

AcousticTrail

First GPS eyes-off for mountain runners



**8th SNOW AND MOUNTAIN
TOURISM WORLD CONGRESS**
9 - 10 April 2014 - Andorra la Vella - Andorra



"Una manera de hacer Europa"

UNIÓN EUROPEA

Spanish Mountain Tourism Cluster

- Born in Spain in 2013
- Key points
 - Mature and fragmented sector
 - Need to reinvent the offer
 - Differentiation and competitiveness based on innovation.
- Working groups
 - **Safety**
 - Commercialization
 - Sustainability
 - Tourism product innovation



Innovative satellite navigation



Connecting people with
Satellite Navigation
Technologies

Navigation based on senses

Helping people to navigate in the outdoors by using haptic and acoustic stimulus

Collaborative navigation

Sharing people position for don't loose anyone and don't get lost

Where is the pain?



Increasing number of people practicing mountain sports, resulting into more incidents and accidents.



Users professional assistance in the mountains, like search and rescue activities, is complex and expensive



Companies and institutions organizing need new solutions for reducing mountain risks.

Where is the pain?



+ Adventure

Increasing number of people practicing mountain sports, resulting into more incidents and rescues.



+ Safety

Users professional assistance in the mountains, like search and rescue activities, is complex and expensive.



Companies and institutions organizing need new solutions for reducing mountain risks.

Innovation

+ Adventure

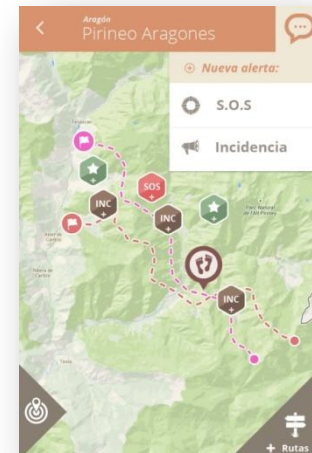
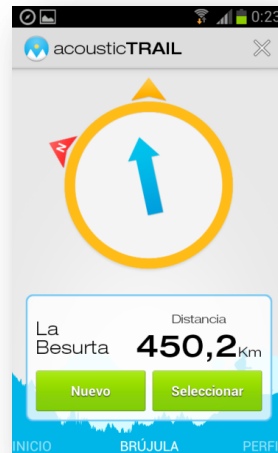
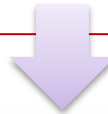
+ Safety



Acoustic
Trail



Safe
Mountain



What does user need?

