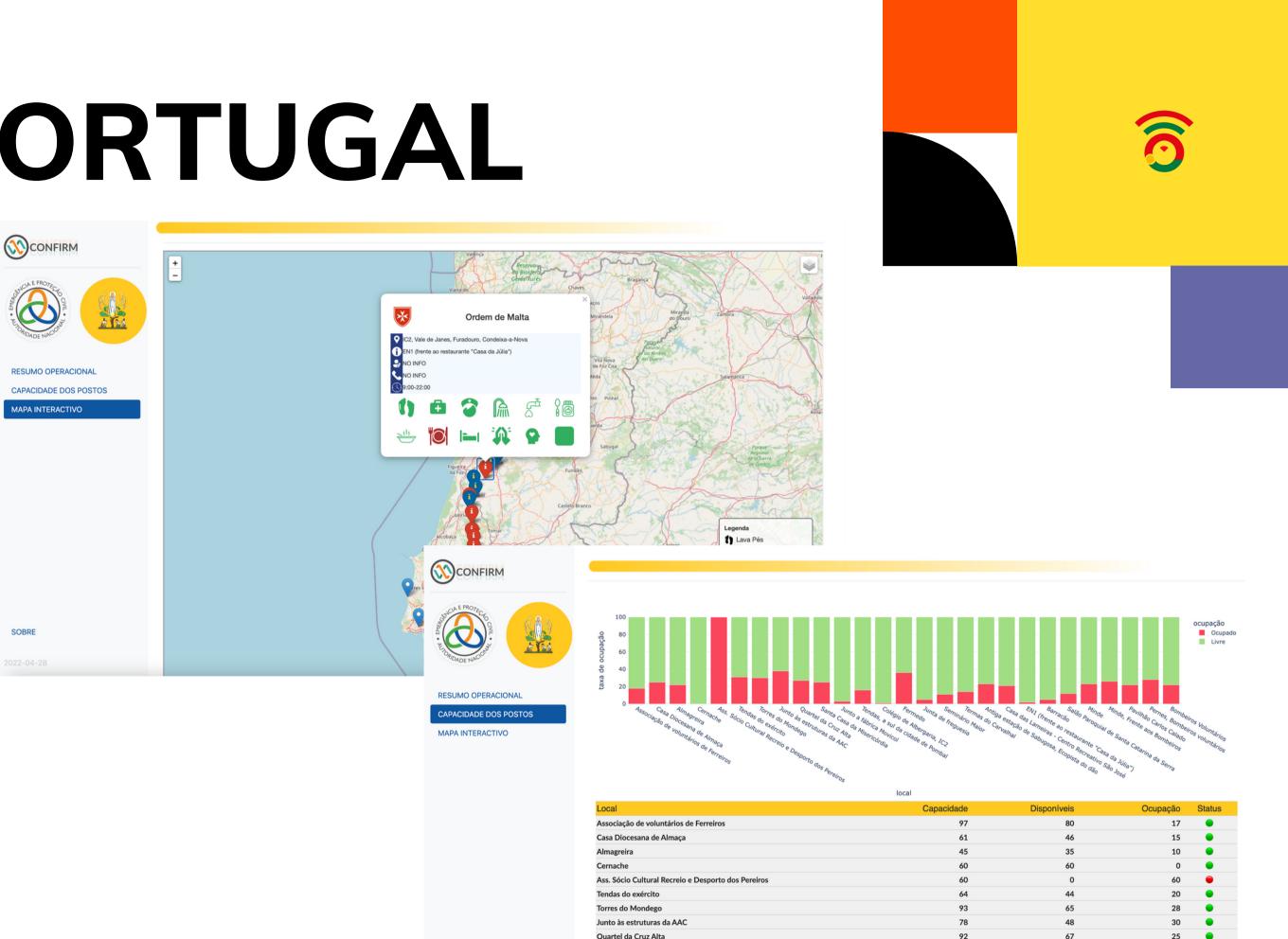




## **VOST PORTUGAL**

### **FÁTIMA 2022**

Use of the CONFIRM tool to manage the pilgrims heading to Fátima in May 2022, in order to prepare for the Youth Festival in 2023, which will bring more than 3M people to Portugal. This deployment was done by combining the location features of the Telegram app. 64 groups were tracked, almost 2k individual pilgrims.



SOBRE

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tel da Cruz Alta 92 67 25 🔎	as estruturas da AAC	78	48	30	•
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## **VOST PORTUGAL CURRENT PROJECTS**

### **COOPERATION WITH** THE SLOVAKIAN GOVERNMENT

Use of the CONFIRM tool to help the Slovakian government manage the influx of refugees from Ukraine.





