Swiss Mobility Lab learnings :
The importance of UX for Future Mobility Solutions

Yann Bocchi

Head of the Software Engineering Unit & Head of the ConEx Lab

Smart Cities Requirements

- Widely Connected environment

    Communication infrastructure

    Sensor network

- Need for a critical size in order to be cost-effective

Songdo, South Korea - 2014

Investment : $ 25 billion
6 km2 of reclaimed land

2006

2013

Songdo-dong

How to propose Smart-City like services outside large urban centers ?

Our proposition :

Improve the existing mobile infrastructure for data collecting and analysis

NOSE

a **No**madic, Modular **S**ensing **E**cosystem

UseCase #1 : Monitoring of the road's state

Knowing when and where you should install snow chains.

Forecasts and weather observations are not sufficient.

How to know if the snow clearing machine has passed ?

We need to know the **real state** of the road !

dry (0)	
damp (1)	
wet (2)	
ice (3)	
snow/ice covered (4)	
chem. wet (5)	
freezing (6)	
critical (7)	
snow covered (8)	

NOSE User Experience

- Clear view of current road state
- Instant alert to be notified for any hazard
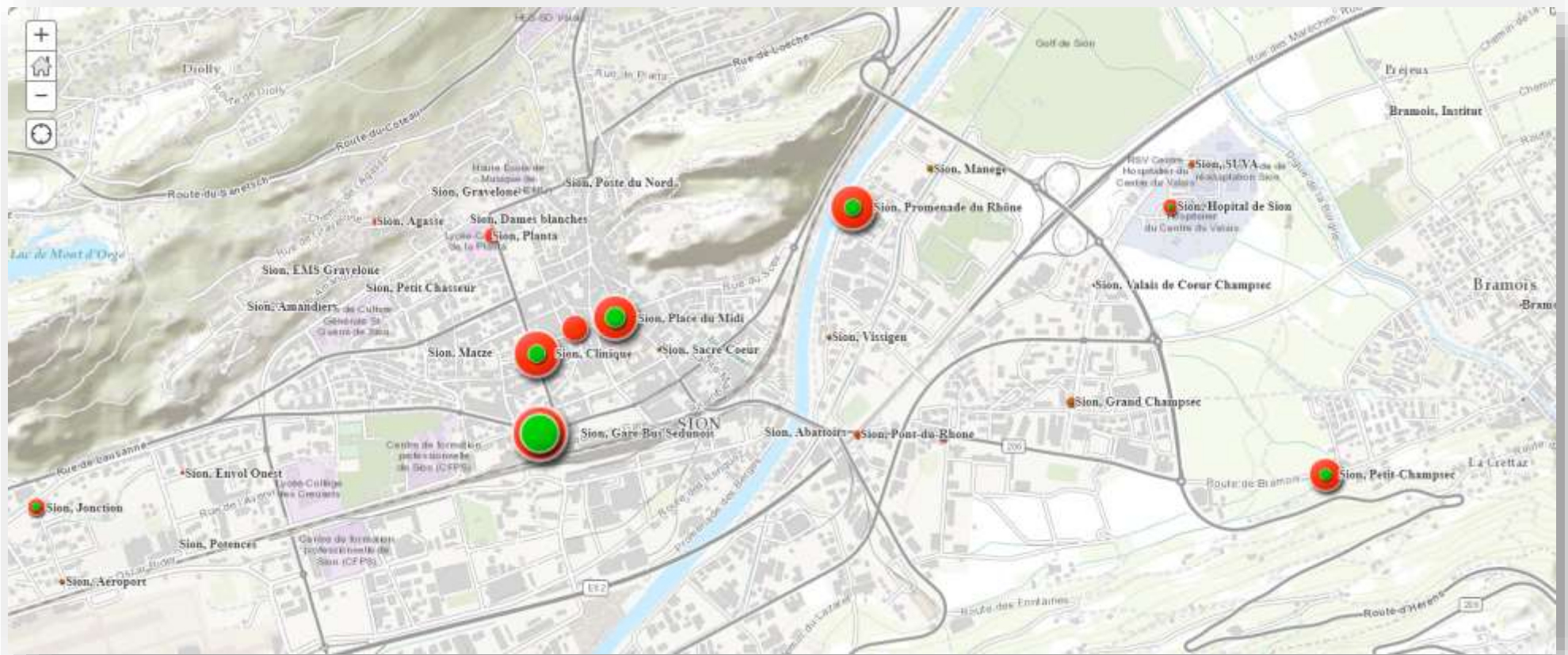- Decision-making tool for road maintenance

CIBO
« Check-in / Be out »

Network usage – stations (Bus Sédunois)

Cibo User Experience

- User doesn't have to worry about tickets

- User always get the best price based on their use

- It's seamless and easy to use

- *For the future : dynamic pricing, data analysis, …*

Conclusion

- User eXperience is more important than ever in new mobility / transportation systems
    - New Smart-Cities like services to the greatest number of citizens
    - New ticket-less billing system for Public Transport using IT technologies
    - New experience and new offer with driverless shuttles
- For operators =
    - new datas + new datas + new datas + …

yann.bocchi@hes-so.ch