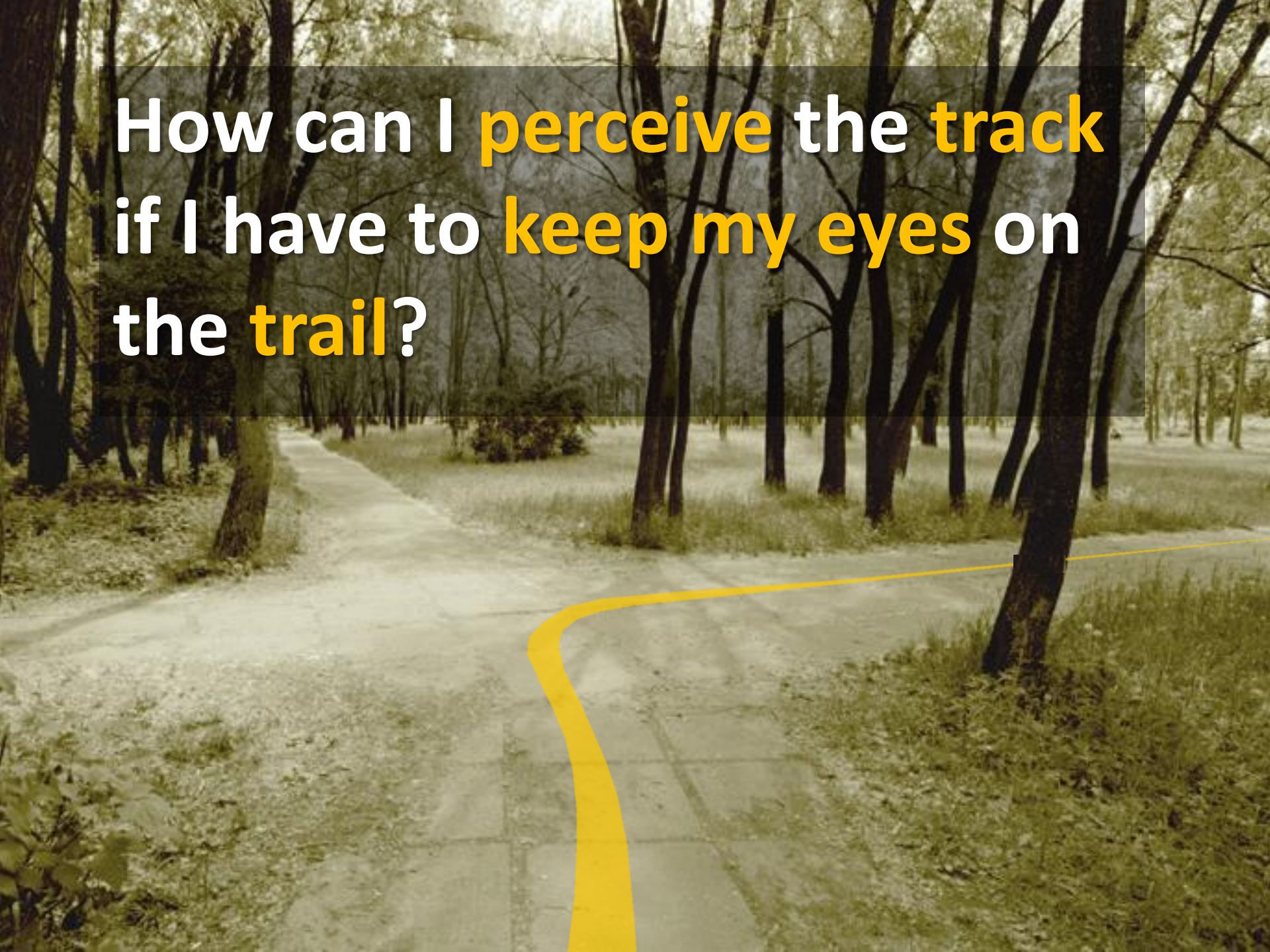
To know the track

Navigate without getting lost

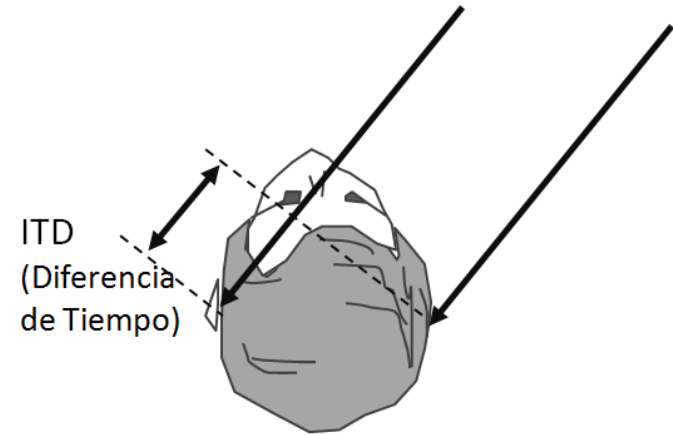
Keep the eye on the trail

Don't stop for consulting maps or GPS

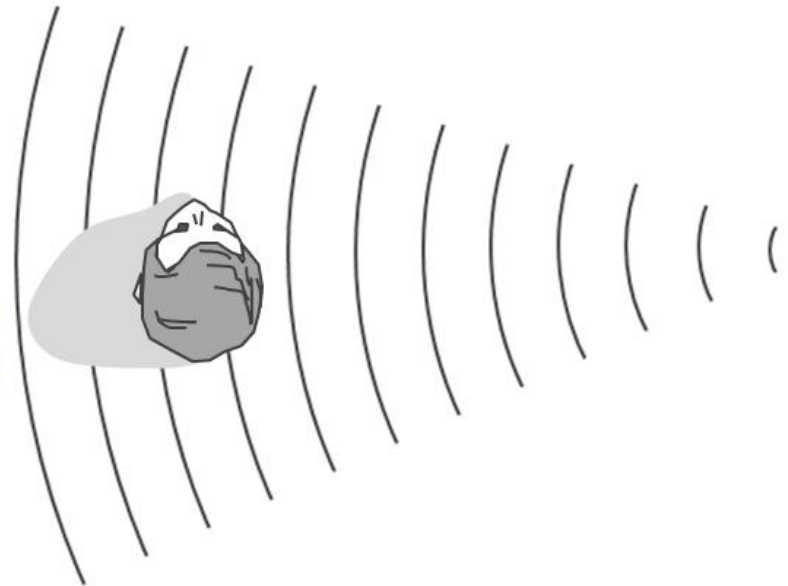
How can I **perceive** the **track**
if I have to **keep my eyes** on
the **trail**?



Where do the sounds come from?



