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## EKOBUS

EBSF\_2 meeting (Donostia, Nov. 29<sup>th</sup> 2017)

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# San Sebastian demonstrator

Tested technologies (Diesel buses)

Local operator



Donostia – San Sebastián



EKOBUS

EcoAssist:



Antibunching:



# EKOBUS

## What is it?

- It is a fusion of EcoAssist and Antibunching. A driving assistant and the punctuality given in only one application

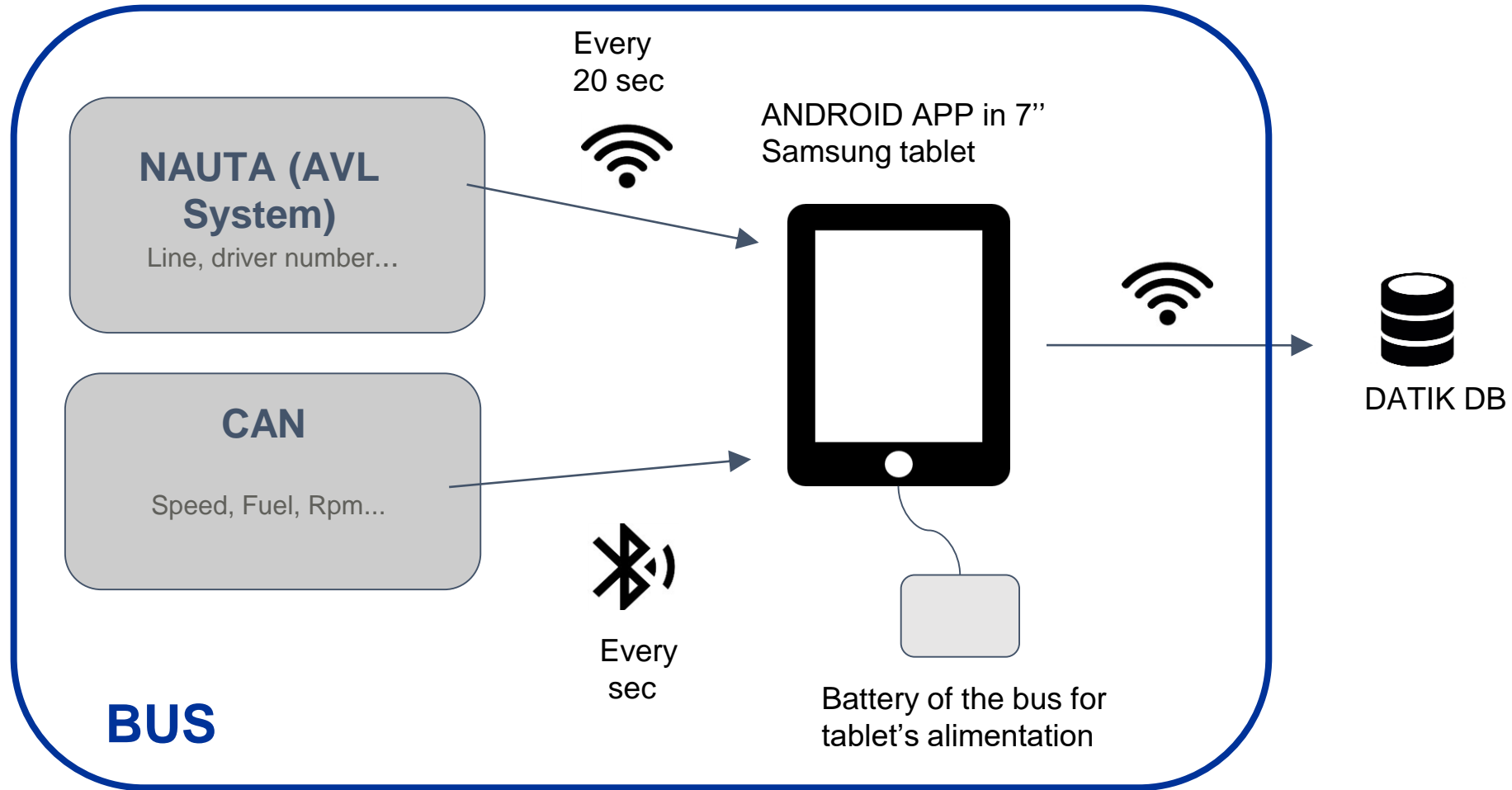
## Which are its goals?

