

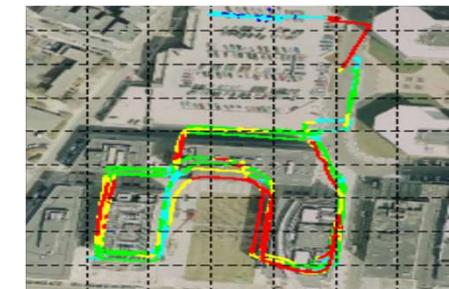


## MALIN MAstery of INdoor Localization

Evaluation campaigns organisation, impact on research

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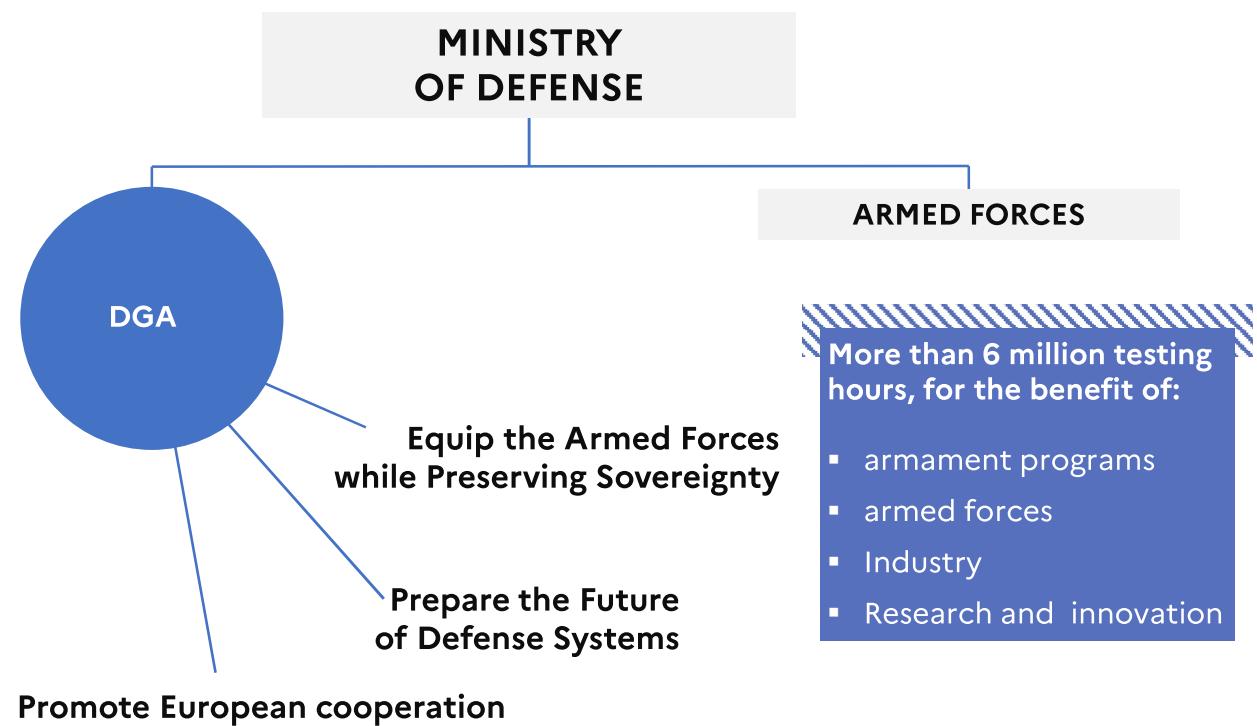


Workshop Challenge & ERA-NET  
November 23, 2020.





# DIRECTORATE GENERAL OF ARMAMENTS



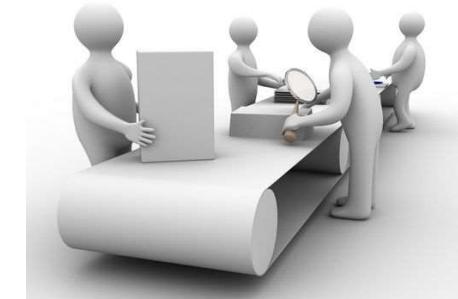
# Challenge MALIN

**Main objective :** To explore future stand alone pedestrian geolocation technologies

➤ **Timetable :** beginning 2016, duration 5 years

➤ **User requirement :**

- civilian and military pedestrians localization
- precision < 1m (with or without GNSS)
- 100% time availability 24/24,
- outdoor and indoor full function availability.



➤ **Desired outcome :** to obtain some technologies candidate for industrialization by **2025**.



## Organization and preparation

➤ **Planning:** 3 competitions / 3 years.



➤ **Methodology:**

1. Develop measurement methods and metrics (ground truth),
2. Define contest rules,
3. Find the contest place, prepare scenario, instrumentation of the area
4. Find partners for social activities

*Evaluation of several approaches or combining technologies in a same experimental condition*



## TEAMS

- 6 teams (Mixed of research laboratories and industrials)
- 500 à 700 K€ /team.
- Each participant proposed state of the art solution in their domain



CyborgLOC



LOCA-3D



SMART-ILOC



TMI-REDY



RIVOLI



POUCET

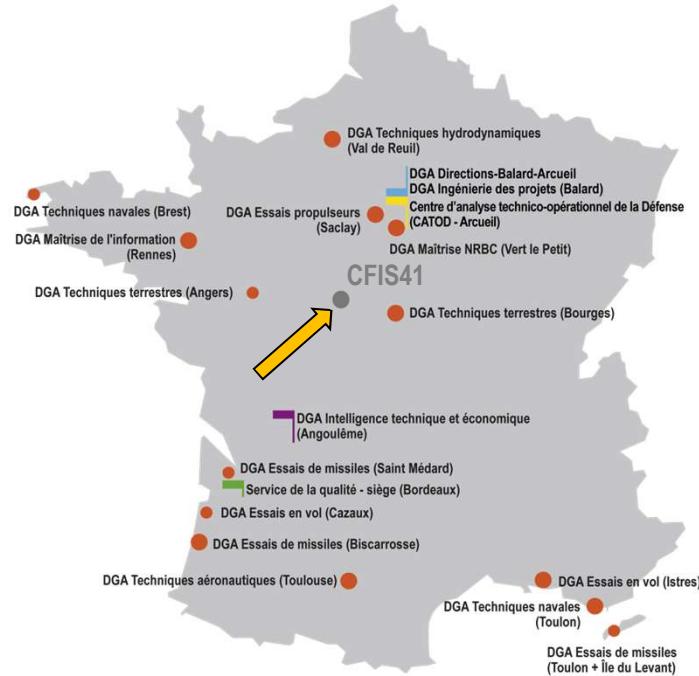




# Competition 1 : DGA TT november-2018



# Competition 2 : september-2019



# Challenge MALIN : competition 2 - illustration





## Preliminary conclusions (after 2 contests)

### ➤ DGA human resources :

- Preparation : **2** years, 3000 h
- Competition : **3** years, 4000 h



### ➤ Budget :

- 500/700 k€ for each team
- 400 k€ for ground truth equipment and communication/social subcontracting

### ➤ Organization :

- Need test management team (preparation and realization)



## Success key parameters



- First : to select a panel of different technologies which covers current state of art.
- To motivate teams with no financial reward at the end (knowledge sharing, cooperative team work).
- To have a ambiance of positive emulation whereas there is real competition between teams.



 Thank you for your attention !