ILD
(Sombra
acústica)

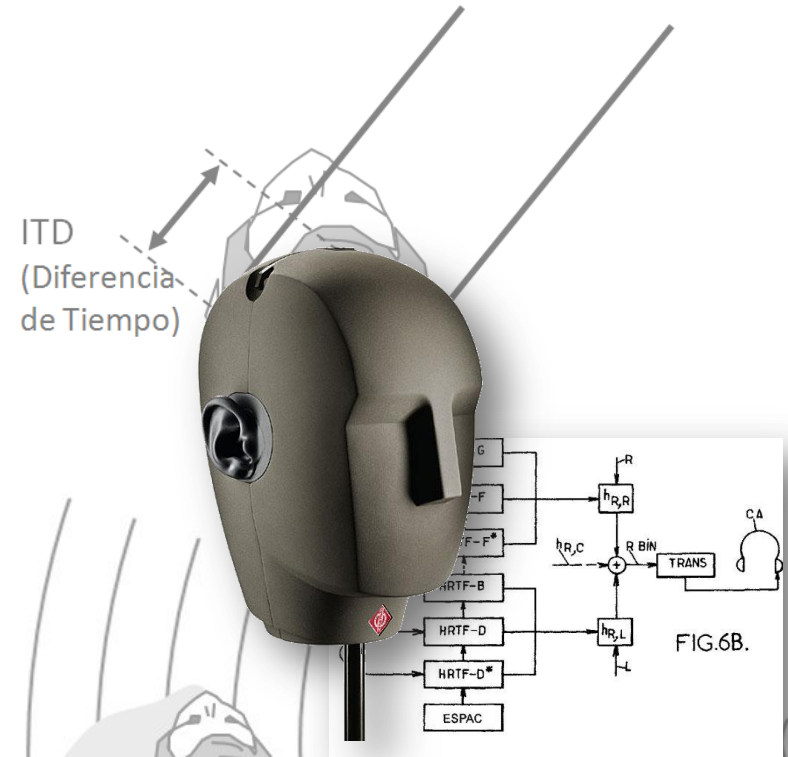


Binaural sounds technologies

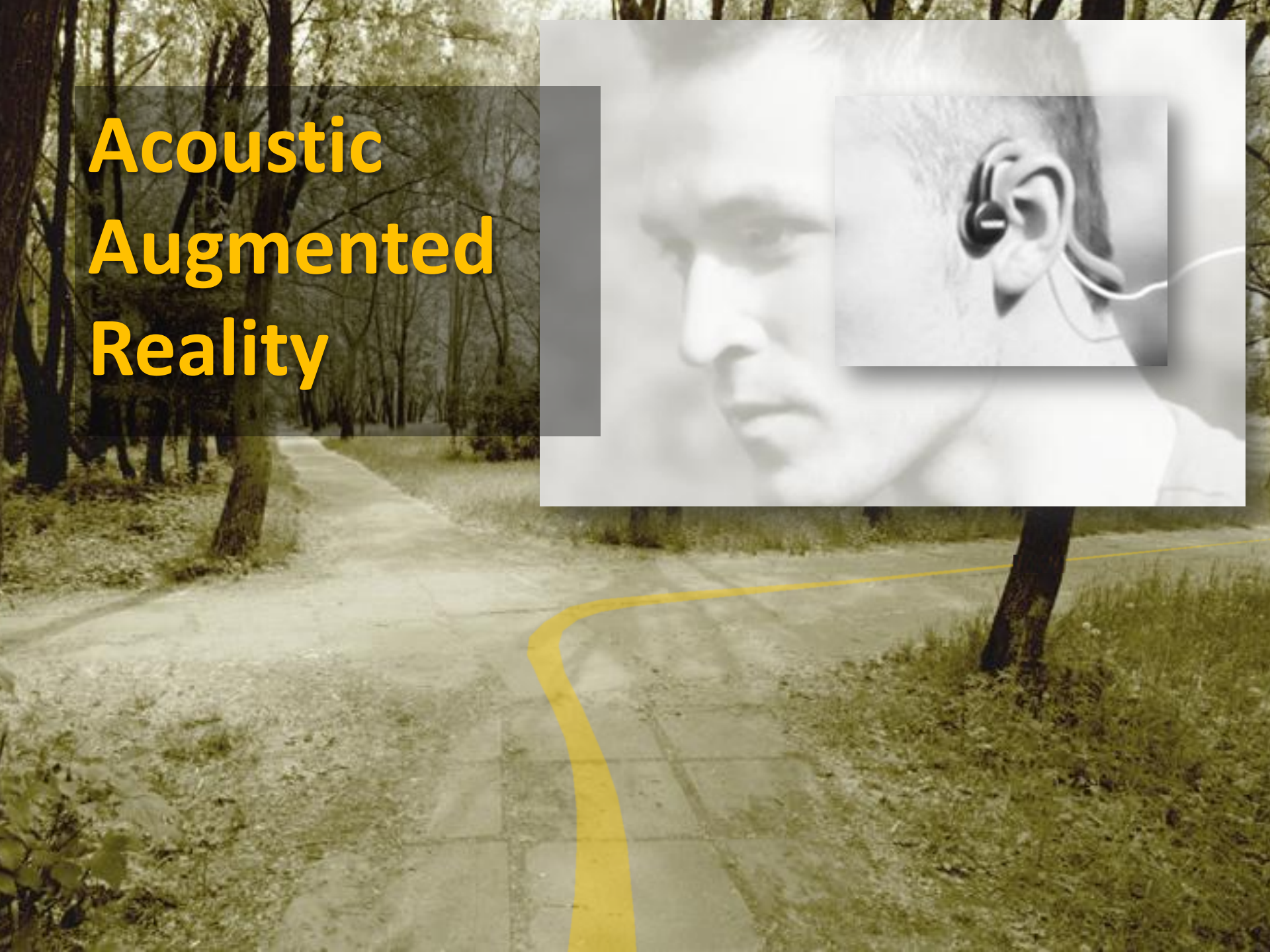


ITD
(Diferencia
de Tiempo)

ILD
(Sombra
acústica)