- To get more efficiently driving
- To reduce consumption
- To get better comfort

## When has been implemented in San Sebastian?

- EKOBUS is working since 2013 in DBus in 30 buses of the fleet

# Hardware implementation





# EKOBUS, software

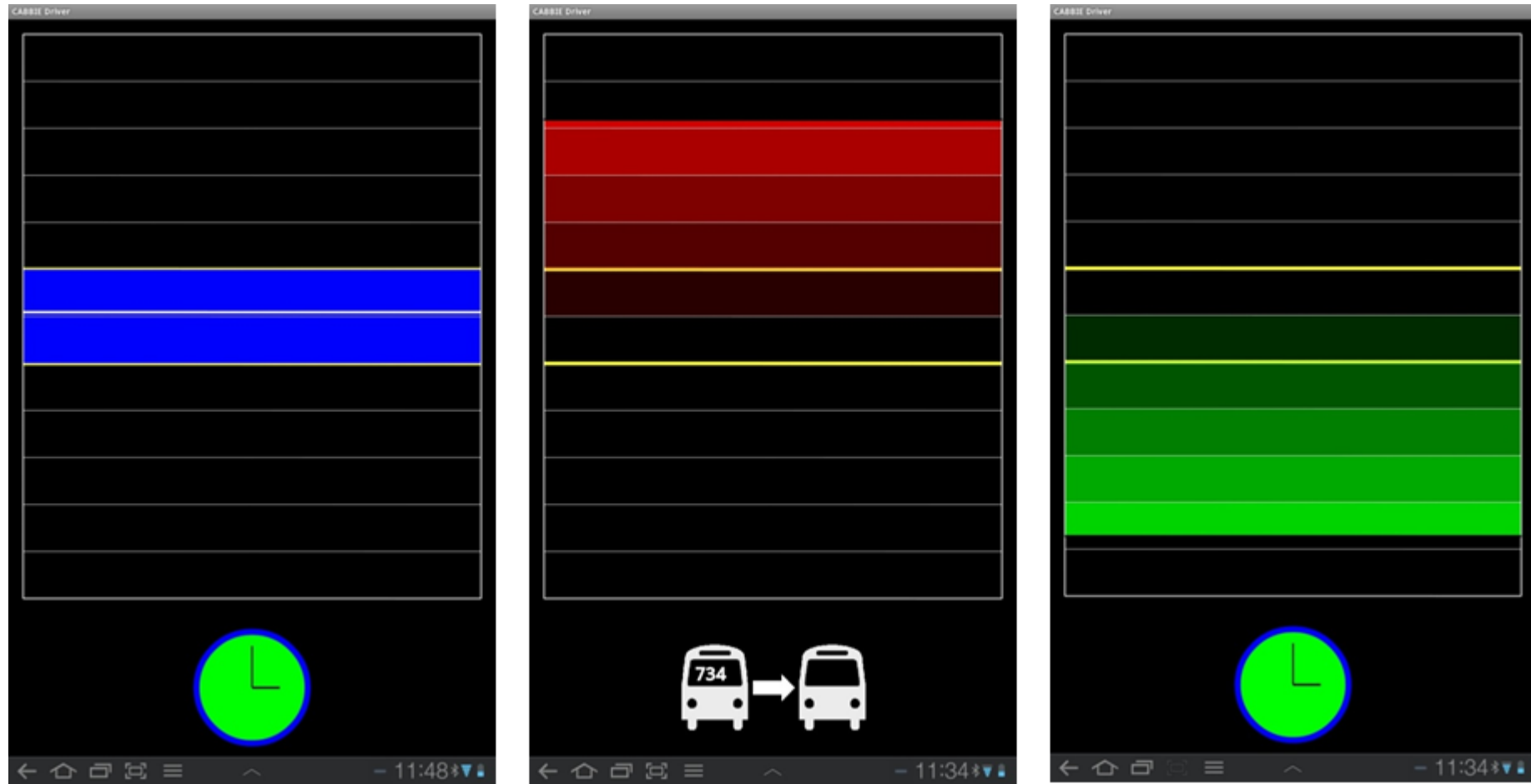
- Gives an optimal and most efficient driving for 5, 25 and 28 bus lines
- INSTRUCTIONS of slowing down and alerts are given when the driving is not optimal and efficient



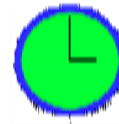
Line 5

Lat	Lon	Speed
24.18061975930	79.36565089010	40
22.18023367590	81.36565089010	35
23.18063453453	77.36565089010	45
24.12116125930	83.36565089010	50
...		
...		
...		

# EKOBUS, software



# EKOBUS, software



Delay / early departure



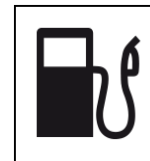
Sudden brake



Sudden accelerate



Radar



Excessive consumption

# Conclusions

- EKOBUS is easy to read
- The system helps to reduce consumption
- The expansion of the system in all the fleet is not going to be with tablets, but it will be easily readable and will not disturb the driving





**EUROPEAN BUS SYSTEM  
of the FUTURE 2**

**Thank you for your attention**