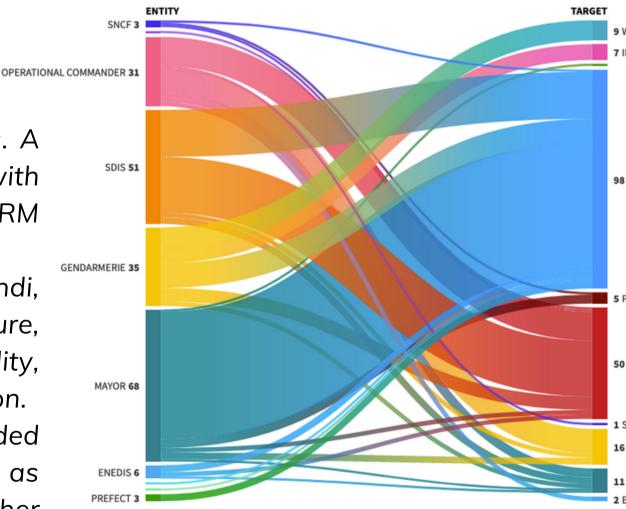


## VOST PORTUGAL CURRENT PROJECTS

### MEDEA

Use of the CONFIRM tool during wildfires. A live exercise was made in Nimes, France with stakeholders and practitioners. CONFIRM aims at:

- Each entity has its own modus operandi, technology, and command structure, which hinders the interoperability, exchange, and publication of information.
- The management of resources provided by municipalities to the COS, such as shelters for evacuated people and other logistical resources for firefighting and support to affected populations.
- Be a multidirectional tool of communications, between entities and ensuring public communication.







9 WAZE 7 INFRASTRUCTURE

98 PUBLIC

POPULATION

50 OPERATIONS

1 SNCF 16 GENDARMERIE

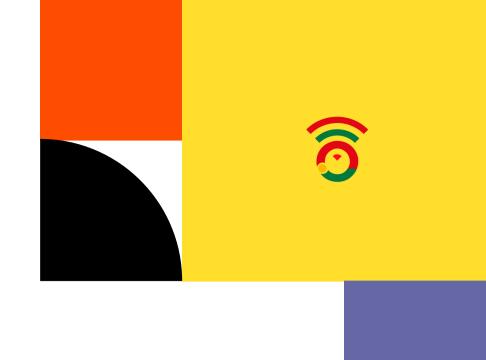
11 MAYOR 2 ENEDIS



## **VOST PORTUGAL CURRENT PROJECTS**

### Fire Season 2022

- Under the cooperation protocol established with ANEPC, VOST Portugal provided personalized access to the FOGOS.PT API to release technological resources from ANEPC systems.
- From July 5th to July 18th 2022), VOST Portugal issued 551 tweets that reached 3.01M views, generating over 587,000 visits to the profile. The highlighted tweet is a message on how to share photos on social media in the context of forest fires.
- Monitored social media networks and transmitted the most relevant information/images to ANEPC via a direct channel that had already been established.
- In the area of cooperation between VOST organizations, VOST Portugal has maintained constant contact with various VOST groups in Spain, particularly with VOST Galicia, due to cross-border fires.
- On July 14th, VOST Portugal managed to make the topic "BEBAM ÁGUA" (Drink Water) trend on the first place in Portugal, alerting to the need for hydration during these days of extreme heat.



### **Fighting misinformation**

Identification of online misinformation and its reporting to the platforms, as well as correction / clarification of misinformation

### bit.ly/MEDIALAB\_VOSTPT

← Tweet

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VOST Portugal 🤣 @VOSTPT · Feb 25

i %#COVID19PT Relativamente a um PDF que já anda por todo o lado, e após contactarmos as entidades oficiais, foi-nos dito que o mesmo é falso. #StopRumores **i** 









#### República Portuguesa 🤣 @govpt · Feb 25

Circula um documento falso com um suposto plano de #desconfinamento do @govpt. Pela #desinformação e falsas expectativas que pode gerar, com o inerente risco para a saúde pública, esta falsificação será objeto de comunicação ao Ministério Público. portugal.gov.pt/pt/gc22/comuni...



#### R&D

Contribution with know-how and practical experience with **R&D** institutions and academics in the areas of DRM

### Joint Research Center (Comissão Europeia)

Participation, since 2019, in a machine learning project in the area of critical information detection in social networks. The project extends to 2024.

### George Mason University (EUA)

Research project, led by Hemant Purohit, on the use of social media by all stakeholders involved in disaster response.





# But does it work?

Does it have an impact? Is it worth it?

**TWITTER DATA** 

2021

Average monthly views:

**3.12M** 

**Most Viewed Tweet:** 

528,217 views





## PIPP\*

### **EUROPEAN PROJECTS**

- Firelogue.eu
- EU-HYBNET
- PyroLife
- DAREnet

### INITIATIVES

- Cell Broadcast
- Code of Practice on Disinformation of the European Commission
- Social Media Disaster Risk Management Task-Force led by COPERNICUS-EMS
- Permanent Task Force to monitor the Code of Practice on Disinformation led by the European Commission

### PARTNERSHIPS

- Joint Research Center
- George Mason University
- EFAS
- COPERNICUS.EU
- Web Foundation
- Twitter
- Facebook / META
- Google

### **AWARDS / PRAISES**

- Portuguese Government
- EENA Award 2022



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### PROTOCOLS

• ANEPC - Portuguese National Civil Protection Authority

### COOPERATION

- GNR
- Polícia Judiciária
- CNCS
- AMA
- Digital Response Office to COVID-19
- Slovakian Government

\*Projects, Initiatives, Protocols, Partnerships

## **CONTACT & RESOURCES**

### **VOST PORTUGAL**

- www.vost.pt
- @vostpt (twitter, Instagram)
- /vostpt (facebook, telegram)

### **JOÃO RIBEIRO**



### **VOST EUROPE**

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