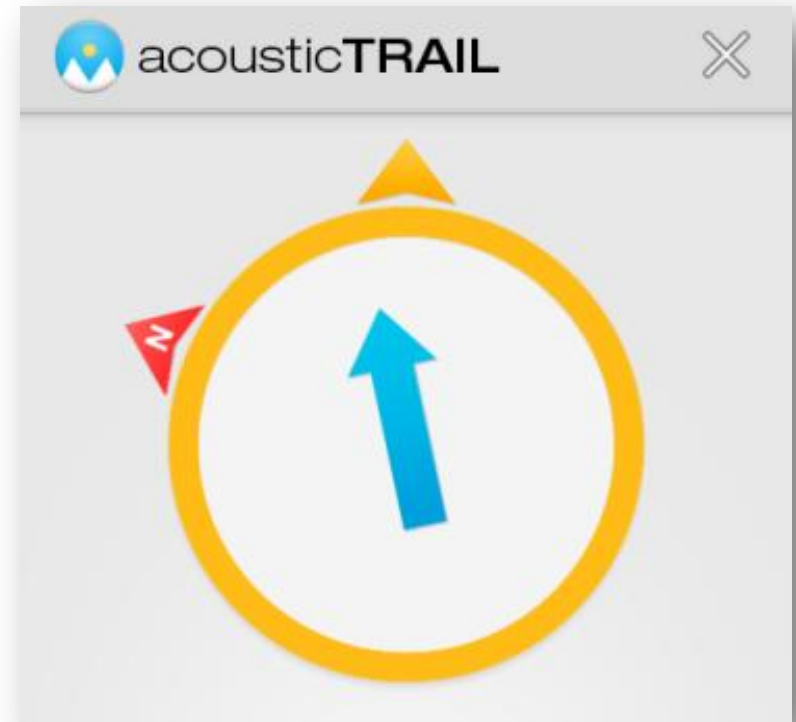
Acoustic Augmented Reality



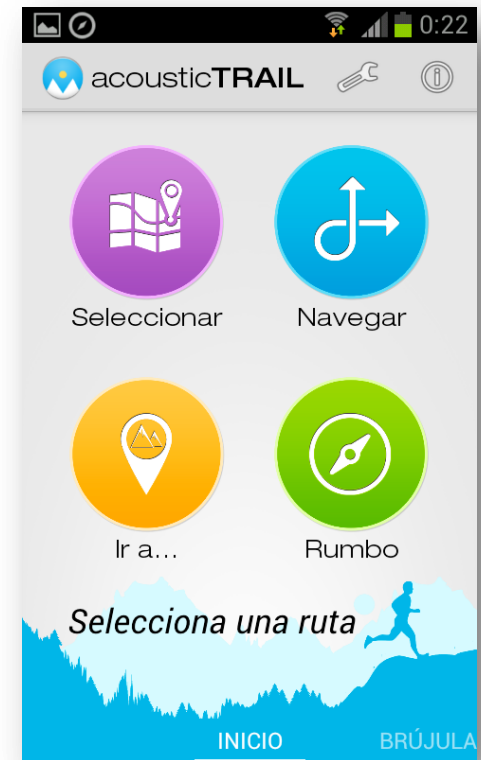
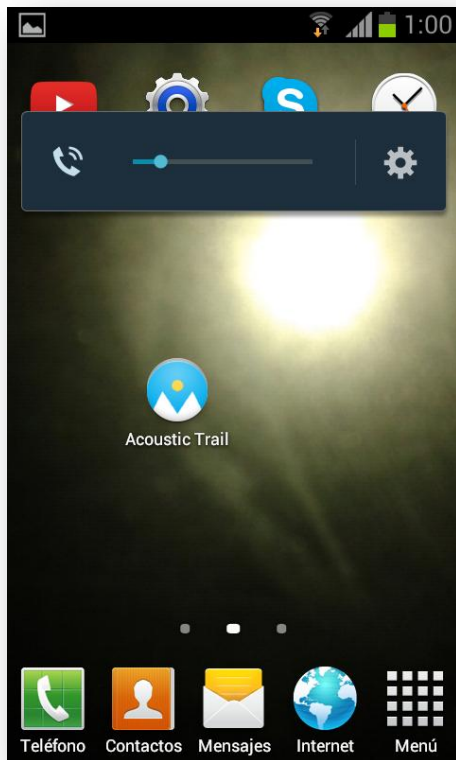
What is the Acoustic Trail App

