# Practical 1: SON and Functional Requirements

#### Practice in:

- Identifying stakeholders
- Statements of Need
- Functional Requirements

## Running example: Biketour

- As people go green, there is an increased need for information on the facilities for cycling and pedestrian traffic in cities.
- The practicals for this course will develop an application that allows citizens to find information about these facilities.
- Assume that you have been hired as a consulting company for the city of London to provide a mobile application to help people find and use bike/pedestrian facilities.

## Project Group Roles

- At least one person should record the results of the activities.
- All members should participate in the discussions as requirements engineers.

## Practical Task 1: Identify stakeholders (15 min)

Brainstorm with your group a collection of stakeholders that you should consult for this application.

## Feedback from City Council

- After receiving the initial list of stakeholders from the consulting companies, the city council has refined their brief about the project.
- In particular, they have specified what the overall goal of the system is in the form of a single statement of need, and helpfully identified who the users are for the application.

#### Biketour: SON

"The Biketour application will provide the citizens of the City of London with information about the cycle paths that are available to them. Cyclists and pedestrians will be able to find out information about the current status of the paths as well as historical data. Further, municipal staff will be able to get concrete usage data for future expansion and refinement of the cycle path network."

### Biketour: SON?



## MHY

Not bad, but it says a lot without actually telling you specifics!

## Practical Task 2: Refinement of statements of need (20 min)

- With the SON in hand what are the key stakeholders that are mentioned in the SON?
- For your now extended list of stakeholders, propose one or more statements of need that describe the goals of those users.
- Try to standardize (boilerplate) the way you express those statements of need

## Biketour: Primary Users

- The following are the direct stakeholders with whom you should be concerned:
  - Cyclists (professionals)
  - Cyclists (casual)
  - Cyclists (commuters)
  - Pedestrians
- Note, each of these roles can be fulfilled by citizens, council members or tourists alike.

## Biketour: Secondary Users

- The City of London sees the following as secondary users of the system:
  - City planners
  - Council members
  - Law enforcement
- All people who have different stakes in the system, and have different goals.

## Practical Task 2: Stakeholder requirements (30 min)



- Using all of these goals do the following:
  - Develop a set of 5 functional user requirements for the following groups of stakeholders refining your staement of need
    - Bicyclists (casual)
    - Bicyclists (professional)
    - Pedestrians
    - City planners
- Be creative! This is supposed to be fun!

## No really ...



#### YOU WILL HAVE FUN AND YOU WILL LIKE IT!

(just kidding)

## Summary

- In this process we have been making up what we think the city council wants
- In this case, many of us can pretend to be cyclists and design for ourselves
- Do not assume that this is the best way to work all the time – usually you should do elicitation activities with individuals and groups (discussed later in the module)