EDUSAFE PROJECT MARIE CURIE ITN

CBI

O. Beltramello

Who are we ?

A Collaboration of 12 Partners
EDUSAFE FP7 Marie Curie ITN Project

3.2 MEuros, 4 years program (started in Sept. 2012)
CERN / ATLAS is coordinator
10 PhD Fellows
2 Post Doc. Fellows

Athens University of Economics and Business, Greece
Canberra, France
CERN / ATLAS
EPFL, Switzerland
Novocaptis, Greece
IASA / National Technical University Athens, Greece
Prisma Electronics, Greece
Technical University of Munich, Germany
Universita Degli Studi Di Roma Tor Vergata, Italy
Aristotle University of Thessaloniki, Greece
CAEN University, France
Democritus University of Thrace, Greece

What are our goals ?

> ➢ **Assist people working in extreme environment**
> **We use CERN/ATLAS maintenance activities in radioactive environment first**

We supervise workers, their environment and their activities:
- ✳ audio / video connection
- ✳ environment parameters
- ✳ health data

We provide information to worker
- ✳ various display: tablets, HMD
- ✳ from various nature: working procedures dose maps
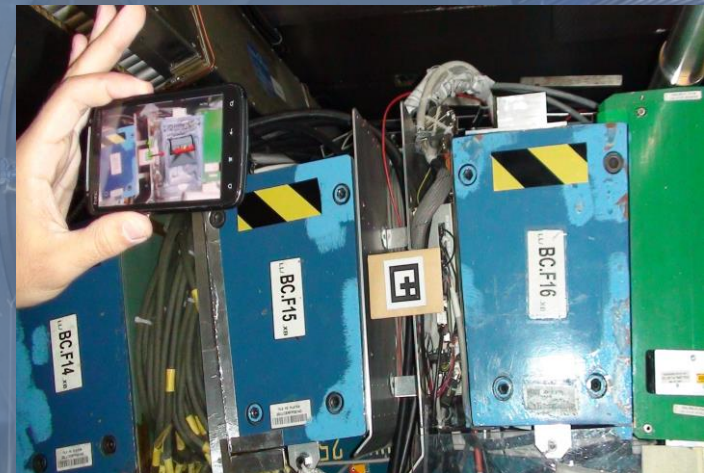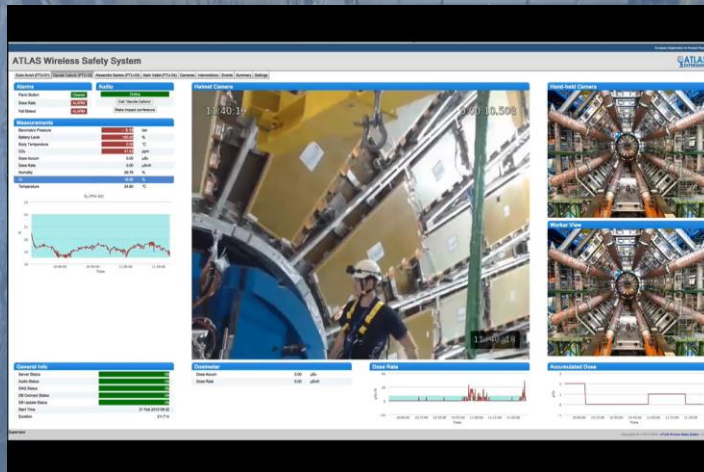- ✳ using AR/VR technologies

Overview of Personnel Safety System
Local worker   Remote Sup.
Current
Step.1.
AR devices
Powered with WRM chip
Future
Step.1.

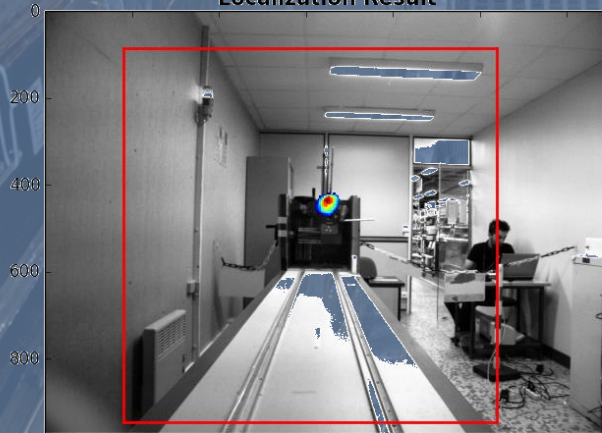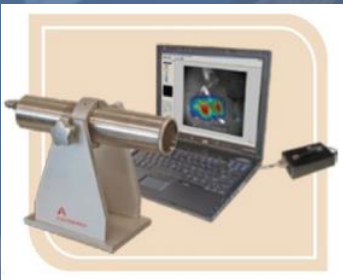➔ **increase safety levels**

➔ **reduce human errors**

➔ **decrease intervention time**

➔ **reduce intervention stress**

➤ **We have developed prototypes already in use for supervision**
➤ **We are developing the AR technology currently**
➤ **We will have our first testing campaign of the system in situ in Jan. 2015**

Localization Result

Source	^{137}Cs
Dose Rate	2.5 μSv/h
Total Time	1 sec

In parallel, we are looking how to **outreach** our project and our technologies

We have been very happy to **inspire the work of the CBI students** for their studies about autistic children

We, CERN, are exploring how our technologies could be used to assist people in various fields and especially in this field of Autism disorders.