Acoustic Trail is an Android smartphone application based on GPS and 3D sounds.

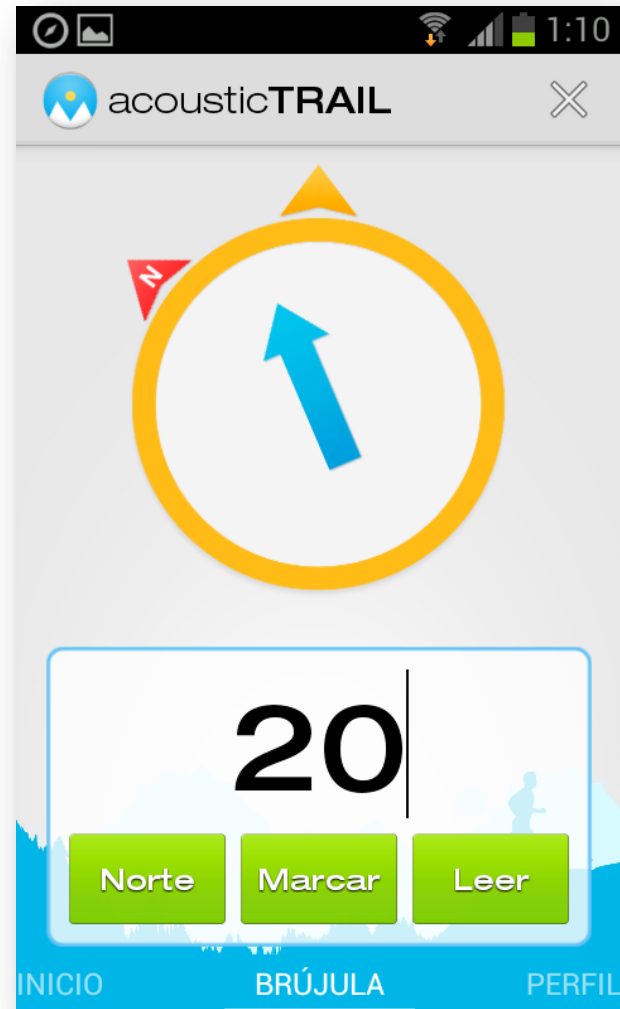
It support **mountain runners** by **guiding** them along an **specific track**, without taking eyes off the trail.



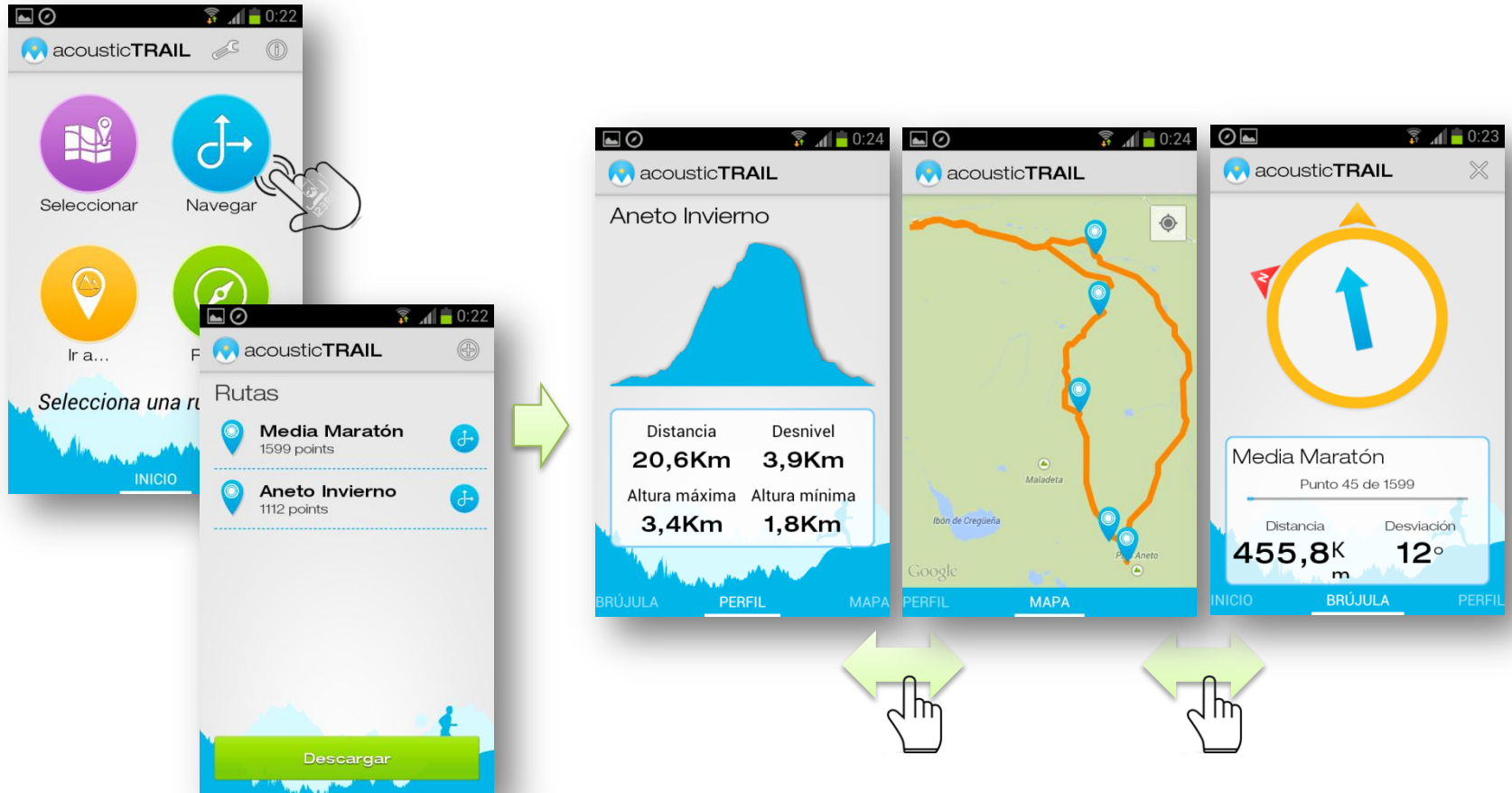
Start here



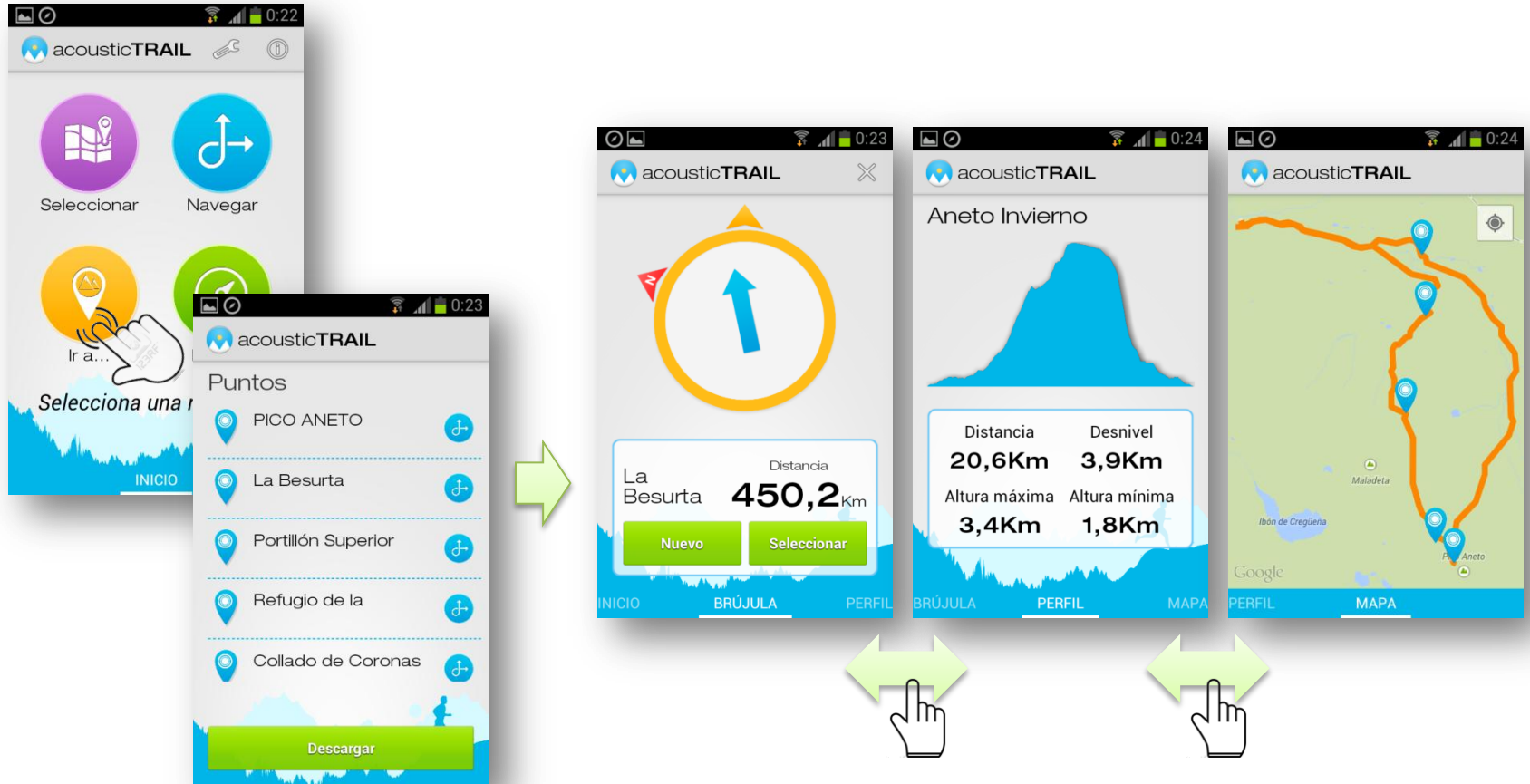
Bearing navigation



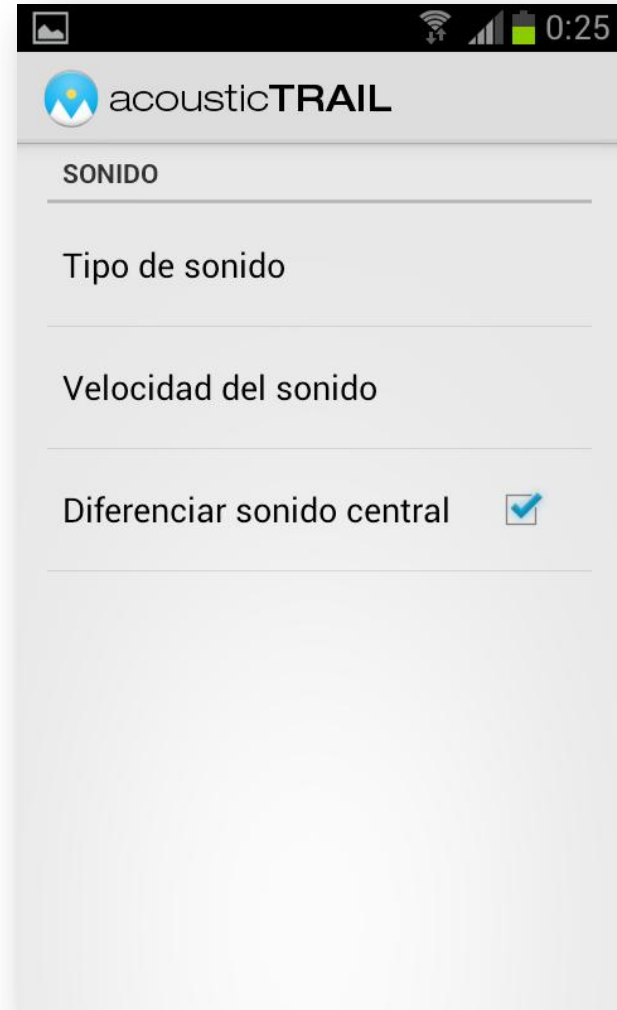
Track navigation



Go-To Point Navigation



Settings



Next steps

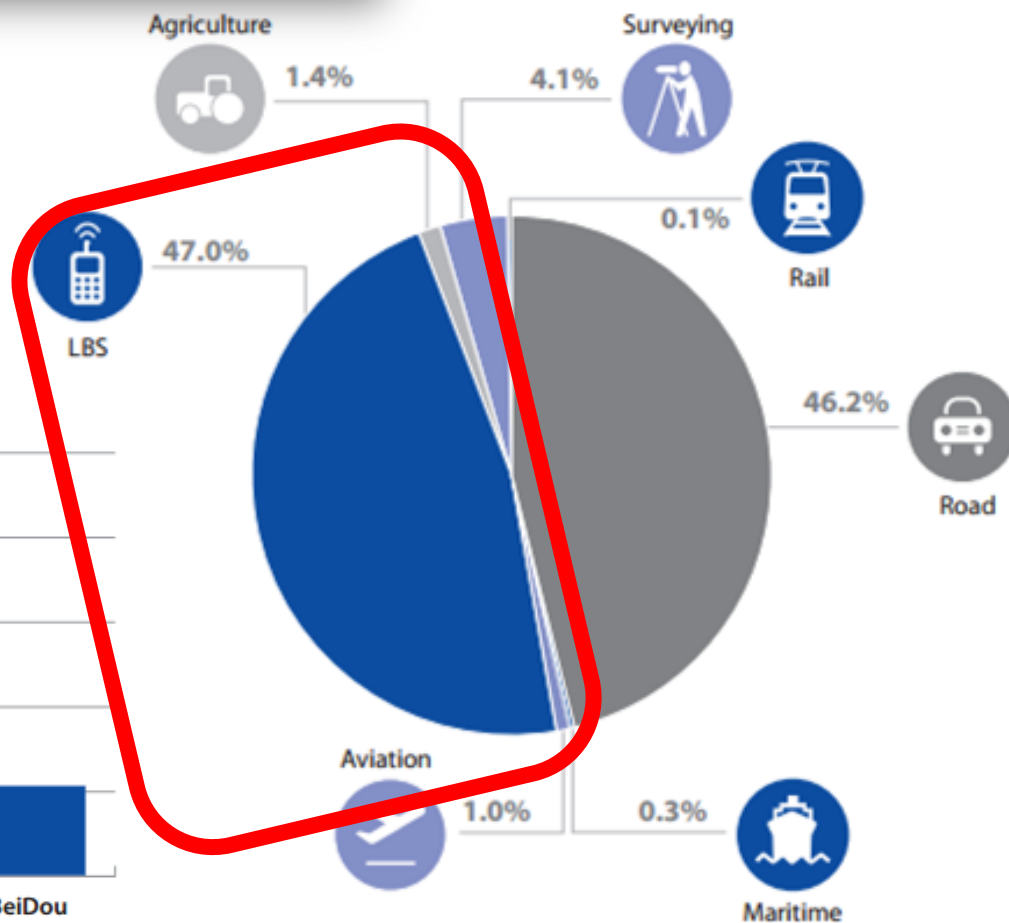
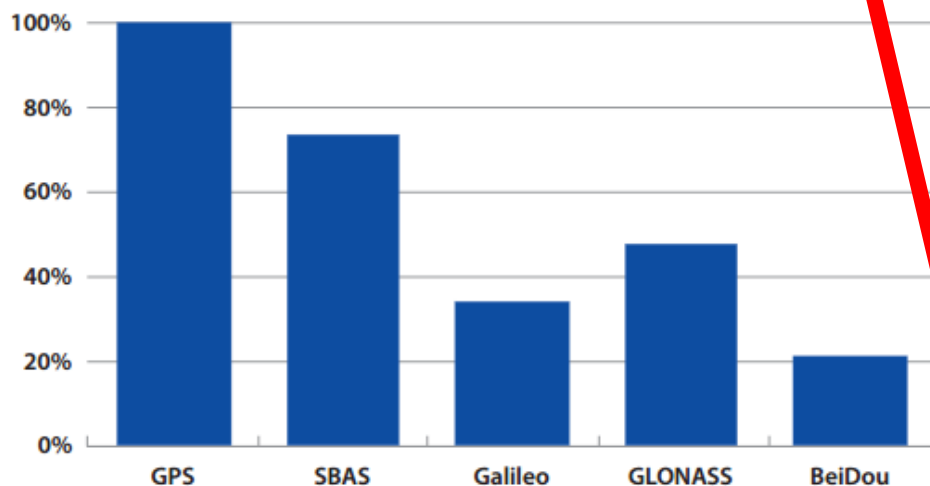
End user tests and validation
Other smartphones platforms
Extend application to other areas



GNSS MARKET REPORT

ISSUE 3

GNSS capability in receivers*



Wearable



All the world
in 0,2cm²

AcousticTrail

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